NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 1 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02

طرح نگهداشت و افزایش تولید ۲۷ مخزن

Standard Pipe Support Drawings

نگهداشت و افزایش تولید میدان نفتی بینک

D02	MAR.2024	IFI	M.Noori	M.Fakharian	S.Faramarzpour	
D01	MAY.2023	IFI	M.Noori	M.Fakharian	A.M.Mohseni	
D00	JUNE.2022	IFC	F.Mosayebnejad	M.Fakharian	M.Mehrshad	
REV.	DATE	PURPOSE OF ISSUE/STATUS	PREPARED BY:	CHECKED BY:	APPROVED BY:	CLIENT APPROVAL
CLASS: 3		CLIENT Doc. Number: F1L-708891				

STATUS:

IDC: Inter-Discipline Check
IFC: Issued For Comment
IFA: Issued For Approval
AFD: Approved For Design
AFC: Approved For Construction
AFP: Approved For Purchase
AFQ: Approved For Quotation
IFI: Issued For Information
AB-R: As-Built for CLIENT Review
AB-A: As-Built - Approved

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY
شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 2 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

REVISION RECORD SHEET

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NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY
شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 3 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

REVISION RECORD SHEET

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NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY
شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 4 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

REVISION RECORD SHEET

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NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

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REVISION RECORD SHEET

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1.0 INTRODUCTION

Binak oilfield in Bushehr province is a part of the southern oilfields of Iran, is located 20 km northwest of Genaveh city.

With the aim of increasing production of oil from Binak oilfield, an EPC/EPD Project has been defined by NIOC/NISOC and awarded to Petro Iran Development Company (PEDCO). Also PEDCO (as General Contractor) has assigned the EPC-packages of the Project to "Hirgan Energy - Design and Inspection" JV.

As a part of the Project, a New Gas Compressor Station (adjacent to existing Binak GCS) shall be constructed to gather of 15 MMSCFD (approx.) associated gases and compress & transfer them to Siahmakan GIS.

GENERAL DEFINITION

The following terms shall be used in this document.

CLIENT:	National Iranian South Oilfields Company (NISOC)
PROJECT:	Binak Oilfield Development - Surface Fcilities; New Gas Compressor Station
EPD/EPC CONTRACTOR (GC):	Petro Iran Development Company (PEDCO)
EPC CONTRACTOR:	Joint Venture of : Hirgan Energy - Design & Inspection (D&I) Companies
VENDOR:	The firm or person who will fabricate the equipment or material.
EXECUTER:	executer is the party which carries out all or part of construction and/or commissioning for the project.
THIRD PARTY INSPECTOR (TPI):	The firm appointed by EPD/EPC CONTRACTOR (GC) and approved by CLIENT (in writing) for the inspection of goods.
SHALL:	Is used where a provision is mandatory.
SHOULD:	Is used where a provision is advisory only.
WILL:	Is normally used in connection with the action by CLIENT rather than by an EPC/EPD CONTRACTOR, supplier or VENDOR.
MAY:	Is used where a provision is completely discretionary.

2. Scope

This document covers minimum necessary requirements for the design, selection, manufacture, inspection, testing and delivery of pipe supports for the above ground piping to be installed in the Binak Project .

3.0 NORMATIVE REFERENCES

3.1 LOCAL CODES AND STANDARDS

- IPS-G-PI-280 General Standard for Pipe Supports
- IPS-D-PI-130 Standard Pipe Supports D02
- NISOC GENERAL STANDARD DRAWING

3.2 INTERNATIONAL CODES AND STANDARDS

- ASME B31.3: Process Piping
- ASME Sec. VIII - Div. I or II: Pressure Vessel Code
- MSS SP-58: Pipe Hangers and Supports - Materials, Design and Manufacture
- MSS SP-69: Pipe Hangers and Supports - Selection and Application
- MSS SP-89: Pipe Hangers and Supports - Fabrication and Installation Practice

3.3 THE PROJECT DOCUMENTS

- BK-GNRAL-PEDCO-000-PI-DC-0001 Piping Design Criteria
- BK-GNRAL-PEDCO-000-PI-SP-0006 Specification for Painting
- BK-GNRAL-PEDCO-000-PI-SP-0015 Specification For Piping Construction, Fabrication & Erection
- BK-GNRAL-PEDCO-000-PI-SP-0011 Specification for Welding of Plant Piping System
- BK-GNRAL-PEDCO-000-PI-SP-0012 Specification for Flexibility Analysis

3.4 ENVIRONMENTAL DATA

Refer to "Process Basis of Design; Doc. No. BK-GNRAL-PEDCO-000-PR-DB-0001".

3.5 Order of Precedence

In case of any conflict between the contents of this document or any discrepancy between this document and other project documents or reference standards, this issue must be reported to the CLIENT. The final decision in this situation will be made by CLIENT.

SAZEH STANDARD PIPE SUPPORT CATEGORY LIST

CATEGORY NAME	DESCRIPTION
SA	U-BOLT, STRAP
SB	SHOE
SC	GUIDE, STOPPER
SD	STOOL, DUMMY
SE	BRACKET SUPPORT ON STRUCTURE
SF	"T" & "U" TYPE SUPPORT AT GRADE
SG	PROP
SH	BRACKET SUPPORT ON EQUIPMENT
SI	HANGER
SK	CLAMP
SL	SLIDING PLATE
SP	BASE PLATE

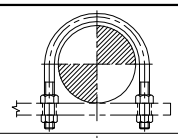
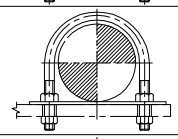
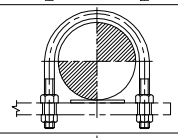
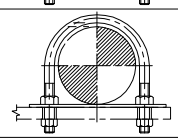
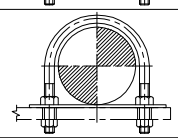
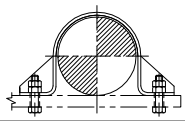
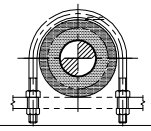
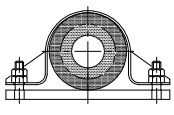
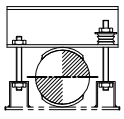
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NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE	CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SA	01	U-BOLT TYPE "A" & "B" CS AND AS LINES	3/8" ~ 24"						
		U-BOLT TYPE "C" & "D" SS LINES-1+1/2" & BELOW	3/8" ~ 24"						
		U-BOLT TYPE "E" & "F" SS LINES-2"& A BOVE							
		U-BOLT TYPE "G" & "H" GALVANAZED LINES	3/8" ~ 24"						
		U-BOLT TYPE "M" & "N" CU-NI LINES	3/8" ~ 24"						
	02	STRAP	1/2" ~ 24"						
	03	U-BOLT (COLD INSULATION)	1/2" ~ 12"						
	04	TIGHT STRAP (COLD INSULATION)	1" ~ 16"						
	05	HOLD DOWN	3/4" ~ 36"						

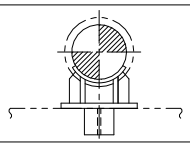
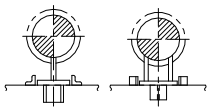
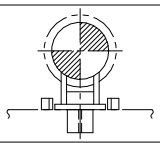
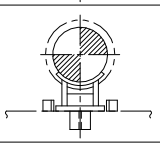
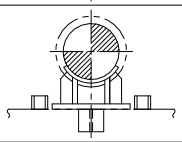
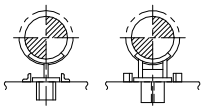
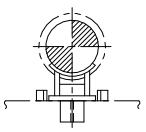
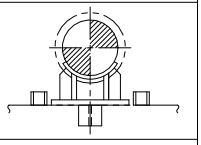
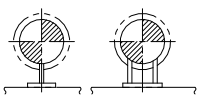
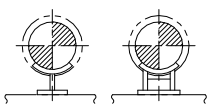
SUPPORT DESCRIPTION:	SHEET
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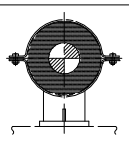
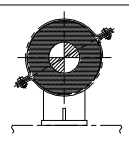
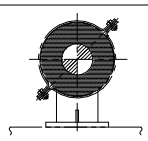
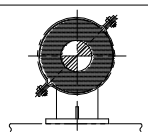
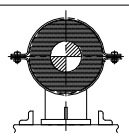
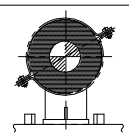
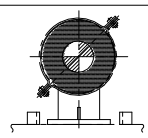
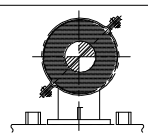
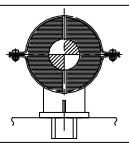
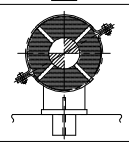
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شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 10 از 394

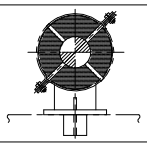
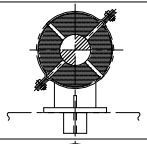
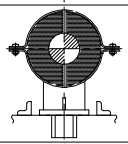
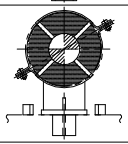
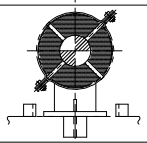
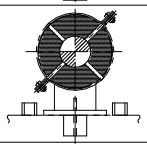
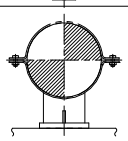
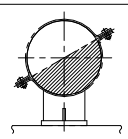
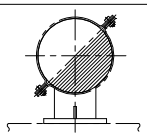
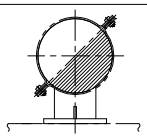
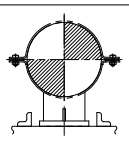
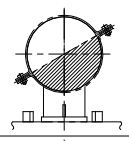
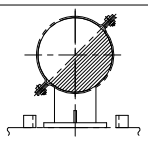
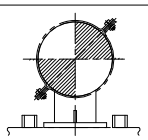
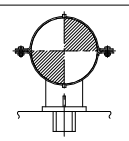
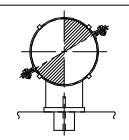
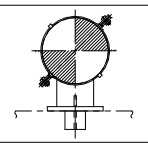
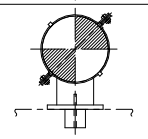
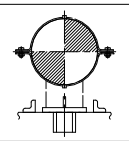
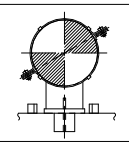
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D02	0001	DW	PI	120	PEDCO	GCS	BK

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SB	01	SLIDE SHOE (CS-WITHOUT PWHT)	1/2" ~ 14"	
			16" ~ 28"	
			30" ~ 36"	
			38" ~ 56"	
	02	SLIDE SHOE (CS-WITH PWHT, AS, SS)	1/2" ~ 14"	
			16" ~ 36"	
			38" ~ 56"	
	03	GUIDE SHOE (CS-WITHOUT PWHT)	1/2" ~ 14"	
			16" ~ 28"	
			30" ~ 36"	
SB	03	GUIDE SHOE (CS-WITHOUT PWHT)	38" ~ 56"	
	04	GUIDE SHOE (CS-WITH PWHT, AS, SS)	1/2" ~ 14"	
			16" ~ 36"	
			38" ~ 56"	
	05	STOPPER SHOE (CS-WITHOUT PWHT)	1/2" ~ 14"	
			16" ~ 28"	
			30" ~ 36"	
			38" ~ 56"	
	06	STOPPER SHOE (CS-WITH PWHT, AS, SS)	1/2" ~ 14"	
			16" ~ 36"	

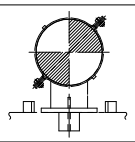
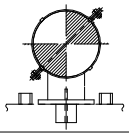
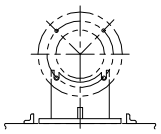
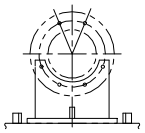
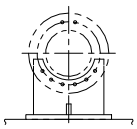
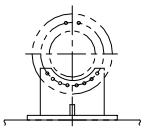
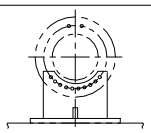
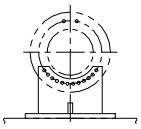
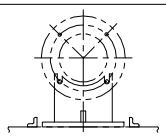
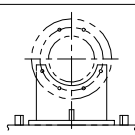
SUPPORT DESCRIPTION:	SHEET
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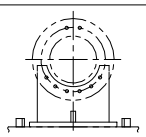
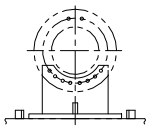
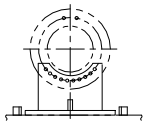
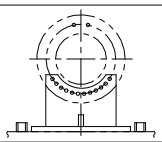
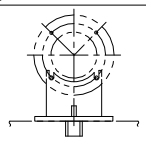
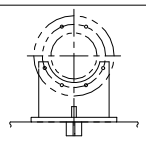
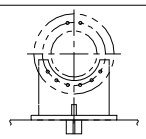
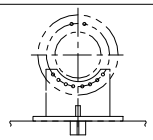
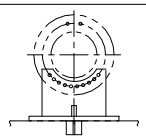
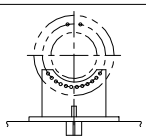
CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SB	06	STOPPER SHOE (CS-WITH PWHT, AS, SS)	38" ~ 56"	
	07	SEMI ANCHOR SHOE (CS-WITHOUT PWHT)	1/2" ~ 14"	
			16" ~ 28"	
			30" ~ 36"	
			38" ~ 56"	
	08	SEMI ANCHOR SHOE (CS-WITH PWHT, AS, SS)	1/2" ~ 14"	
			16" ~ 36"	
			38" ~ 56"	
	09	FIXED SHOE (CS-WITHOUT PWHT)	1/2" ~ 14"	
	10	FIXED SHOE (CS-WITH PWHT, AS, SS)	1/2" ~ 14"	

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SB	11	SLIDE SHOE (COLD INSULATION)	1/5"~1 1/2"	
			2" ~ 5"	
			6" ~ 18"	
			20" ~ 30"	
	12	GUIDE SHOE (COLD INSULATION)	1/5"~1 1/2"	
			2" ~ 5"	
			6" ~ 18"	
			20" ~ 30"	
	13	STOP SHOE (COLD INSULATION)	1/5"~1 1/2"	
			2" ~ 5"	

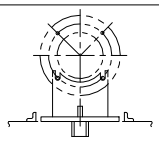
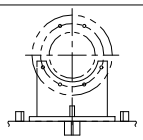
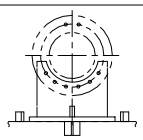
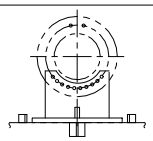
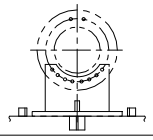
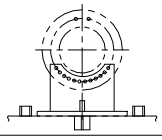
CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SB	13	STOP SHOE (COLD INSULATION)	6" ~ 18"	
			20" ~ 30"	
	14	SEMI ANCHOR SHOE (COLD INSULATION)	1/5"~1 1/2"	
			2" ~ 5"	
			6" ~ 18"	
			20" ~ 30"	
	15	SLIDE CLAMPED SHOE	1/2" ~ 6"	
			8" ~ 20"	
			22" ~ 36"	
			38" ~ 42"	
SB	16	GUIDE CLAMPED SHOE	1/2" ~ 6"	
			8" ~ 20"	
			22" ~ 36"	
			38" ~ 42"	
	17	STOPPER CLAMPED SHOE	1/2" ~ 6"	
			8" ~ 20"	
			22" ~ 36"	
			38" ~ 42"	
	18	SEMI ANCHOR CLAMPED SHOE	1/2" ~ 6"	
			8" ~ 20"	

SUPPORT DESCRIPTION:	SHEET
STANDARD PIPE SUPPORT INDEX	3
	5

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SB	18	SEMI ANCHOR CLAMPED SHOE	22" ~ 36"	
			38" ~ 42"	
	19	SLIDE SHOE ON VALVE FOR GRE LINE	1" ~ 3"	
			4" ~ 14"	
			16" ~ 24"	
			26"	
			26" ~ 38"	
			40"	
	20	GUIDE SHOE ON VALVE FOR GRE LINE	1" ~ 3"	
			4" ~ 14"	

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SB	20	GUIDE SHOE ON VALVE FOR GRE LINE	16" ~ 24"	
			26"	
			26" ~ 38"	
			40"	
	21	STOP SHOE ON VALVE FOR GRE LINE	1" ~ 3"	
			4" ~ 14"	
			16" ~ 24"	
			26"	
			26" ~ 38"	
			40"	

SUPPORT DESCRIPTION:	SHEET
STANDARD PIPE SUPPORT INDEX	4
	5

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE	CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SB	22	SEMI ANCHOR SHOE ON VALVE FOR GRE LINE	1" ~ 3"						
			4" ~ 14"						
			16" ~ 24"						
			26" ~ 38"						
			16" ~ 24"						
			40"						

SUPPORT DESCRIPTION:	SHEET
STANDARD PIPE SUPPORT INDEX	5
	5

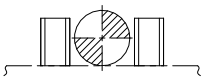
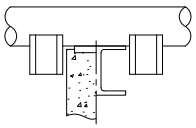
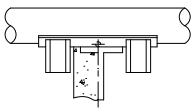
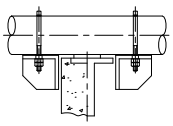
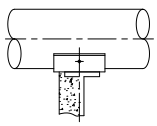
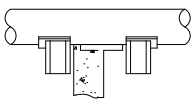
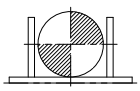
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 15 از 394

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE	CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SC	01	GUIDE BARE PIPE	1/2" ~ 56"						
	02	STOPPER (CS-WITHOUT PWHT)	1/2" ~ 56"						
	03	STOPPER (CS-WITH PWHT, AS, SS)	1/2" ~ 56"						
	04	STOPPER FOR GALVANIZED PIPE	1/2" ~ 8"						
	05	REINFORCING PAD	2"~ 56"						
	06	STOPPER (CS-WITH PWHT, AS, SS)	2"~ 56"						
	07	UNINSULATED GALVANIZED PIPE REST-GUIDE	2"~ 8"						

SUPPORT DESCRIPTION:	SHEET
STANDARD PIPE SUPPORT INDEX	1
	1

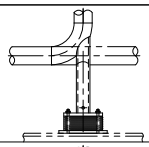
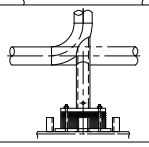
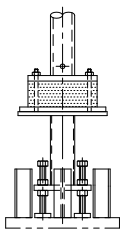
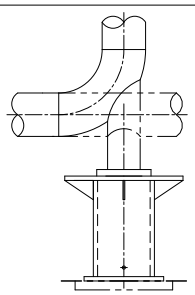
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY
شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 16 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

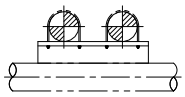
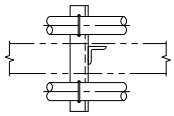
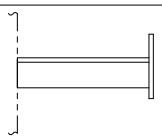
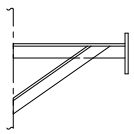
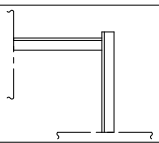
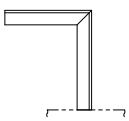
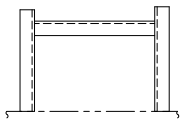
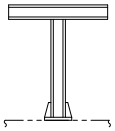
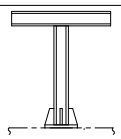
CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SD	01	SLIDE STOOL (CS-WITHOUT PWHT)	2" ~ 36"	
	02	SLIDE STOOL (CS-WITH PWHT, AS, SS)	2" ~ 36"	
	03	GUIDE/LINE STOP /SEMI ANCHOR STOOL (CS-WITHOUT PWHT)	2" ~ 36"	
	04	GUIDE/LINE STOP /SEMI ANCHOR STOOL (CS-WITH PWHT, AS, SS)	2" ~ 36"	
	05	FIXED STOOL (CS-WITHOUT PWHT)	2" ~ 36"	
	06	FIXED STOOL (CS-WITH PWHT, AS, SS)	2" ~ 36"	
	07	ADJUSTABLE SLIDE STOOL (CS-WITHOUT PWHT)	2" ~ 6"	
			8" ~ 24"	
	08	ADJUSTABLE SLIDE STOOL (CS-WITH PWHT, AS, SS)	2" ~ 6"	
			8" ~ 24"	

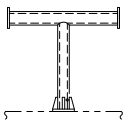
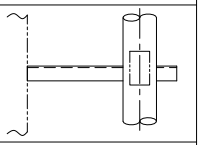
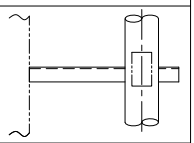
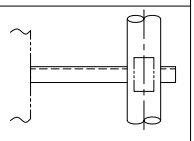
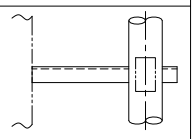
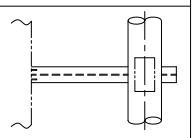
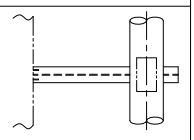
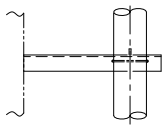
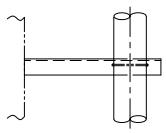
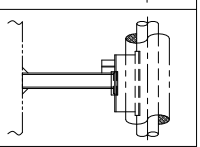
CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SD	09	ADJUSTABLE GUIDE /LINE STOP/SEMI ANCHOR STOOL (CS-WITHOUT PWHT)	2" ~ 6"	
			8" ~ 14"	
			16" ~ 24"	
	10	ADJUSTABLE GUIDE /LINE STOP/SEMI ANCHOR STOOL (CS-WITH PWHT,AS,SS)	2" ~ 6"	
			8" ~ 14"	
			16" ~ 24"	
	11	DUMMY PIPE FOR 90° ELBOW (CS-WITHOUT PWHT)	2" ~ 36"	
	12	DUMMY PIPE FOR 90° ELBOW (CS-WITH PWHT, AS, SS)	2" ~ 36"	
	13	DUMMY PIPE FOR 45° ELBOW (CS-WITHOUT PWHT)	2" ~ 36"	
	14	DUMMY PIPE FOR 45° ELBOW (CS-WITH PWHT, AS, SS)	2" ~ 36"	

SUPPORT DESCRIPTION:	SHEET
STANDARD PIPE SUPPORT INDEX	1 2

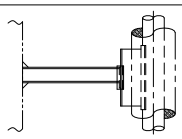
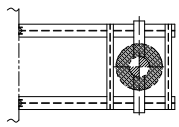
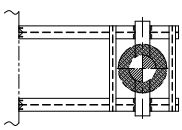
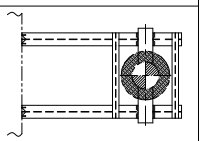
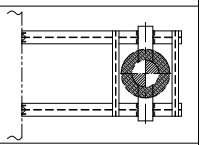
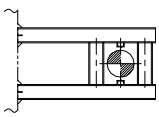
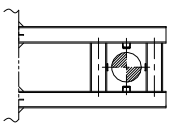
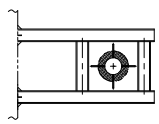
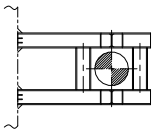
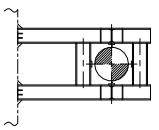
CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE	CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SD	15	SLIDE STOOL (COLD INSULATION)	2" ~ 36"						
	16	GUIDE/LINE STOP /SEMI ANCHOR STOOL (COLD INSULATION)	2" ~ 36"						
	17	ADJUSTABLE GUIDE LINE STOP/SEMI ANCHOR STOOL (COLD INSULATION)	2" ~ 36"						
	18	LOAD STANCHION	2" ~ 20"						

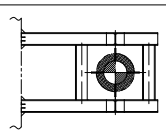
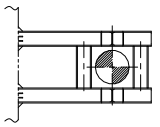
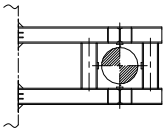
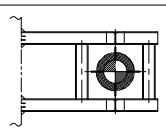
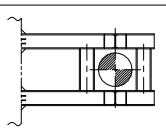
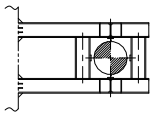
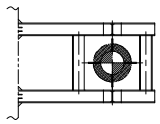
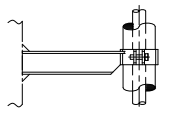
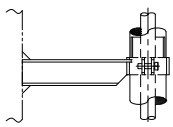
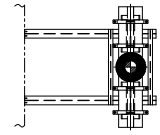
SUPPORT DESCRIPTION:	SHEET
STANDARD PIPE SUPPORT INDEX	2
	2

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SE	01	RESTING WITH MOTHER PIPE	-	
	02	ANGLE SUPPORT	1/2" ~ 2"	
	03	ANGLE BRACKET	1/2" ~ 2"	
	04	SIMPLE BRACKET	-	
	05	REINFORCED BRACKET	-	
	06	CHAIR-TYPE SUPPORT AT STEEL STRUCTURE	-	
	07	L-TYPE SUPPORT AT STEEL STRUCTURE	-	
	08	U-TYPE SUPPORT AT STEEL STRUCTURE	-	
	09	T-TYPE SUPPORT AT STEEL STRUCTURE (CHANNEL)	-	
		T-TYPE SUPPORT AT STEEL STRUCTURE (HEB)	-	

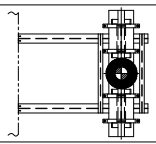
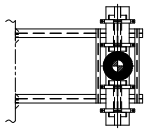
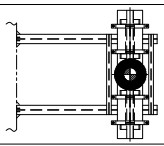
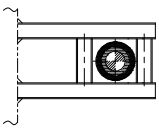
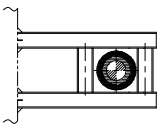
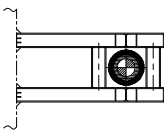
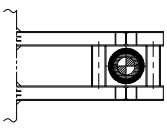
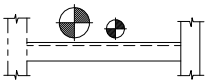
CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SE	09	T-TYPE SUPPORT AT STEEL STRUCTURE (PIPE)	-	
	10	BRACKET ON STEEL STRUCTURE HORIZONTAL RUN PIPE (TYPE "A")	-	
		BRACKET ON STEEL STRUCTURE HORIZONTAL RUN PIPE (TYPE "B")	-	
		BRACKET ON STEEL STRUCTURE HORIZONTAL RUN PIPE (TYPE "C")	-	
		BRACKET ON STEEL STRUCTURE HORIZONTAL RUN PIPE (TYPE "D")	-	
		BRACKET ON STEEL STRUCTURE HORIZONTAL RUN PIPE (TYPE "E")	-	
		BRACKET ON STEEL STRUCTURE HORIZONTAL RUN PIPE (TYPE "F")	-	
	11	BRACKET ON STEEL STRUCTURE U-BOLT TYPE SEMI ANCHOR	1/2" ~ 2"	
	12	BRACKET ON STEEL STRUCTURE U-BOLT TYPE DOUBLE GUIDE	1/2" ~ 2"	
	13	BRACKET ON STEEL STRUCTURE SHOE TYPE SEMI ANCHOR	2" ~ 6"	

SUPPORT DESCRIPTION:	SHEET
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CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SE	14	BRACKET ON STEEL STRUCTURE SHOE TYPE DOUBLE GUIDE	2" ~ 6"	
	15	BRACKET ON STEEL STRUCTURE REST	8" ~ 12"	
			14" ~ 24"	
			26" ~ 42"	
			44" ~ 56"	
	16	BRACKET ON STEEL STRUCTURE DOUBLE GUIDE (TYPE A-CS)	8" ~ 12"	
		BRACKET ON STEEL STRUCTURE DOUBLE GUIDE (TYPE B-AS, SS)	8" ~ 12"	
		BRACKET ON STEEL STRUCTURE DOUBLE GUIDE (TYPE C-CS,AS,SS)	8" ~ 12"	
		BRACKET ON STEEL STRUCTURE DOUBLE GUIDE (TYPE A-CS)	14" ~ 24"	
		BRACKET ON STEEL STRUCTURE DOUBLE GUIDE (TYPE B-AS, SS)	14" ~ 24"	

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SE	16	BRACKET ON STEEL STRUCTURE DOUBLE GUIDE (TYPE C CS,AS,SS)	14" ~ 24"	
		BRACKET ON STEEL STRUCTURE DOUBLE GUIDE (TYPE A-CS)	26" ~ 42"	
		BRACKET ON STEEL STRUCTURE DOUBLE GUIDE (TYPE B-AS,SS)	26" ~ 42"	
		BRACKET ON STEEL STRUCTURE DOUBLE GUIDE (TYPE C CS,AS,SS)	26" ~ 42"	
		BRACKET ON STEEL STRUCTURE DOUBLE GUIDE (TYPE A-CS)	44" ~ 56"	
		BRACKET ON STEEL STRUCTURE DOUBLE GUIDE (TYPE B-AS, SS)	44" ~ 56"	
		BRACKET ON STEEL STRUCTURE DOUBLE GUIDE (TYPE C CS,AS,SS)	44" ~ 56"	
	17	BRACKET ON STEEL STRUCTURE CLAMP TYPE,DOUBLE GUIDE (COLD INSULATION)	2" ~ 6"	
	18	BRACKET ON STEEL STRUCTURE CLAMP TYPE, SEMI ANCHOR (COLD INSULATION)	2" ~ 6"	
	19	BRACKET ON STEEL STRUCTURE REST (COLD INSULATION)	2" ~ 6"	

SUPPORT DESCRIPTION:	SHEET
STANDARD PIPE SUPPORT INDEX	2 3

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE	CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SE	19	BRACKET ON STEEL STRUCTURE REST (COLD INSULATION)	8" ~ 12"						
		BRACKET ON STEEL STRUCTURE REST (COLD INSULATION)	14" ~ 24"						
		BRACKET ON STEEL STRUCTURE REST (COLD INSULATION)	26" ~ 42"						
	20	BRACKET ON STEEL STRUCTURE GUIDE (COLD INSULATION)	2" ~ 6"						
		BRACKET ON STEEL STRUCTURE GUIDE (COLD INSULATION)	8" ~ 12"						
		BRACKET ON STEEL STRUCTURE GUIDE (COLD INSULATION)	14" ~ 24"						
		BRACKET ON STEEL STRUCTURE DOUBLE GUIDE (COLD INSULATION)	26" ~ 42"						
	21	STRAIGTH FRAME FOR MULTI PIPE	-						

SUPPORT DESCRIPTION:	SHEET
STANDARD PIPE SUPPORT INDEX	3
	3

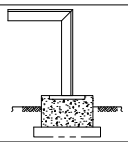
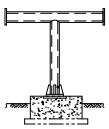
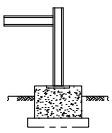
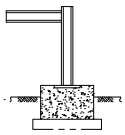
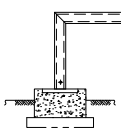
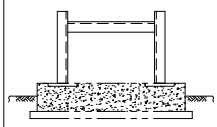
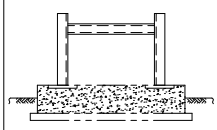
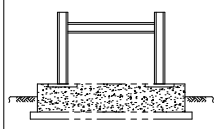
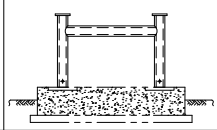
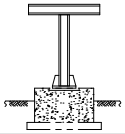
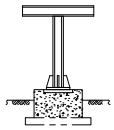
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 21 از 394

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE	CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SF	01	L-TYPE SUPPORT (ANGLE) AT GRADE	-		SF	11	T-TYPE SUPPORT (PIPE)	-	
	02	L-TYPE SUPPORT (CHANNEL) AT GRADE	-						
	03	L-TYPE SUPPORT (HEB) AT GRADE	-						
	04	L-TYPE SUPPORT (PIPE) AT GRADE	-						
	05	U-TYPE SUPPORT (ANGLE) AT GRADE	-						
	06	U-TYPE SUPPORT (CHANNEL) AT GRADE	-						
	07	U-TYPE SUPPORT (HEB) AT GRADE	-						
	08	U-TYPE SUPPORT (PIPE) AT GRADE	-						
	09	T-TYPE SUPPORT (CHANNEL)	-						
	10	T-TYPE SUPPORT (HEB)	-						

SUPPORT DESCRIPTION:	SHEET
STANDARD PIPE SUPPORT INDEX	1 1

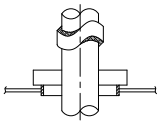
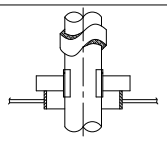
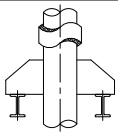
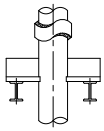
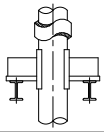
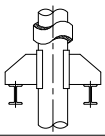
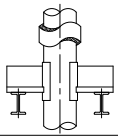
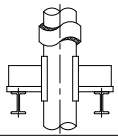
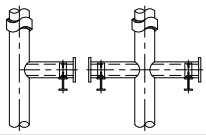
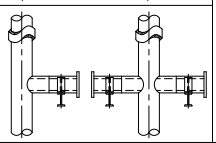
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

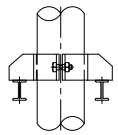
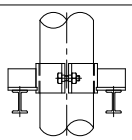
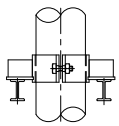
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 22 از 394

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SG	01	WELDED PROP (CS-WITHOUT PWHT)	1/2" ~ 2"	
	02	WELDED PROP (CS-WITH PWHT, AS, SS)	1/2" ~ 2"	
	03	WELDED PROP (CS-WITHOUT PWHT)	3" ~ 6"	
			8" ~ 12"	
			14" ~ 24"	
	04	WELDED PROP (CS-WITH PWHT, AS, SS)	3" ~ 6"	
			8" ~ 12"	
			14" ~ 24"	
	05	SINGLE & DOUBLE TRUNNION (CS-WITHOUT PWHT)	2" ~ 36"	
	06	SINGLE & DOUBLE TRUNNION (CS-WITH PWHT, AS, SS)	2" ~ 36"	

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SG	07	REMOVABLE PROP	1/2" ~ 6"	
			8" ~ 12"	
			14" ~ 24"	

SUPPORT DESCRIPTION:
STANDARD PIPE SUPPORT INDEX

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NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

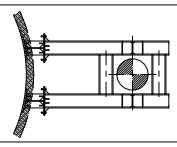
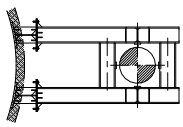
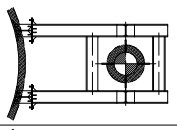
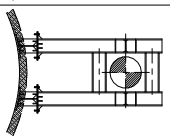
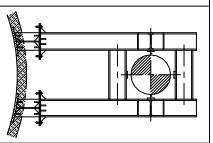
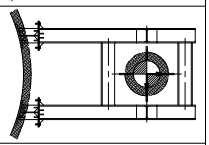
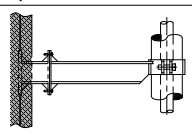
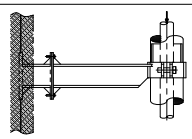
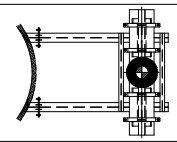
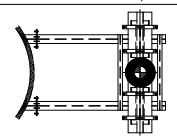
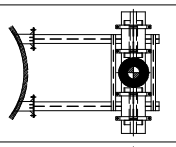
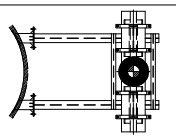
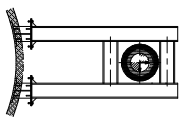
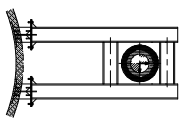
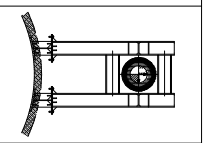
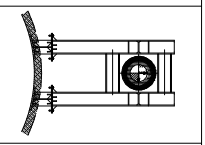
CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SH	01	BRACKET ON EQUIPMENT HORIZONTAL RUN PIPE (TYPE "A")	-	
		BRACKET ON EQUIPMENT HORIZONTAL RUN PIPE (TYPE "B")	-	
		BRACKET ON EQUIPMENT HORIZONTAL RUN PIPE (TYPE "C")	-	
		BRACKET ON EQUIPMENT HORIZONTAL RUN PIPE (TYPE "D")	-	
		BRACKET ON EQUIPMENT HORIZONTAL RUN PIPE (TYPE "E")	-	
		BRACKET ON EQUIPMENT HORIZONTAL RUN PIPE (TYPE "F")	-	
	02	BRACKET ON EQUIPMENT U-BOLT TYPE SEMI ANCHOR	1/2" ~ 2"	
	03	BRACKET ON EQUIPMENT U-BOLT TYPE DOUBLE GUIDE	1/2" ~ 2"	
	04	BRACKET ON EQUIPMENT SHOE TYPE SEMI ANCHOR	2" ~ 6"	
	05	BRACKET ON EQUIPMENT SHOE TYPE DOUBLE GUIDE	2" ~ 6"	

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SH	06	BRACKET ON EQUIPMENT REST	8" ~ 12"	
		BRACKET ON EQUIPMENT REST	14" ~ 24"	
		BRACKET ON EQUIPMENT REST	26" ~ 42"	
		BRACKET ON EQUIPMENT REST	44" ~ 56"	
	07	BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE A-CS)	8" ~ 12"	
		BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE B-AS,SS)	8" ~ 12"	
		BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE C-CS,AS,SS)	8" ~ 12"	
		BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE A-CS)	14" ~ 24"	
		BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE B-AS,SS)	14" ~ 24"	
		BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE C CS,AS,SS)	14" ~ 24"	

SUPPORT DESCRIPTION:

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CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SH	07	BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE A-CS)	26" ~ 42"	
		BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE B-AS,SS)	26" ~ 42"	
		BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE C CS,AS,SS)	26" ~ 42"	
		BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE A-CS)	44" ~ 56"	
		BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE B-AS,SS)	44" ~ 56"	
		BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE C CS,AS,SS)	44" ~ 56"	
	08	BRACKET ON EQUIPMENT CLAMP TYPE, DOUBLE GUIDE (COLD INSULATION)	2" ~ 6"	
	09	BRACKET ON EQUIPMENT CLAMP TYPE,SEMI ANCHOR (COLD INSULATION)	2" ~ 6"	
	10	BRACKET ON EQUIPMENT REST (COLD INSULATION)	2" ~ 6"	
		BRACKET ON EQUIPMENT REST (COLD INSULATION)	8" ~ 12"	
CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
	10	BRACKET ON EQUIPMENT REST (COLD INSULATION)	14" ~ 24"	
		BRACKET ON EQUIPMENT REST (COLD INSULATION)	26" ~ 42"	
SH	11	BRACKET ON EQUIPMENT DOUBLE GUIDE (COLD INSULATION)	2" ~ 6"	
		BRACKET ON EQUIPMENT DOUBLE GUIDE (COLD INSULATION)	8" ~ 12"	
		BRACKET ON EQUIPMENT DOUBLE GUIDE (COLD INSULATION)	14" ~ 24"	
		BRACKET ON EQUIPMENT DOUBLE GUIDE (COLD INSULATION)	26" ~ 42"	

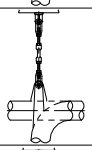
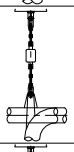
SUPPORT DESCRIPTION:	SHEET
STANDARD PIPE SUPPORT INDEX	2
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NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

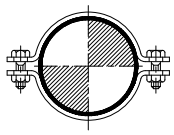
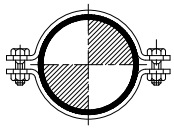
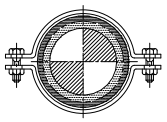
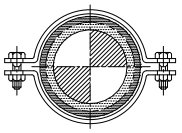
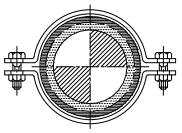
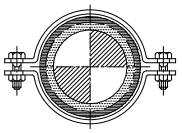
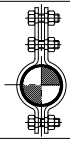
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

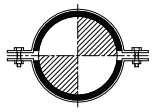
CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE	CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SI	01	RIGID HANGER (CLAMP TYPE)	2" ~ 24"						
	02	SPRING HANGER (CLAMP TYPE)	2" ~ 24"						
	03	RIGID HANGER (CS-WITHOUT PWHT)	2" ~ 24"						
	04	RIGID HANGER (CS-WITH PWHT, AS, SS)	2" ~ 24"						
	05	SPRING HANGER (CS-WITHOUT PWHT)	2" ~ 24"						
	06	SPRING HANGER (CS-WITH PWHT, AS, SS)	2" ~ 24"						

SUPPORT DESCRIPTION:	SHEET
STANDARD PIPE SUPPORT INDEX	1
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NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY
شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 26 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SK	01	SIMPLE CLAMP	1/2" ~ 8"	
			10" & 42"	
	02	HANGING CLAMP	1/2" ~ 8"	
			10" ~ 42"	
	03	SIMPLE COLD CLAMP	1/2"~1 1/2"	
			2" ~ 5"	
			6" ~ 18"	
			20" ~ 30"	
	04	HANGING COLD CLAMP	1/2"~1 1/2"	
			2" ~ 5"	

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SK	04	HANGING COLD CLAMP	6" ~ 18"	
			20" ~ 30"	
	05	UN-INSULATED COLD LINES CLAMP	2" ~ 48"	

SUPPORT DESCRIPTION:	SHEET
STANDARD PIPE SUPPORT INDEX	1
	1

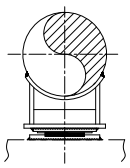
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 27 از 394

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE	CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SL	01	SLIDING PLATE (GRAPHITE WITH SHOE/"SD")	-						
	02	SLIDING PLATE (PTFE WITH SHOE /"SD")	-						
SP	01	BASE PLATE	-						

SUPPORT DESCRIPTION:	SHEET
STANDARD PIPE SUPPORT INDEX	1
	1

General Notes:

- Unless otherwise specified, supports shall be described during the detail engineering for all piping 2" and above.
- All bolts & nuts shall be provided as hot deep galvanized.
- All machine bolts shall include suitable washer.
- Allowable loads have been calculated based on location of applied load which is shown in support details, in case of any major changing in load location during design or construction condition, allowable loads shall be computed per case.
- Some of support configurations will not be erected with large bore piping and minimum length "l"/ height "h"/..., such cases shall be judged and checked by support engineer.(e.g. Rigid hanger (SI-01) for run pipe 24" and height 1000mm is not feasible. Height mark "01" (h=1000mm) is considered for small bore piping).
- In some of supports a minimum clearances is mentioned in drawing, in these cases supports items have been taken off based on those minimum clearance, otherwise exact values of support items shall be calculated.
- When a profile is welded to an existing beam/column (e.g. In SE category), allowable load have been calculated based on continuous welding all around of bracket to existing, if such welding is not possible, allowable loads shall be calculated consequently.
- Allowable vertical/lateral load with friction (Fv/Fl) has been calculated based on μ=0.3, which is reduced by horizontal forces. Horizontal forces are the forces formed by friction of the piping.
- If stop/guide gap that has been considered by stress engineer is different from typical values of this document, this subject shall be noted in related indication of support.

  Ex. SC-02-06-1(stop gap: zero)

  All of bare pipes (Ferrous material) could be located on structure (Support/Beam... Refer to SC-05) without shoe support except for Sloped lines, SS, LTCS, AS , Galvanized lines and overloads requiring reinforcing. Pipe with PWHT could be located on structure without pad. Shoe supports to be considered for Insulated lines , Sloped lines , LTCS , SS , AS ,Galvanized lines, lines with sliding plate and overloads requiring reinforcement pad with saddle. Types of shoe as below are preferred:

  - Hot insulated Carbon Steel without PWHT: Welded shoe.

SUPPORT DESCRIPTION:	SHEET
GENERAL NOTES	1 3

General Notes:

- Hot insulated Carbon Steel with PWHT: Clamped shoe will be used except specific cases due to loads, large diameters or temperatures. In this case, reinforcing pad will be shop welded- On stop location welded shoe could be used.
- AS, SS: Clamped shoe will be used except specific cases due to loads, large diameters or temperatures. In this case, reinforcing pad will be shop welded- On stop location welded shoe could be used.
- Galvanized lines: Clamped shoe.
- Non-Metallic, Non-Ferrous: In this case, lines shall be supported according to manufacturer catalogue/procedure. If such document doesn't exist, proper “clamp-type” shoe will be used.
- For cold insulated lines, proper support according to standard pipe support will be used.
- For LTCS and bare CS with service condition <0°C, pipe shoe shall be provided. Clamped
- Shoe is preferred.
- For sloped lines, exact height of shoe will be specified with a note. Also, shoe with height (H) of 250 and 300mm could be used but allowable loads shall be checked.
- Ex. SB-01-A30-3-5(H= 160mm)

- Supports made of pipe components shall have a 6 mm weep hole with the plate welded on the end to avoid corrosion.
- All elements integrally welded to the pipes, such as reinforcing pads, shall be bored in order to evacuate the gas produced during welding.
- Rigid supports located in proximity to pumps, turbines and compressors shall be adjustable type.
- Reciprocating compressors
  - Lines connected to reciprocating compressors should not have rigid connections with metallic structures or foundations of other equipment.
  - All supports with guides should be without gap except for thermal effects.
  - When anti vibrating supports are required, supports may be designed with special washers.
- Supports for piping connected to heat exchangers shall be designed to allow adjustment of support and dismantling of pipe.
- When a temporary support is required during hydrostatic test, it shall be clearly specified on isometric or piping drawing so that it may be removed after testing if necessary.
- Generally, supporting a pipe from a larger pipe will not be used. In cases that specific structure is not practical such support could be used except for below conditions:
  - Bearing line (mother pipe) is cryogenic line.
  - Bearing line (mother pipe) is transporting highly corrosive, poisonous, toxic products and liquefied gas
  - Bearing line (mother pipe) with operating pressure over 64 bar
  - Bearing line (mother pipe) with operating temperature over +95 °C

General Notes:

- **For Can type spring supports a polished SS (304) plate shall be considered in relevant special support drawing and its material take off. Mentioned plate shall be welded to bottom plate of support and be in direct contact with PTFE sheet.**

SUPPORT DESCRIPTION:	SHEET
GENERAL NOTES	3
	3

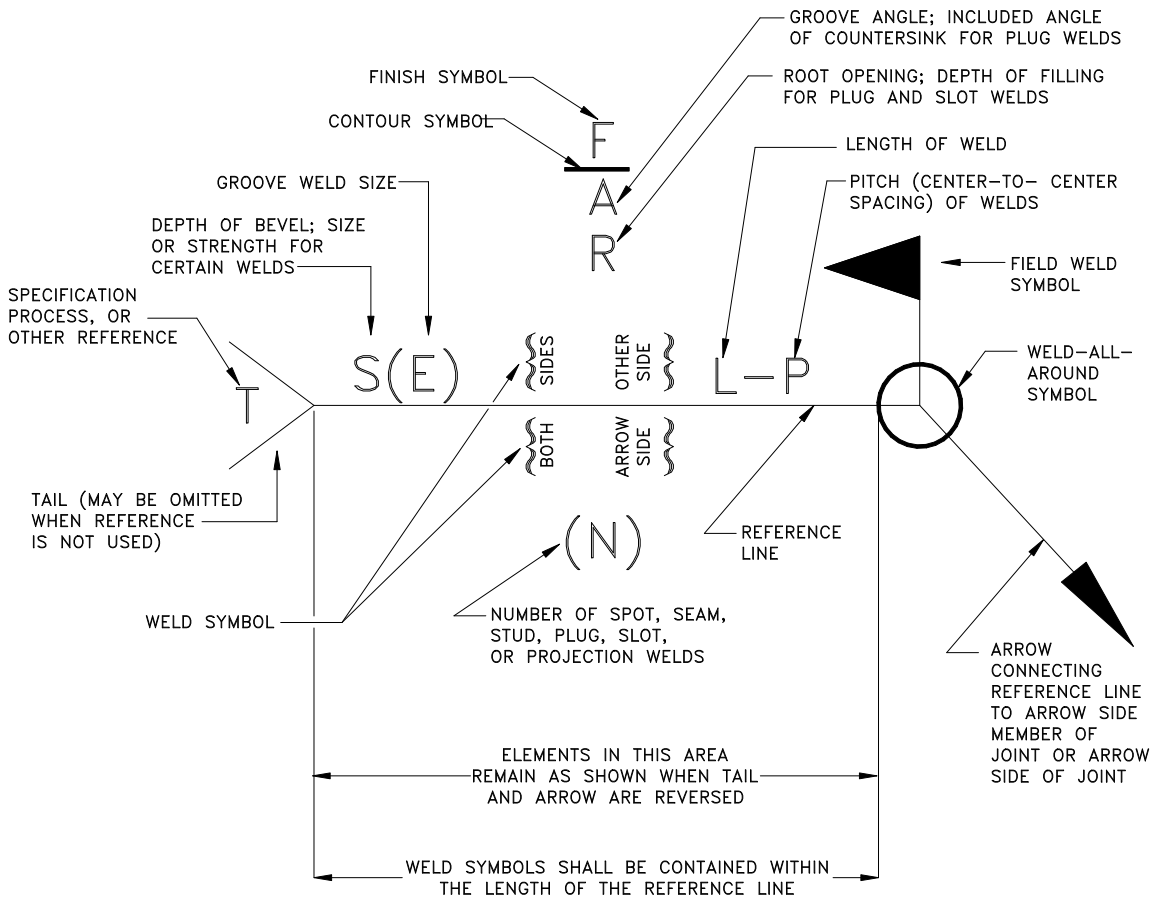


FIGURE 1-STANDARD LOCATION OF ELEMENTS OF A WELDING SYMBOL

WELD ALL AROUND	FIELD WELD	MELT THROUGH	CONSUMABLE INSERT (SQUARE)	BACKING OR SPACER (RECTANGLE)	CONTOUR		
					FLUSH OR FLAT	CONVEX	CONCAVE
				BACKING			
				SPACER			

FIGURE 2-SUPPLEMENTARY SYMBOLS

SUPPORT DESCRIPTION:	SHEET
WELDING SYMBOLS	1
G-01	2

GROOVE							
SQUARE	SCARF	V	BEVEL	U	J	FLARE-V	FLARE-BEVEL
							

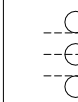
FILLET	PLUG OR SLOT	STUD	SPOT OR PROJECTION	SEAM	BACK OR BACKING	SURFACING	EDGE
							

FIGURE-3 WELD SYMBOLS

SUPPORT DESCRIPTION:	SHEET
WELDING SYMBOLS	2
G-01	2

PIPE SUPPORT SPANS

1-MAX. REST SPAN FOR LONG STRAIGHT RUN OF PIPING

PIPE SIZE	WALL THK.	UNINSULATED				INSULATED			
		RECOMMENDED PIPE SPANS		RECOMMENDED MAX. PIPE SPANS		RECOMMENDED PIPE SPANS		RECOMMENDED MAX. PIPE SPANS	
		SPAN	DEFL.	SPAN	DEFL.	SPAN	DEFL.	SPAN	DEFL.
3/4"	SCH80	3600	10	5300	43	3350	10	4300	22
1"	SCH80	4400	13	6100	48	4100	13	4700	22
1+1/2"	SCH80	5000	19	7300	48	5500	19	5000	25
2"	SCH80	7000	25	8000	44	6400	22	6700	25
3"	SCH40	8400	25	9600	44	7200	10	7500	22
4"	SCH40	9400	25	10500	37	8100	19	8500	24
6"	SCH40	11200	25	12300	38	9700	19	10100	24
8"	SCH40	12600	25	13700	33	11000	19	11400	21
10"	SCH40	14000	25	15000	35	12300	19	12600	21
12'	STD	13400	25	15800	32	13100	17	13600	21
14"	STD	15500	25	16300	32	13400	18	14100	19
16"	STD	16300	25	16700	29	13700	14	14800	19
18"	STD	16900	25	17200	27	13800	13	15000	16
20"	STD	17000	22	17500	25	14300	13	15000	16
24"	STD	17300	19	18100	22	14700	11	16000	14
30"	SCH10	15000	11	15000	11	14300	8	14300	8
36"	SCH10	16100	10	16100	10	14300	7	14300	7
42"	STD	17600	9	17600	9	15000	6	15000	6
48"	STD	17800	8	17800	8	16100	5	16100	5

NOTE:

1- ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE SPECIFIED.

2- ALLOWABLE SPAN IN REST TYPE SUPPORT HAS BEEN CALCULATED BASED ON MAX. TEMPERATURE 320°C, PIPE MATERIAL A53 GR.B. 3- ABOVE TABLE SHALL BE USED FOR SELECTION AND APPLICATION OF REST TYPE SUPPORT. 4- THIS DRAWING INDICATES THE RECOMMENDED AND THE MAX. ALLOWABLE PIPE SPANS, BASED ON CARBON STEEL PIPE FILLED WITH WATER.

5- STRESS ENGINEER APPROVAL IS REQUIRED IF:

5-1) THE RECOMMENDED SPANS OF STRAIGHT RUNS OF PIPE MAY BE EXCEEDED.

5-2) PIPE SCH. LESS THAN VALUES GIVEN IN TABLE.

5-3) DESIGN TEMPRATURE OF PIPE EXCEED 320°C AND PIPE MATERIAL IS NOT A53 GR.B.

5-4) PIPE IS COLD INSULATED.

6- IF PIPE IS NOT HYDROSTATICLY TESTED, RECOMMENDED SPAN MAY EXCEED.

SUPPORT DESCRIPTION:	SHEET
ALLOWABLE SPANS (GUIDE TYPE SUPPORTS) G-02	1
	2

PIPE SUPPORT SPANS

2-MAX. GUIDE SPAN FOR LONG STRAIGHT RUN OF PIPING

PIPE SIZE	MAX. SPAN
1+1/2" AND SMALLER	6000
2" UP TO 8"	12000
10" UP TO 18"	18000
20" AND LARGER	24000

3-MAX. GUIDE SPAN FOR LONG VERTICAL RUN OF PIPING

MAX. SPACING OF GUIDES (h)							
NOM. PIPE SIZE	INS. THK. mm	WIND PRESS 145Kg/m^2	WIND PRESS 170Kg/m^2	WIND PRESS 195Kg/m^2	WIND PRESS 220Kg/m^2	WIND PRESS 240Kg/m^2	WIND PRESS 300Kg/m^2 & OVER
3/4"	25	6500	5500	4800	4400	3700	3000
1"	25	6700	5800	5100	4600	4000	3600
1+1/2"	25	7000	6100	5100	4600	4300	4000
2"	25	7300	6100	5500	4900	4300	4000
3"	25	8200	7000	6100	5500	4900	4300
4"	25	8800	7600	6700	5800	5200	4600
6"	50	10000	8500	7600	6700	6100	5500
8"	50	11300	9800	8500	7300	6700	5200
10"	50	12500	10700	9400	8200	7600	7300
12'	50	13700	11600	10400	9100	8200	8000
14"	50	14300	12200	10700	9400	8500	8200
16"	75	15200	13100	11600	10000	9100	8800
18"	75	16200	13700	12200	10700	9800	9500
20"	75	17000	14600	12800	11300	10400	10000
22"	75	17500	15000	13200	12600	10800	10200
24"	75	18300	15500	13700	13200	11000	10500

NOTE:

1- ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE SPECIFIED.

2- STRESS ENGINEER CAN OVERRULE ABOVE TABLE ACCORDING TO STRESS REQUIREMENTS.

3- PIPE GUIDES SHALL NOT BE PLACED CLOSER THEN 1000 PIPE DIAMETER FROM A DIRECTIONAL CHANGE OF PIPE, EXCEPT WHERE REQUIRED BY STRESS ENGINEER.

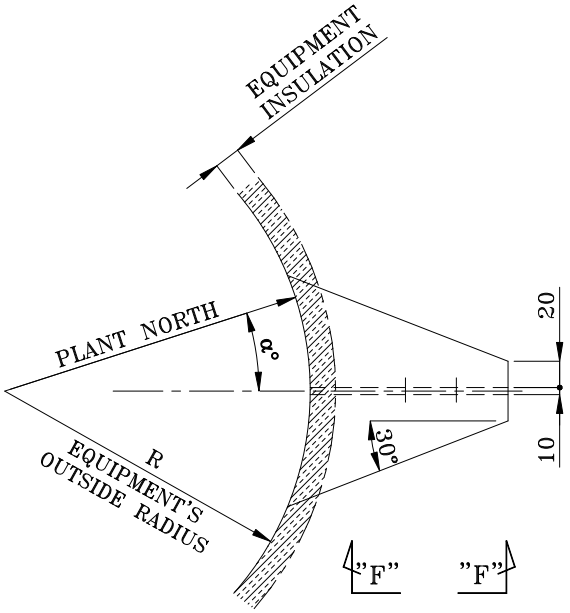
I.E. 6" PIPE: 1000 x 6=6000
2" PIPE: 1000 x 2=2000

4- FOR LINES WITH INSULATION THE LARGER THAN THOSE SHOWN, THE REDUCED GUIDE SPACING (H) MAY BE FOUND BY THE FOLLOWING FORMULA: H=hxD1/D2 WHERE:
D1= OD OF PIPE + TWICE THE GIVEN INSULATION THK. FROM THE ABOVE TABLE.
D2= OD OF PIPE + TWICE THE ACTUAL INSULATION THK. AS SHOWN IN THE NOMENCLATURE.

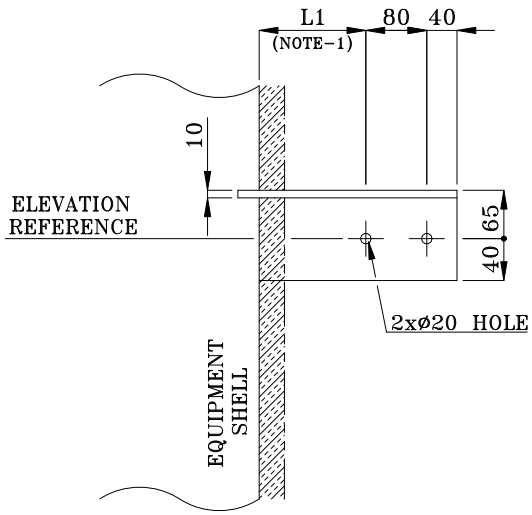
SUPPORT DESCRIPTION:	SHEET
ALLOWABLE SPANS (GUIDE TYPE SUPPORTS) G-02	2 2

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

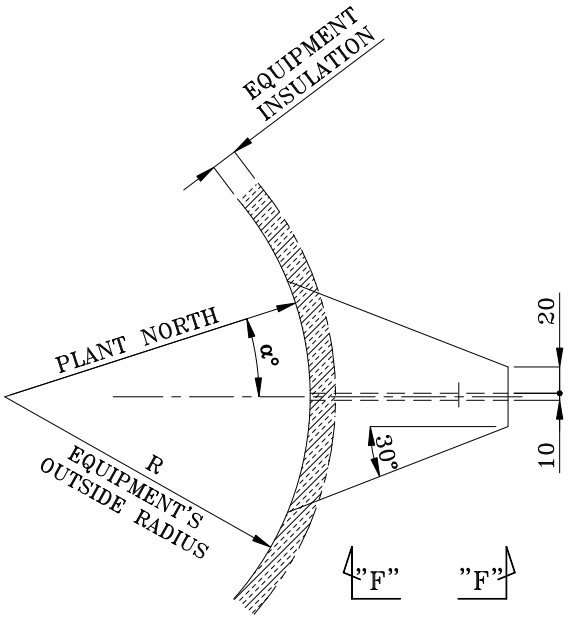
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 35 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	



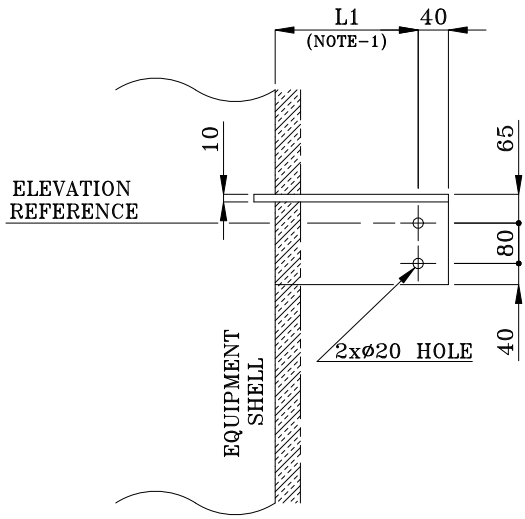
CLIP No.1



VIEW F-F



CLIP No.2



VIEW F-F

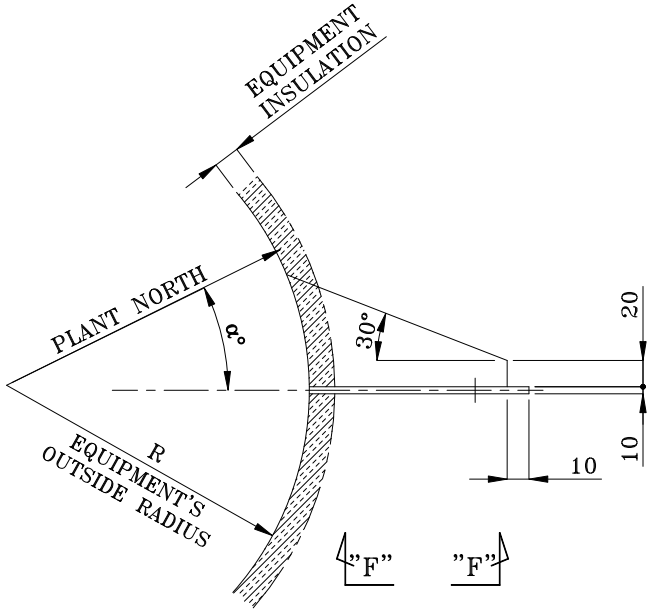
NOTE:

1- DIMENSION "L1" SHALL BE CALCULATED AS FOLLOW:
FOR EQUIPMENT INSULATION THICKNESS ⩽ 80mm, L1=140mm
FOR EQUIPMENT INSULATION THICKNESS > 80mm, L1=240mm

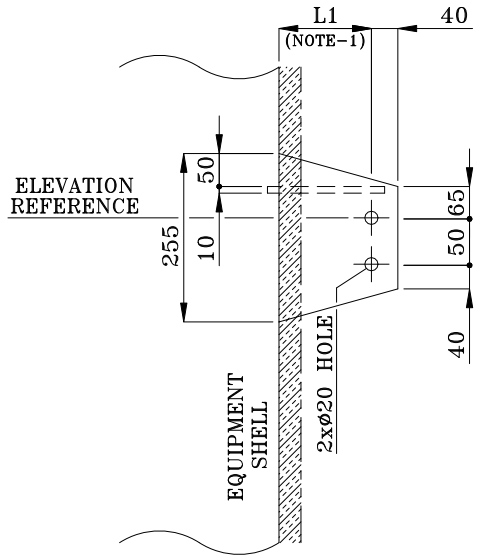
SUPPORT DESCRIPTION:	SHEET
VESSEL CLIP	01
G-03	17

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

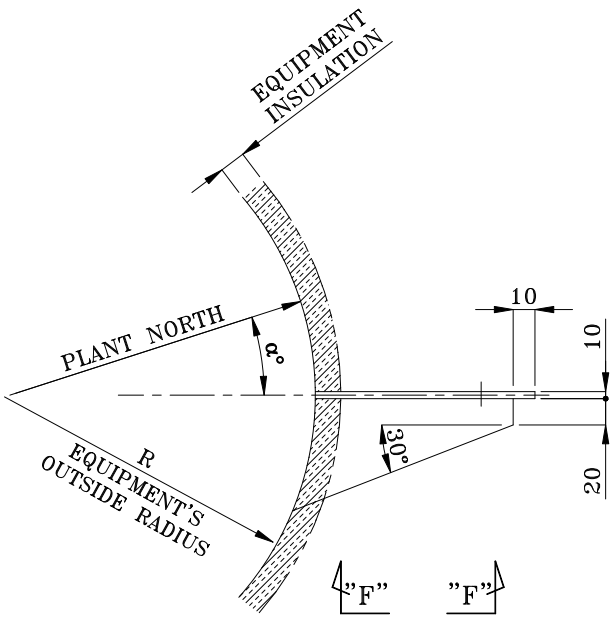
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 36 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02



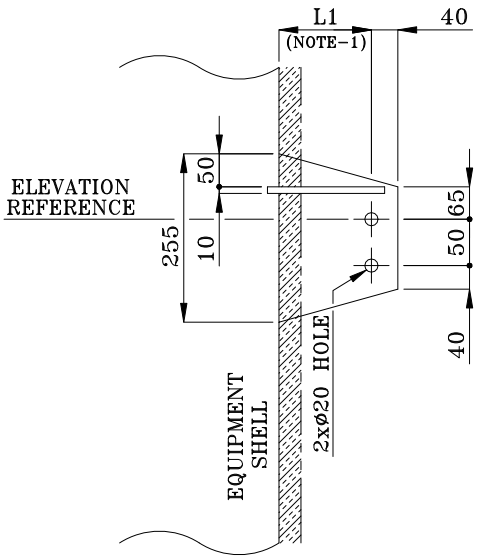
CLIP No.3



VIEW F-F



CLIP No.4



VIEW F-F

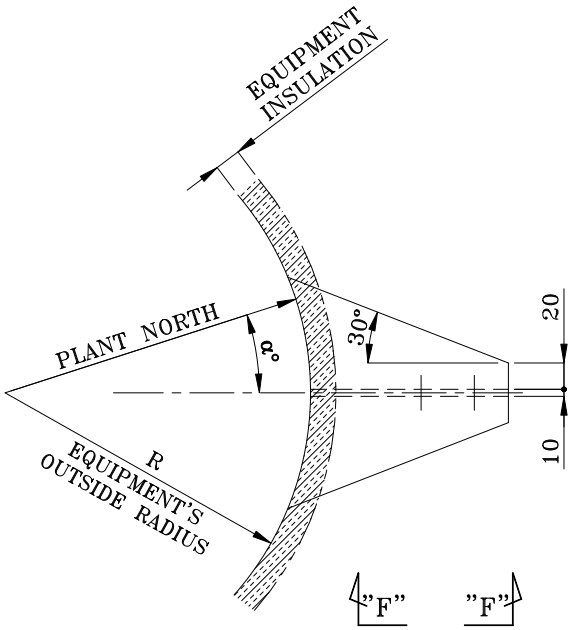
NOTE:

1- DIMENSION "L1" SHALL BE CALCULATED AS FOLLOW:
FOR EQUIPMENT INSULATION THICKNESS ≤ 80mm, L1=140mm
FOR EQUIPMENT INSULATION THICKNESS > 80mm, L1=240mm

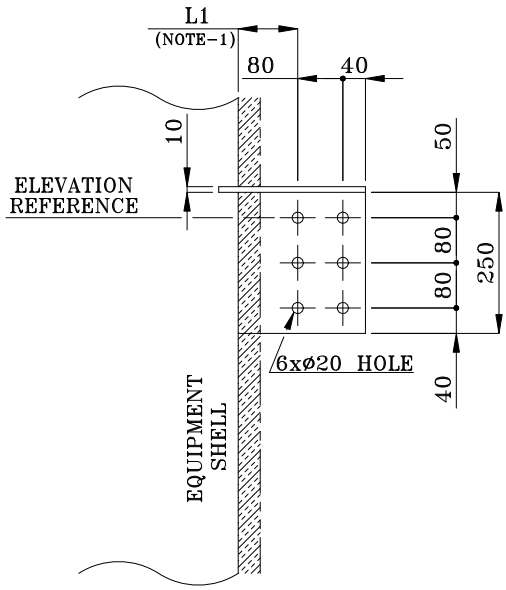
SUPPORT DESCRIPTION:	SHEET
VESSEL CLIP	02
G-03	17

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

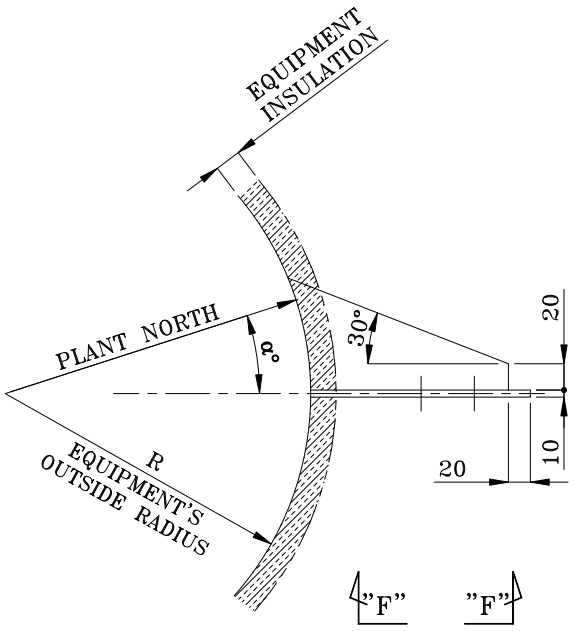
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 37 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	



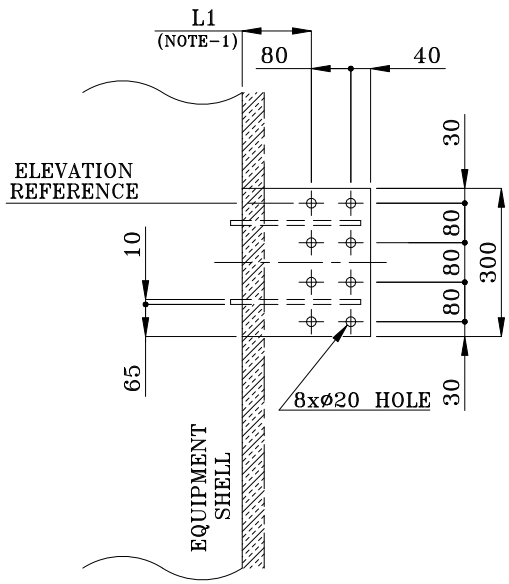
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VIEW F-F



CLIP No.6



VIEW F-F

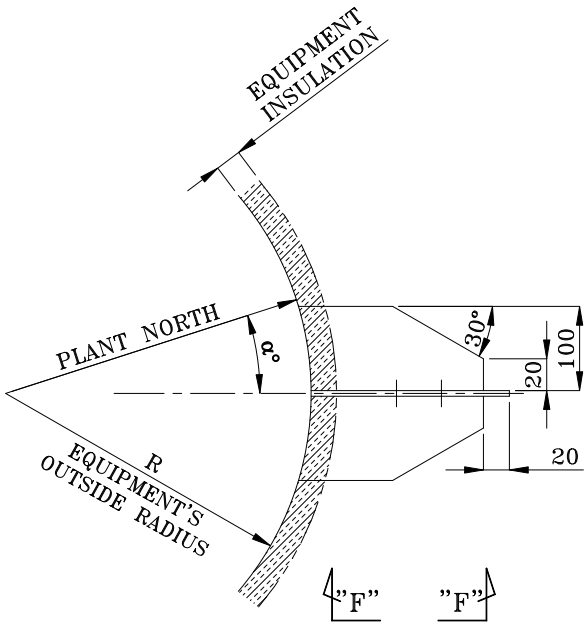
NOTE:

1- DIMENSION "L1" SHALL BE CALCULATED AS FOLLOW:
FOR EQUIPMENT INSULATION THICKNESS ≤ 80mm, L1=140mm
FOR EQUIPMENT INSULATION THICKNESS > 80mm, L1=240mm

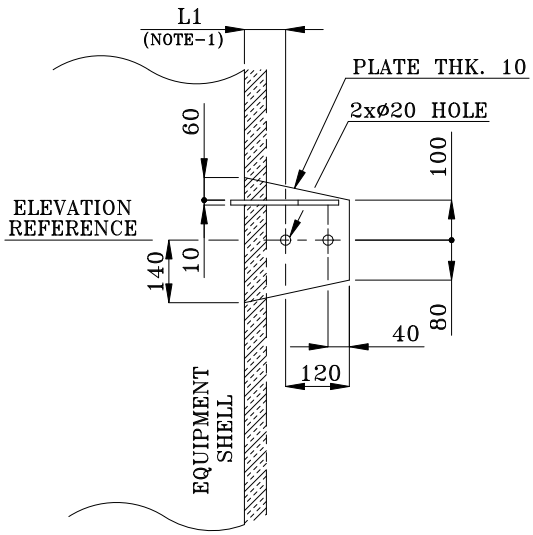
SUPPORT DESCRIPTION:	SHEET
VESSEL CLIP	03
G-03	17

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

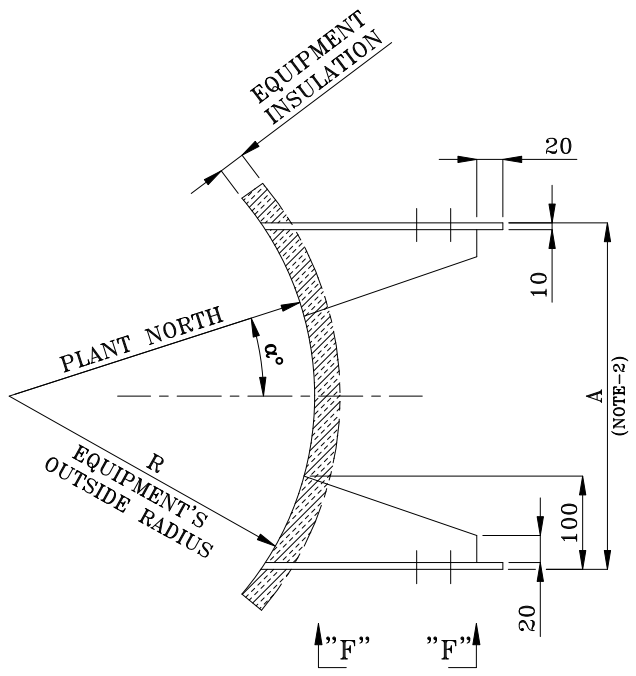
شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 38 از 394
	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02



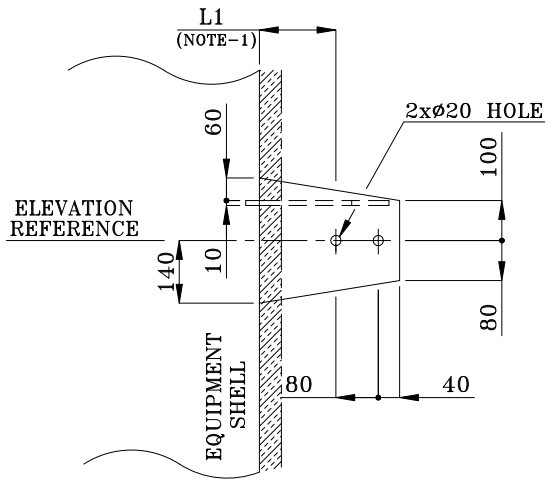
CLIP No.7



VIEW F-F



CLIP No.8



VIEW F-F

NOTE:

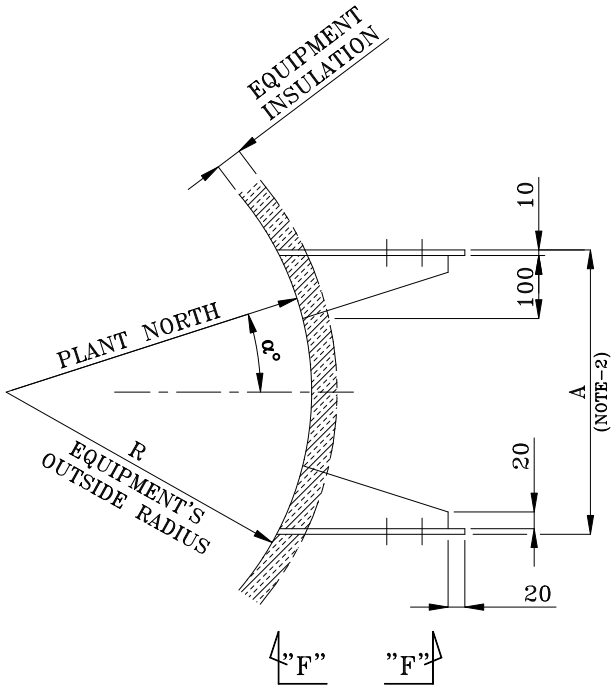
1- DIMENSION "L1" SHALL BE CALCULATED AS FOLLOW:
FOR EQUIPMENT INSULATION THICKNESS ≤ 80mm, L1=140mm
FOR EQUIPMENT INSULATION THICKNESS > 80mm, L1=240mm

2- DIMENSION "A" SHALL BE CALCULATED BACED ON PIPE SIZE.

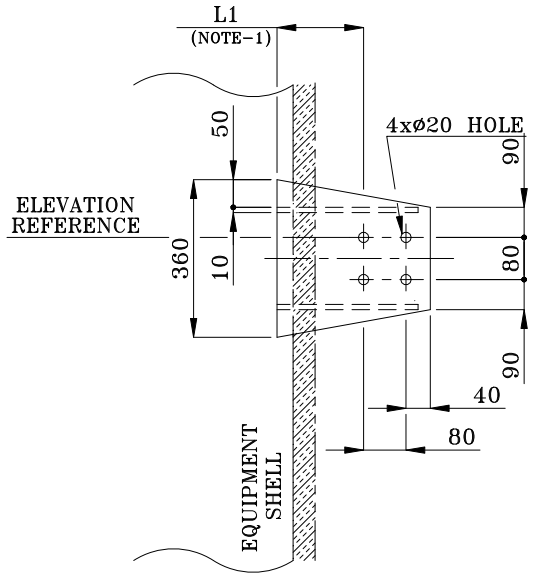
SUPPORT DESCRIPTION:	SHEET
VESSEL CLIP	04
G-03	17

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

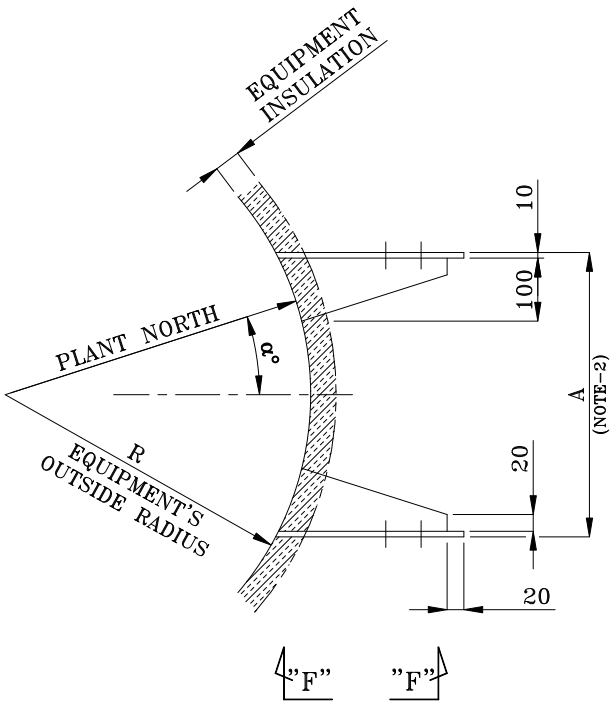
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 39 از 394
053-073-9184	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه	
	D02	0001	DW	PI	120	PEDCO	GCS	BK	



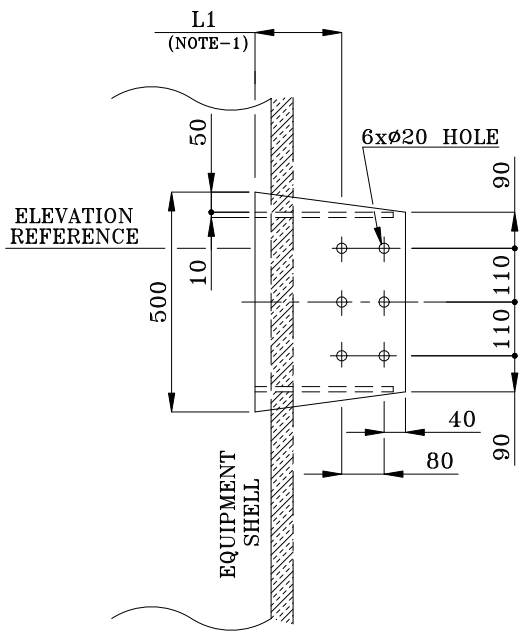
CLIP No.9



VIEW F-F



CLIP No.10



VIEW F-F

NOTE:

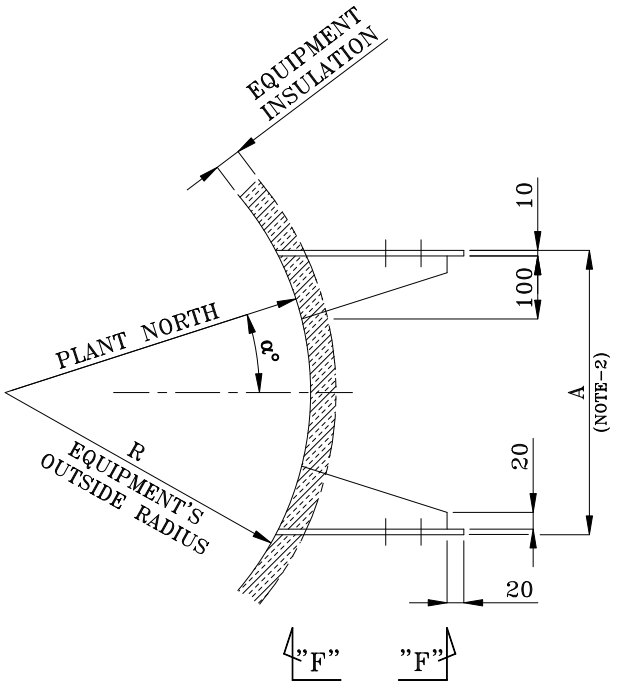
1- DIMENSION "L1" SHALL BE CALCULATED AS FOLLOW:
FOR EQUIPMENT INSULATION THICKNESS ⩽ 80mm, L1=140mm
FOR EQUIPMENT INSULATION THICKNESS > 80mm, L1=240mm

2- DIMENSION "A" SHALL BE CALCULATED BASED ON PIPE SIZE.

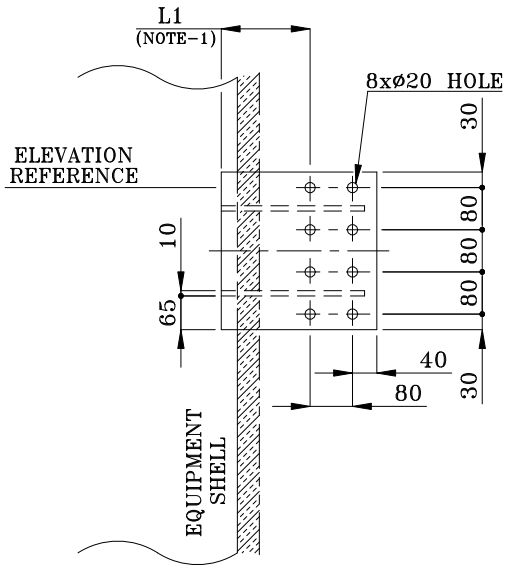
SUPPORT DESCRIPTION:	SHEET
VESSEL CLIP	05
G-03	17

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

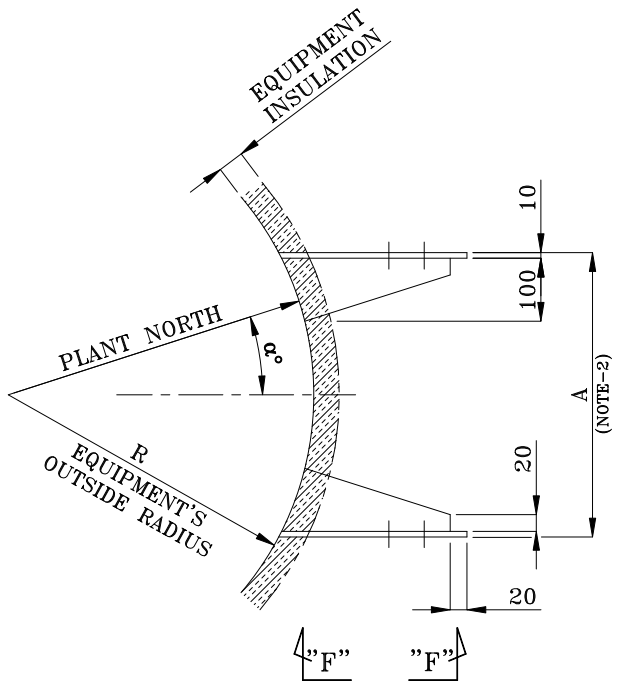
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 40 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	



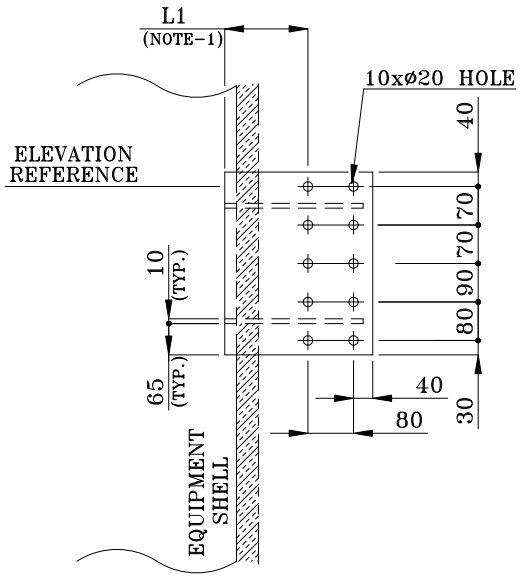
CLIP No.11



VIEW F-F



CLIP No.12



VIEW F-F

NOTE:

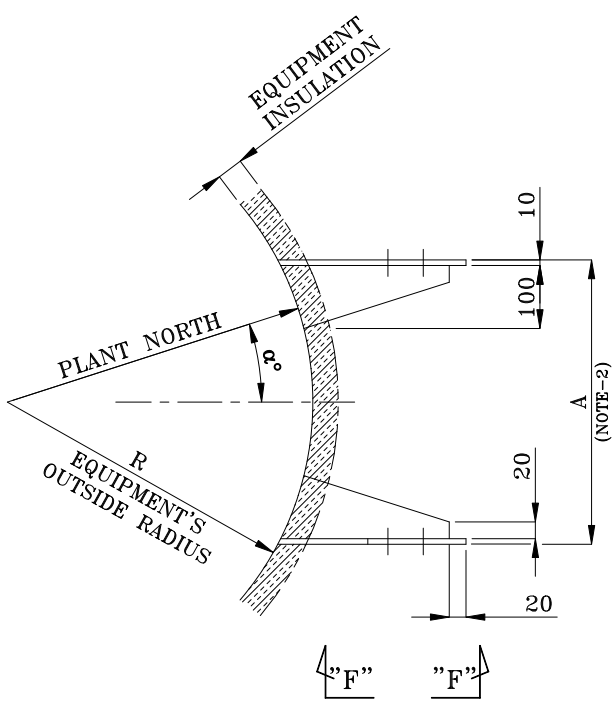
1- DIMENSION "L1" SHALL BE CALCULATED AS FOLLOW:
   FOR EQUIPMENT INSULATION THICKNESS ⩽ 80mm, L1=140mm
   FOR EQUIPMENT INSULATION THICKNESS > 80mm, L1=240mm

2- DIMENSION "A" SHALL BE CALCULATED BASED ON PIPE SIZE.

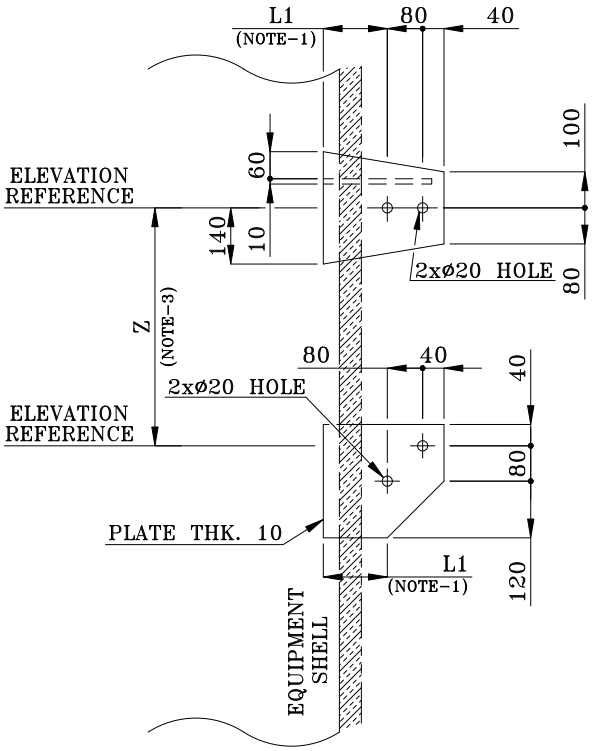
SUPPORT DESCRIPTION:	SHEET
VESSEL CLIP	06
G-03	17

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

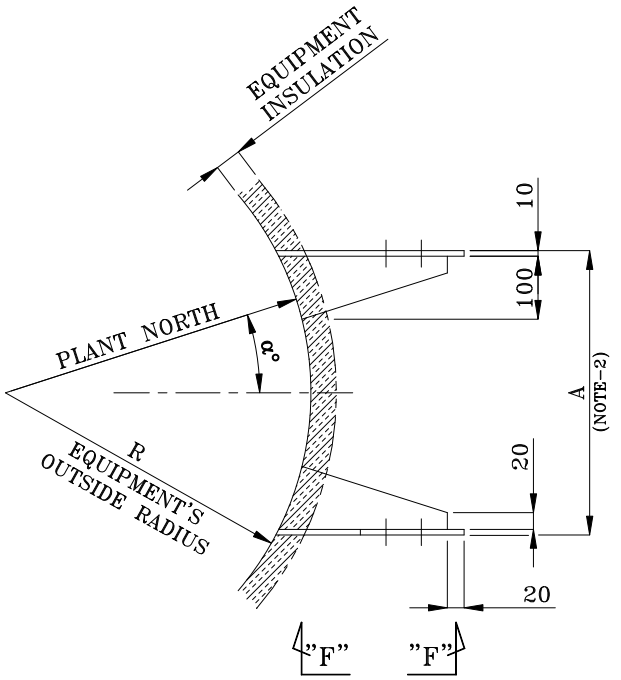
شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 41 از 394
	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02



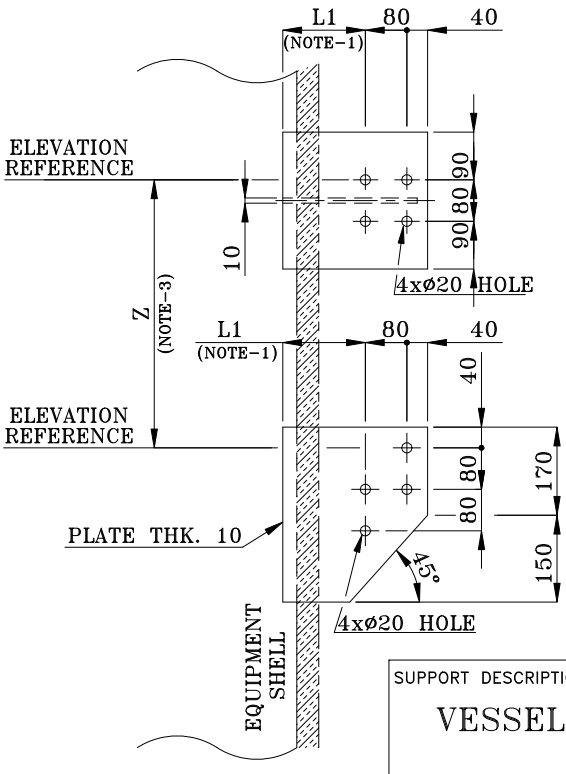
CLIP No.13



VIEW F-F



CLIP No.14



VIEW F-F

NOTE:

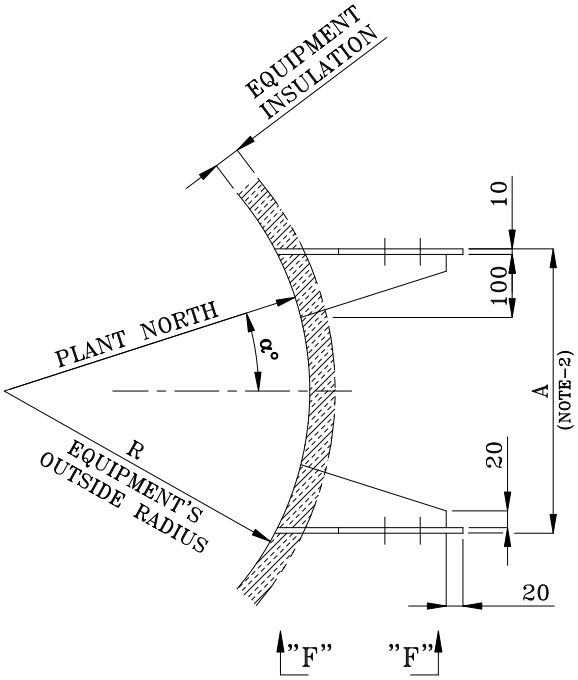
1- DIMENSION "L1" SHALL BE CALCULATED AS FOLLOW:
   FOR EQUIPMENT INSULATION THICKNESS ⩽ 80mm, L1=140mm
   FOR EQUIPMENT INSULATION THICKNESS > 80mm, L1=240mm
2- DIMENSION "A" SHALL BE CALCULATED BASED ON PIPE SIZE.
3- DIMENSION "Z" SHALL BE CALCULATED BASED ON SUPPORT TYPE.

SUPPORT DESCRIPTION:	SHEET
VESSEL CLIP	07
G-03	17

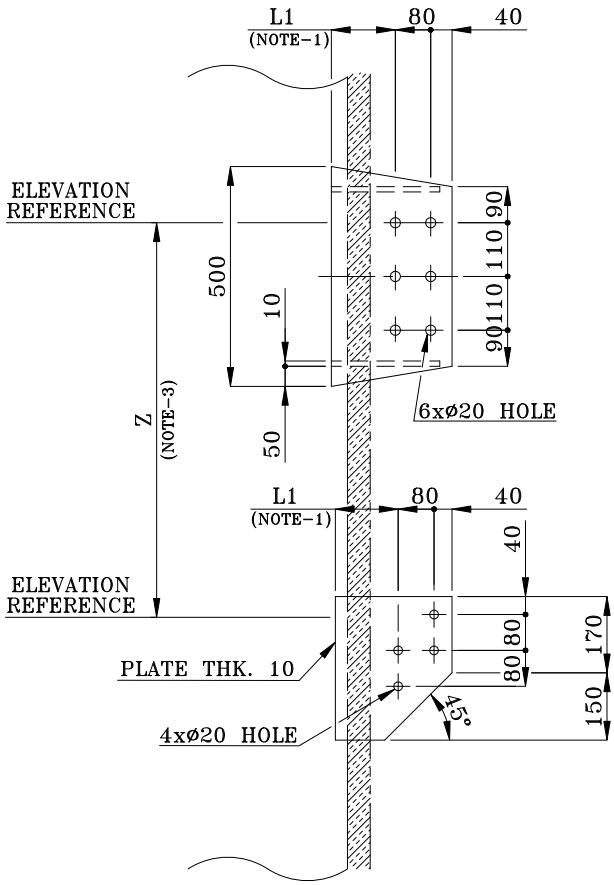
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 42 از 394



CLIP No.15

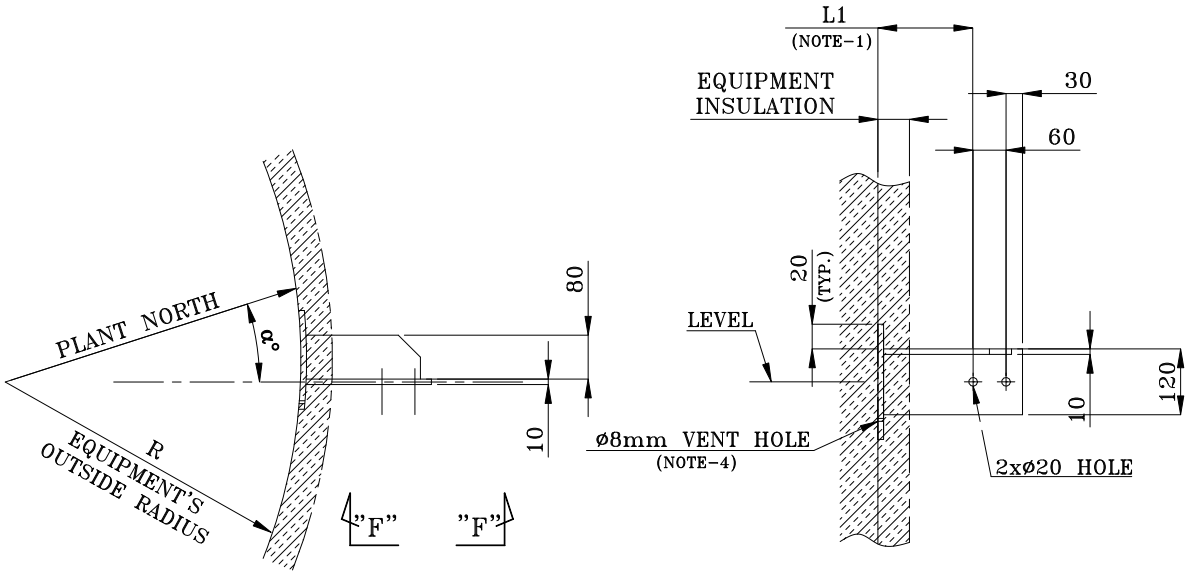


VIEW F-F

NOTE:

1- DIMENSION "L1" SHALL BE CALCULATED AS FOLLOW:
   FOR EQUIPMENT INSULATION THICKNESS ⩽ 80mm, L1=140mm
   FOR EQUIPMENT INSULATION THICKNESS > 80mm, L1=240mm
2- DIMENSION "A" SHALL BE CALCULATED BASED ON PIPE SIZE.
3- DIMENSION "Z" SHALL BE CALCULATED BASED ON SUPPORT TYPE.

SUPPORT DESCRIPTION:	SHEET
VESSEL CLIP	08
G-03	17



CLIP No.16

VIEW F-F

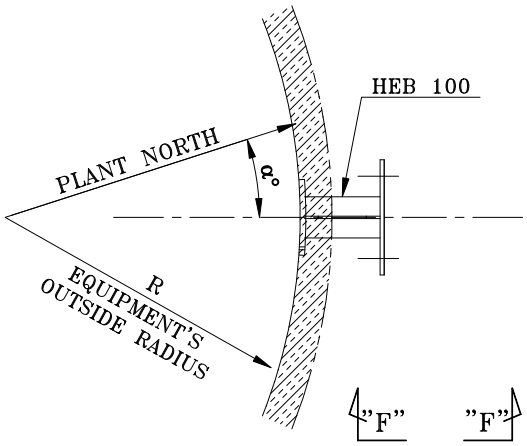
NOTE:

1- DIMENSION "L1" SHALL BE CALCULATED AS FOLLOW:
   FOR EQUIPMENT INSULATION THICKNESS ≤ 80mm, L1=140mm
   FOR EQUIPMENT INSULATION THICKNESS > 80mm, L1=240mm
2- VESSEL VENDOR SHALL CALCULATE WEAR PAD THICKNESS AND WELD THICKNESS OF WEAR PAD.
3- VESSEL VENDOR SHALL CHECK LOCAL STRESS FOR VESSEL.
4- VENT HOLE SHALL BE PLUGED WITH SEALANT AFTER WELDING.

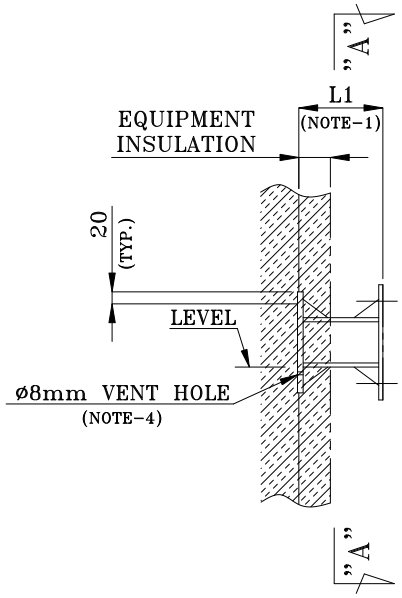
SUPPORT DESCRIPTION:	SHEET
VESSEL CLIP	09
G-03	17

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

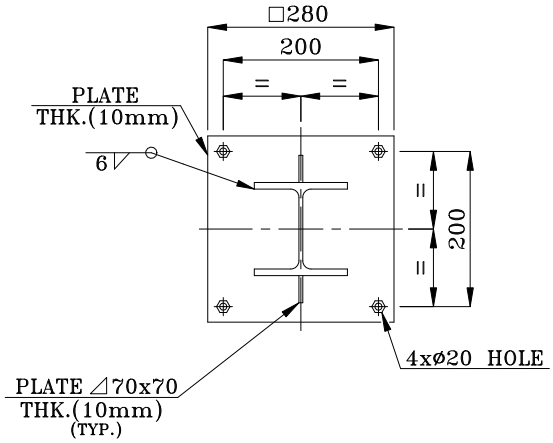
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 44 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	



CLIP No.17



VIEW F-F

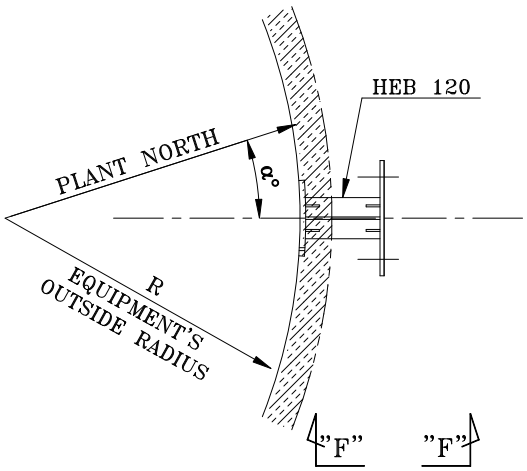


VIEW "A"~"A"

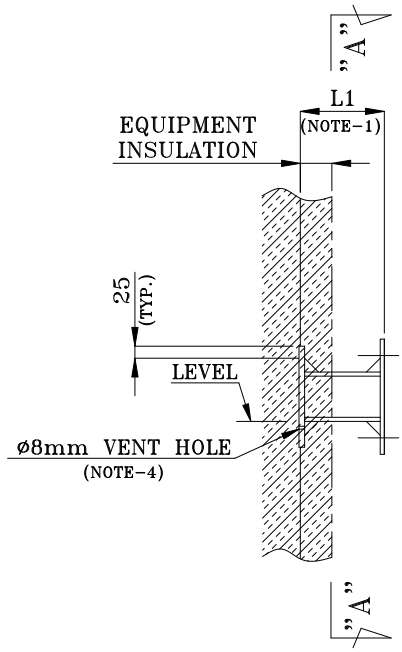
NOTE:

1- DIMENSION "L1" SHALL BE CALCULATED AS FOLLOW:
   FOR EQUIPMENT INSULATION THICKNESS ≤ 80mm, L1=200mm
   FOR EQUIPMENT INSULATION THICKNESS > 80mm, L1=250mm
2- VESSEL VENDOR SHALL CALCULATE WEAR PAD THICKNESS AND WELD THICKNESS OF WEAR PAD.
3- VESSEL VENDOR SHALL CHECK LOCAL STRESS FOR VESSEL.
4- VENT HOLE SHALL BE PLUGED WITH SEALANT AFTER WELDING.

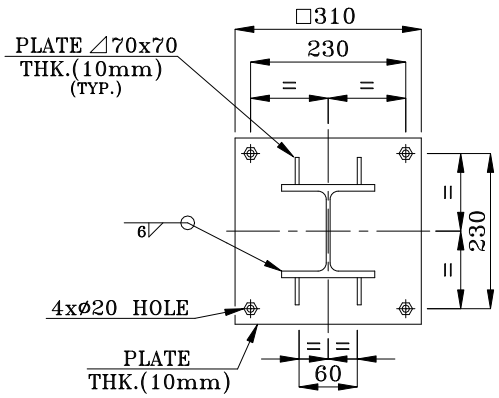
SUPPORT DESCRIPTION:	SHEET
VESSEL CLIP	10
G-03	17



CLIP No.18



VIEW F-F



VIEW "A"~"A"

NOTE:

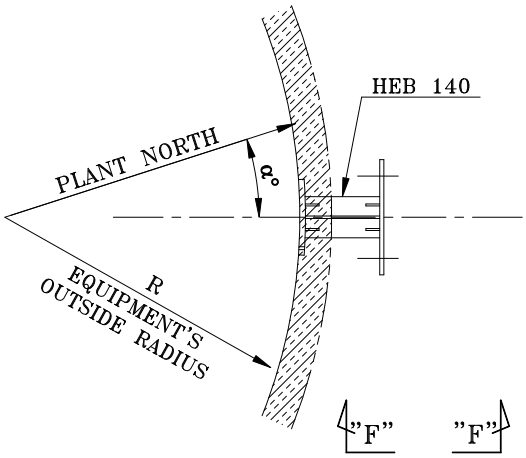
1- DIMENSION "L1" SHALL BE CALCULATED AS FOLLOW:
   FOR EQUIPMENT INSULATION THICKNESS ≤ 80mm, L1=200mm
   FOR EQUIPMENT INSULATION THICKNESS > 80mm, L1=250mm
2- VESSEL VENDOR SHALL CALCULATE WEAR PAD THICKNESS AND WELD THICKNESS OF WEAR PAD.
3- VESSEL VENDOR SHALL CHECK LOCAL STRESS FOR VESSEL.
4- VENT HOLE SHALL BE PLUGED WITH SEALANT AFTER WELDING.

SUPPORT DESCRIPTION:	SHEET
VESSEL CLIP	11
G-03	17

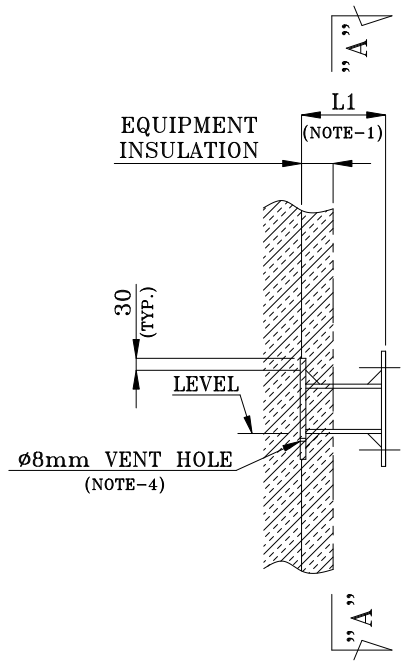
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02

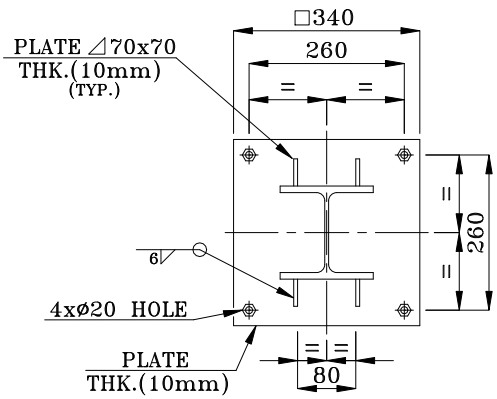
شماره صفحه: 46 از 394



CLIP No.19



VIEW F-F



VIEW "A"~"A"

NOTE:

1- DIMENSION "L1" SHALL BE CALCULATED AS FOLLOW:
   FOR EQUIPMENT INSULATION THICKNESS ≤ 80mm, L1=200mm
   FOR EQUIPMENT INSULATION THICKNESS > 80mm, L1=250mm
2- VESSEL VENDOR SHALL CALCULATE WEAR PAD THICKNESS AND WELD THICKNESS OF WEAR PAD.
3- VESSEL VENDOR SHALL CHECK LOCAL STRESS FOR VESSEL.
4- VENT HOLE SHALL BE PLUGED WITH SEALANT AFTER WELDING.

SUPPORT DESCRIPTION:	SHEET
VESSEL CLIP	11
G-03	17

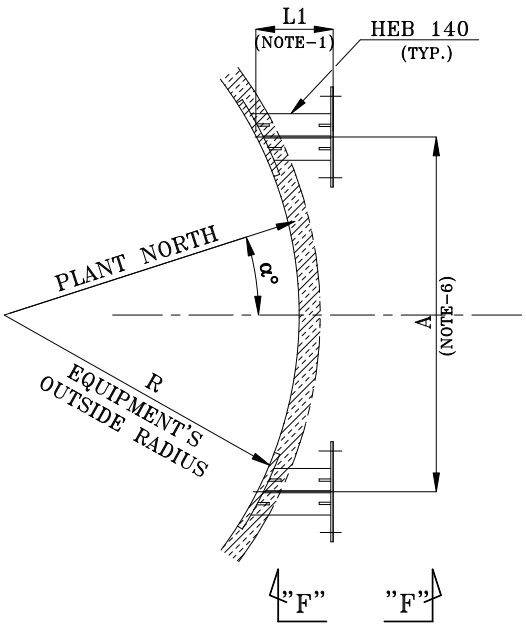
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

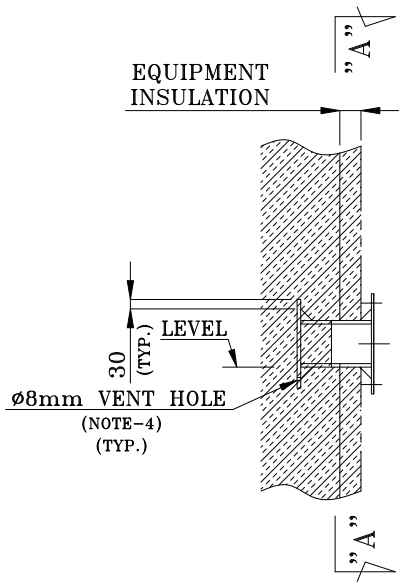
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

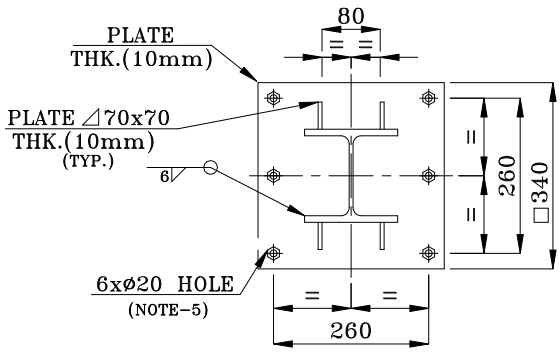
شماره صفحه: 47 از 394



CLIP No.20



VIEW F-F



VIEW "A"~"A"

NOTE:

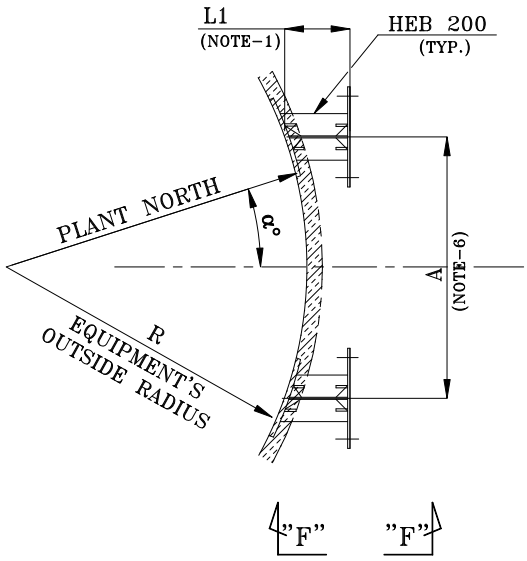
1- DIMENSION "L1" SHALL BE CALCULATED AS FOLLOW:
   FOR EQUIPMENT INSULATION THICKNESS ≤ 80mm, L1=200mm
   FOR EQUIPMENT INSULATION THICKNESS > 80mm, L1=250mm
2- VESSEL VENDOR SHALL CALCULATE WEAR PAD THICKNESS AND WELD THICKNESS OF WEAR PAD.
3- VESSEL VENDOR SHALL CHECK LOCAL STRESS FOR VESSEL.
4- VENT HOLE SHALL BE PLUGED WITH SEALANT AFTER WELDING.
5- NUMBER AND LOCATION OF HOLES SHALL BE CHECKED AND SPECIFIED BASED ON SUPPORT TYPE.
6- DIMENSION "A" SHALL BE CALCULATED BASED ON SUPPORT TYPE.

SUPPORT DESCRIPTION:	SHEET
VESSEL CLIP	13
G-03	17

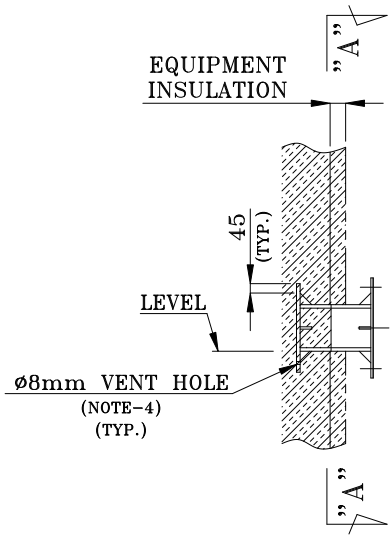
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 48 از 394

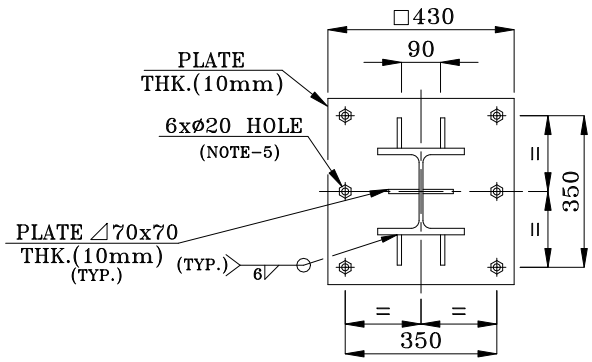
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



CLIP No.21



VIEW F-F

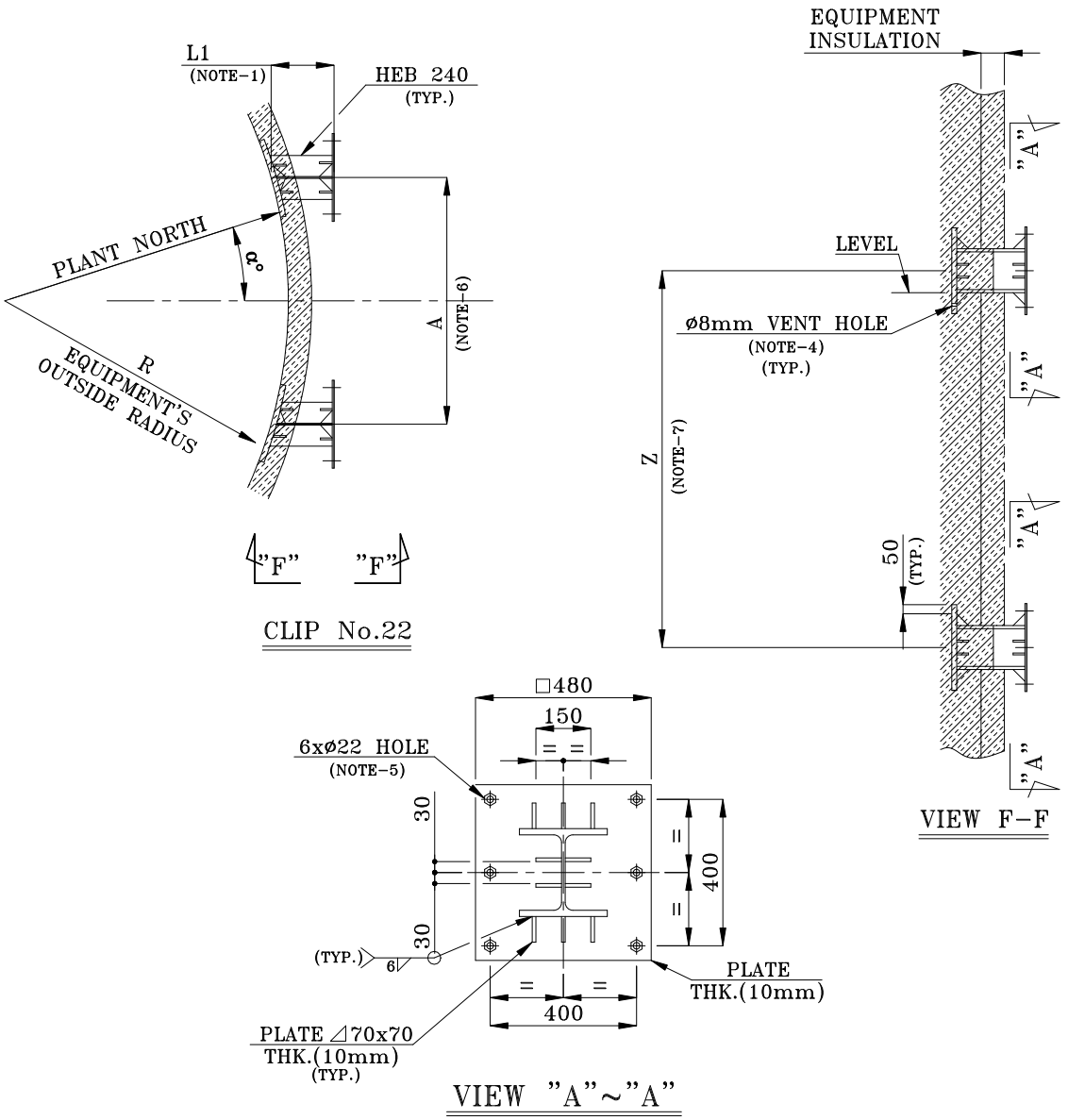


VIEW "A"~"A"

NOTE:

1- DIMENSION "L1" SHALL BE CALCULATED AS FOLLOW:
   FOR EQUIPMENT INSULATION THICKNESS ≤ 80mm, L1=200mm
   FOR EQUIPMENT INSULATION THICKNESS > 80mm, L1=250mm
2- VESSEL VENDOR SHALL CALCULATE WEAR PAD THICKNESS AND WELD THICKNESS OF WEAR PAD.
3- VESSEL VENDOR SHALL CHECK LOCAL STRESS FOR VESSEL.
4- VENT HOLE SHALL BE PLUGED WITH SEALANT AFTER WELDING.
5- NUMBER AND LOCATION OF HOLES SHALL BE CHECKED AND SPECIFIED BASED ON SUPPORT TYPE.
6- DIMENSION "A" SHALL BE CALCULATED BASED ON SUPPORT TYPE.

SUPPORT DESCRIPTION:	SHEET
VESSEL CLIP	14
G-03	17



NOTE:

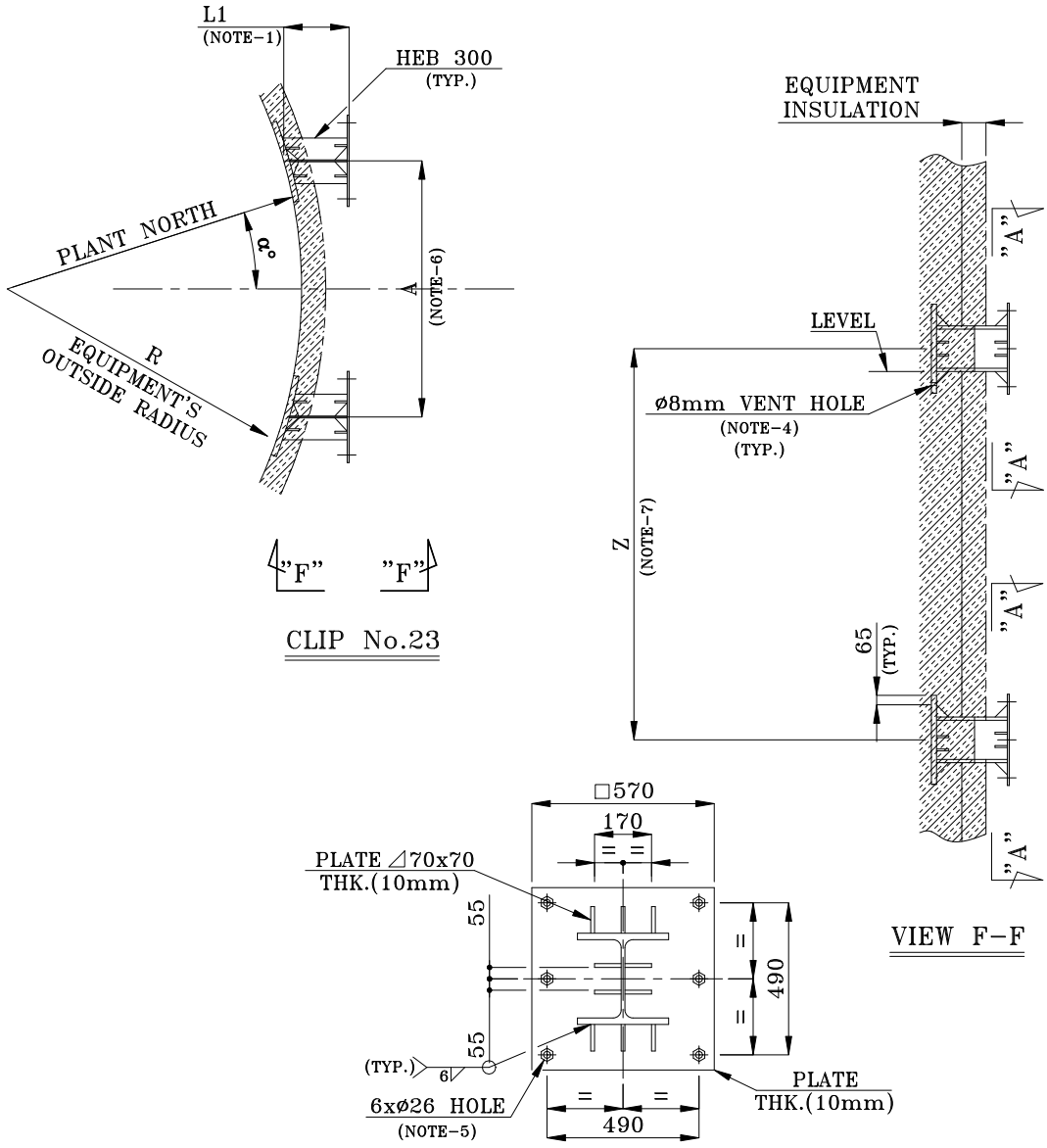
1- DIMENSION "L1" SHALL BE CALCULATED AS FOLLOW:
   FOR EQUIPMENT INSULATION THICKNESS ⩽ 80mm, L1=200mm
   FOR EQUIPMENT INSULATION THICKNESS > 80mm, L1=250mm
2- VESSEL VENDOR SHALL CALCULATE WEAR PAD THICKNESS AND WELD THICKNESS OF WEAR PAD.
3- VESSEL VENDOR SHALL CHECK LOCAL STRESS FOR VESSEL.
4- VENT HOLE SHALL BE PLUGED WITH SEALANT AFTER WELDING.
5- NUMBER AND LOCATION OF HOLES SHALL BE CHECKED AND SPECIFIED BASED ON SUPPORT TYPE.
6- DIMENSION "A" SHALL BE CALCULATED BASED ON SUPPORT TYPE.
7- DIMENSION "Z" SHALL BE CALCULATED BASED ON SUPPORT TYPE.

SUPPORT DESCRIPTION:	SHEET
VESSEL CLIP	15
G-03	17

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 50 از 394



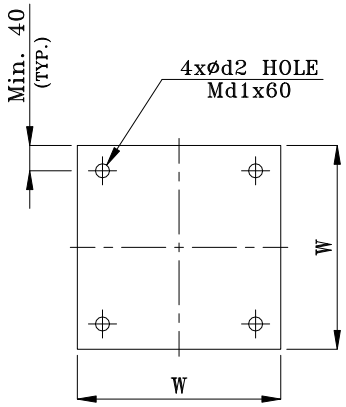
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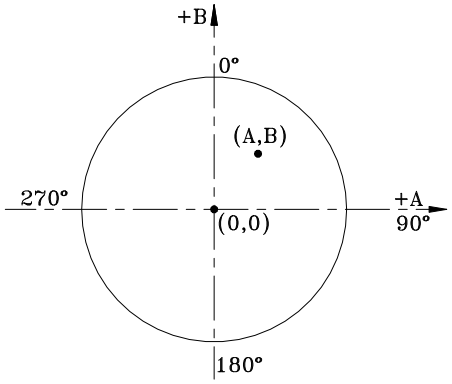
1- DIMENSION "L1" SHALL BE CALCULATED AS FOLLOW:
   FOR EQUIPMENT INSULATION THICKNESS ⩽ 80mm, L1=200mm
   FOR EQUIPMENT INSULATION THICKNESS > 80mm, L1=250mm
2- VESSEL VENDOR SHALL CALCULATE WEAR PAD THICKNESS AND WELD THICKNESS OF WEAR PAD.
3- VESSEL VENDOR SHALL CHECK LOCAL STRESS FOR VESSEL.
4- VENT HOLE SHALL BE PLUGED WITH SEALANT AFTER WELDING.
5- NUMBER AND LOCATION OF HOLES SHALL BE CHECKED AND SPECIFIED BASED ON SUPPORT TYPE.
6- DIMENSION "A" SHALL BE CALCULATED BASED ON SUPPORT TYPE.
7- DIMENSION "Z" SHALL BE CALCULATED BASED ON SUPPORT TYPE.

SUPPORT DESCRIPTION:	SHEET
VESSEL CLIP	16
G-03	17

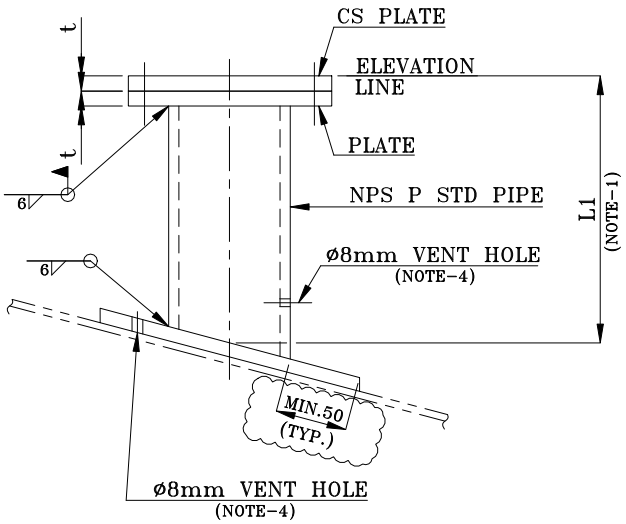
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 51 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	





LOCATION PLAN DETAIL



CLIP TYPE No.	P	W	t	Md1	Ød2
24	2"	170	10	M12	14
25	3"	190	10	M12	14
26	4"	210	10	M12	14
27	6"	250	12	M14	16
28	8"	290	12	M16	18
29	10"	340	15	M18	20
30	12"	370	15	M18	20
31	14"	410	15	M18	20

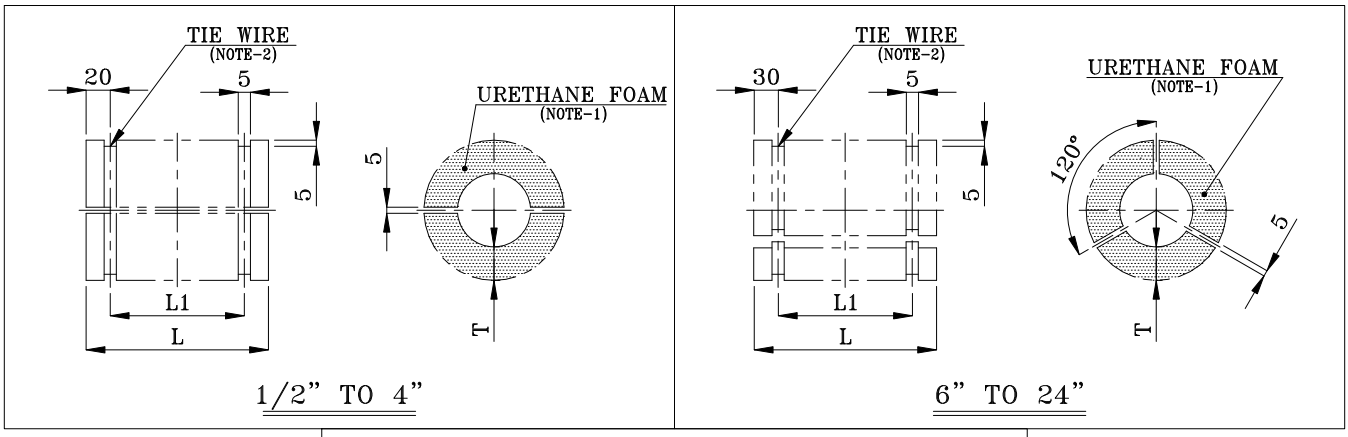
NOTE:

1- DIMENSION "L1" SHALL BE CALCULATED AS FOLLOW:
   FOR EQUIPMENT INSULATION THICKNESS ≤ 80mm, L1=200mm
   FOR EQUIPMENT INSULATION THICKNESS > 80mm, L1=250mm
2- VESSEL VENDOR SHALL CALCULATE WEAR PAD THICKNESS AND WELD THICKNESS OF WEAR PAD.
3- VESSEL VENDOR SHALL CHECK LOCAL STRESS FOR VESSEL.
4- VENT HOLE SHALL BE PLUGED WITH SEALANT AFTER WELDING.
5- NUMBER AND LOCATION OF HOLES SHALL BE CHECKED AND SPECIFIED BASED ON SUPPORT TYPE.
6- DIMENSIONS CODE OF A, B ARE DEFINED IN VESSEL CLIP INFORMATION SHEET.

SUPPORT DESCRIPTION:	SHEET
VESSEL CLIP	17
G-03	17

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 52 از 394
	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	



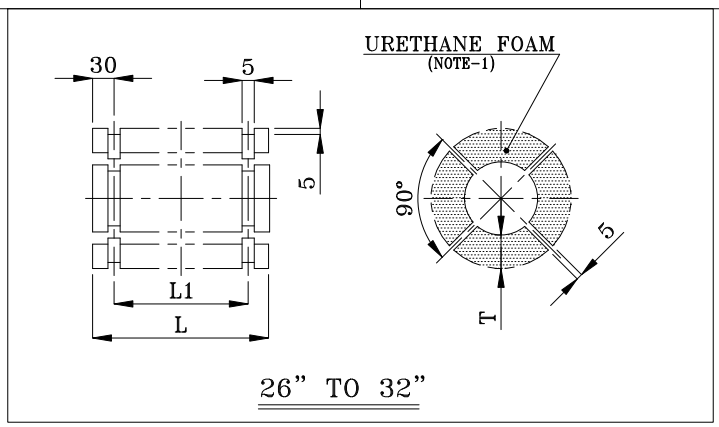


TABLE OF DIMENSIONS

NPS MARK	PIPE SIZE	L	L1
0A	1/2"	150	110
0B	3/4"	150	110
01	1"	150	110
1A	1+1/2"	150	110
02	2"	180	140
03	3"	180	140
04	4"	180	140
05	5"	180	140
06	6"	250	190
08	8"	250	190
10	10"	250	190
12	12"	250	190
14	14"	250	190
16	16"	250	190
18	18"	250	190
20	20"	310	250
22	22"	310	250
24	24"	310	250
26	26"	310	250
28	28"	310	250
30	30"	310	250
32	32"	310	250

TABLE OF DIMENSIONS

COLD INSULATION THK.	25-50	51-100	101-150	151-200	201-250	251-300
CRADLE THK.	T=50	T=100	T=150	T=200	T=250	T=300

NOTE:

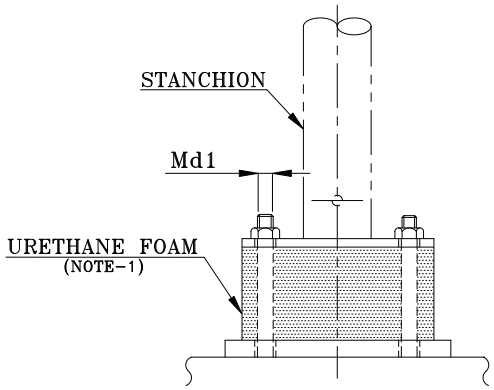
1- FOR DETAIL OF URETHANE FOAM MECHANICAL PROPERTIES SEE (G-07).

2- DEVILED PARTS OF CRADLE SHALL BE TIGHT BY GALVANIZED TIE WIRE. TIE WIRE IS IN MANUFACTURER SCOPE OF SUPPLY.

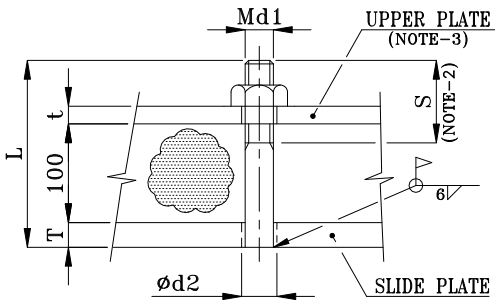
SUPPORT DESCRIPTION:	SHEET
CRADLE (COLD INSULATION) G-04	1 1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 53 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02



TYPE "A"



DETAIL FOR BOLT & NUT

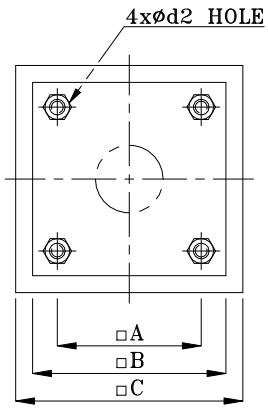


TABLE OF DIMENSIONS

STANCHION MARK	STANCHION SIZE	A	B	C	T	t	BOLT & NUT			ød2
							Md1	L	S	
01	1"	90	140	180	10	8	M10	140	35	12
1A	1+1/2"	90	140	180	10	8	M10	140	35	12
02	2"	90	140	180	10	8	M10	140	35	12
03	3"	130	180	220	12	10	M12	150	40	14
04	4"	130	180	220	12	10	M12	150	40	14
06	6"	180	230	270	12	10	M14	150	40	16
08	8"	220	280	320	12	10	M16	150	40	18
10	10"	270	330	370	12	10	M18	160	50	20
12	12"	330	410	450	12	10	M22	160	50	24
14	14"	330	410	450	12	10	M22	160	50	24
16	16"	420	500	540	15	12	M24	170	55	26
18	18"	420	500	540	15	12	M24	170	55	26
20	20"	460	550	590	15	12	M27	180	65	30

INDICATION:

G-05- [ ][ ] (1) (2)

1-TYPE MARK
2-STANCHION MARK

NOTE:

1- FOR DETAIL OF URETHANE FOAM MECHANICAL PROPERTIES SEE (G-07).

2- DIMENSION "S" IS THREADED LENGTH OF BOLT.

3- IF UPPER PLATE'S TEMP. IS LOWER THAN -29°, MATERIAL SHALL BE CHANGED ACCORDINGLY.

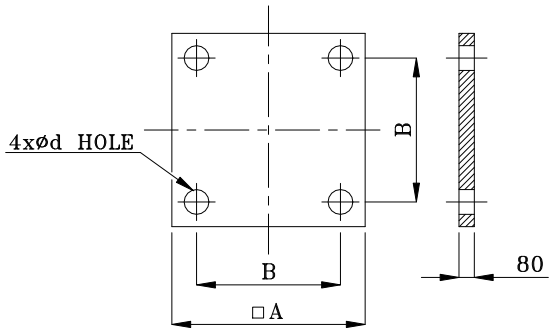
4- ALLOWABLE LOAD OF URETHANE BLOCK SHALL BE CLARIFIED BY VENDOR.

MATERIAL:
PLATE: A283 GR.C, BOLT & NUT: A325

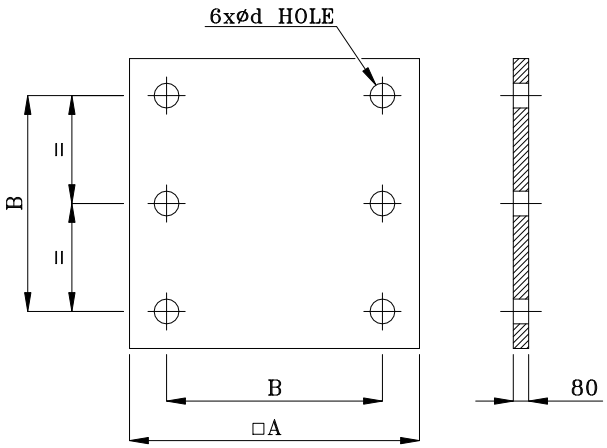
SUPPORT DESCRIPTION:	SHEET
URETHANE BLOCK G-05	1 2

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 54 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	



TYPE "B"



TYPE "C"

INDICATION:

G-05- (1) (2)

1-TYPE MARK
2-CLIP NO.

TABLE OF DIMENSIONS

CLIP No.	A	B	d
18	310	230	20
20	340	260	20
21	430	350	20
22	480	400	22

NOTE:

1- FOR DETAIL OF URETHANE FOAM MECHANICAL PROPERTIES SEE (G-07).

2- ALLOWABLE LOAD OF URETHANE BLOCK SHALL BE CLARIFIED BY VENDOR.

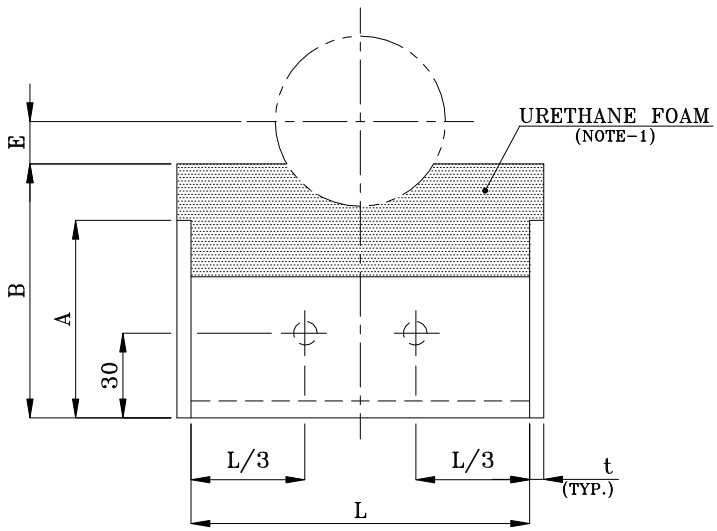
SUPPORT DESCRIPTION:	SHEET
URETHANE BLOCK G-05	2 2

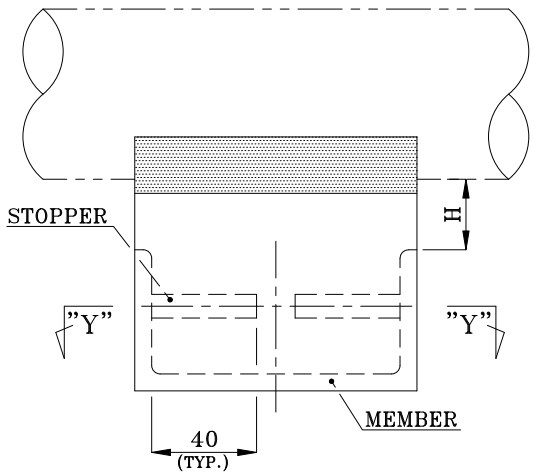
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

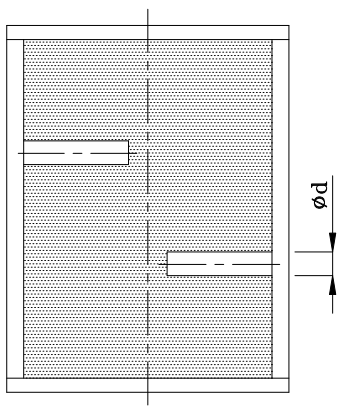
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 55 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

053-073-9184







VIEW "Y" ~ "Y"

TABLE OF DIMENSIONS

TRUNNION MARK	TRUNNION SIZE	L	A	B	H	E	t	ød	MEMBER
1A	1+1/2"	120	70	80	15	9	5	6	U100
02	2"	120	70	95	25	10			
03	3"	200	90	110	30	14			
04	4"	200	90	130	45	22			
06	6"	300	130	170	65	30			
08	8"	400	150	205	75	30			
10	10"	420	170	225	40	22	8	8	U180
12	12"	460	190	265	50	17			
14	14"	540	220	280	55	23			
16	16"	600	240	300	60	33			
18	18"	700	260	330	70	38			
20	20"	800	300	380	80	30	10	10	U200
24	24"	900	330	400	90	70			

INDICATION:

G-06- [ ] (1)

1-TRUNNION MARK

NOTE:

1- FOR DETAIL OF URETHANE FOAM MECHANICAL PROPERTIES SEE (G-07).

MATERIAL:

STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
ADIABATIC BLOCK (COLD INSULATION) G-06	1
	1

MECHANICAL/PHYSICAL PROPERTY OF POLYURETHANE FOAM

ITEM	UNIT	TEST STANDARD	DENSITY (Kg/M^3)-(ASTM D1622)		
			160	320	500
ULTIMATE COMPRESSIVE STRENGTH AT 20°C	Kg/CM^2	ASTM D1621	20.4	71.4	170
ULTIMATE COMPRESSIVE STRENGTH AT -165°C	Kg/CM^2	ASTM D1621	38.7	91.8	210
THERMAL CONDUCTIVITY AT 20°C	Kcal/Mhr°C	ASTM C177	0.028	0.035	0.084
COEFFICIENT OF THERMAL CONTRACTION	cm/cm°C	BS 4370	$65x10^{-6}$	$65x10^{-6}$	$65x10^{-6}$
NON-INFLAMMABILITY	-	-	SE	SE	SE
CLOSED CELL CONTENT BY VOLUME	%	ASTM D2856	90	90	90
APPLICATION	-	-	(NOTE-1)	(NOTE-2)	(NOTE-3)

SE - SELF EXTINGUISH

NOTE:

1- CRADLE SUPPORT (RESTING TYPE).
2- CRADLE SUPPORT (FIXED TYPE) AND URETHANE BLOCK (TYPE-A) FOR 8"(STANCHION SIZE) AND BELOW.
3- URETHANE BLOCK (TYPE-A) FOR 10"(STANCHION SIZE) AND ABOVE AND URETHANE BLOCK (TYPE-B) AND (TYPE-C).
4- A PROTECTIVE COATING SHALL BE APPLIED TO ALL EXPOSED SURFACES OF THE POLYURETHANE TO A DRY FILM THICHNESS OF 0.5mm TO 0.76mm AND ALLOWED TO CURE 2 DAYS PRIOR TO SHIPMENT.THE COATING SHALL ALSO PROTECT ALL EXPOSED SUFACES FROM SOLAR IMPACT (UV AFFECT).

SUPPORT DESCRIPTION:	SHEET
POLYURETHANE FOAM G-07	1
	1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 57 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	

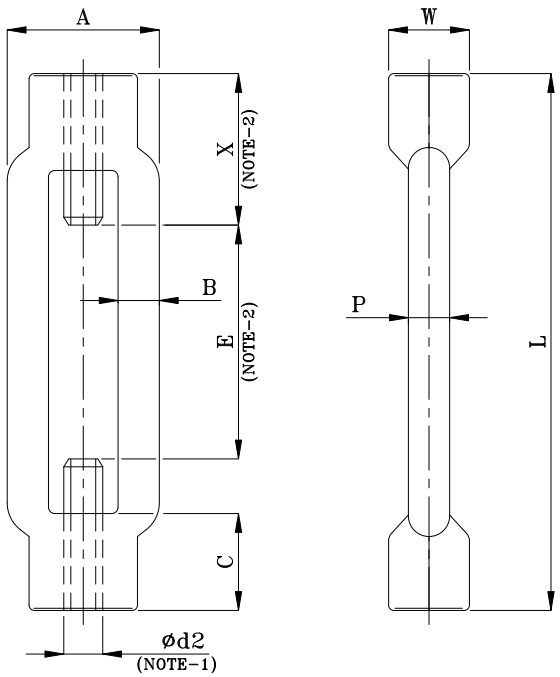


TABLE OF DIMENSIONS

ød2	A	L	C	W	E	B	P	X
M10	30	125	18	16	35	9	8	45
M12	34	125	21	18	35	11	9	45
M16	42	150	27	24	50	14	11	50
M20	52	170	33	30	60	17	14	55
M24	62	240	39	36	80	22	17	80
M30	74	255	45	46	85	23	20	85
M36	86	295	55	55	95	28	23	100
M42	104	330	63	65	100	32	27	115
M48	130	355	75	75	105	40	35	125

NOTE:

1- ONE END SHALL BE RIGHT HAND THREAD, THE OTHER LEFT HAND.

2- TABULATED VALUES WILL BE USED FOR INSTALLATION AND MAY BE VARIED DURING ADJUSTMENT AT FIELD.

MATERIAL:

ASTM A36

SUPPORT DESCRIPTION:	SHEET
TURN BUCKLE G-08	1 1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 58 از 394

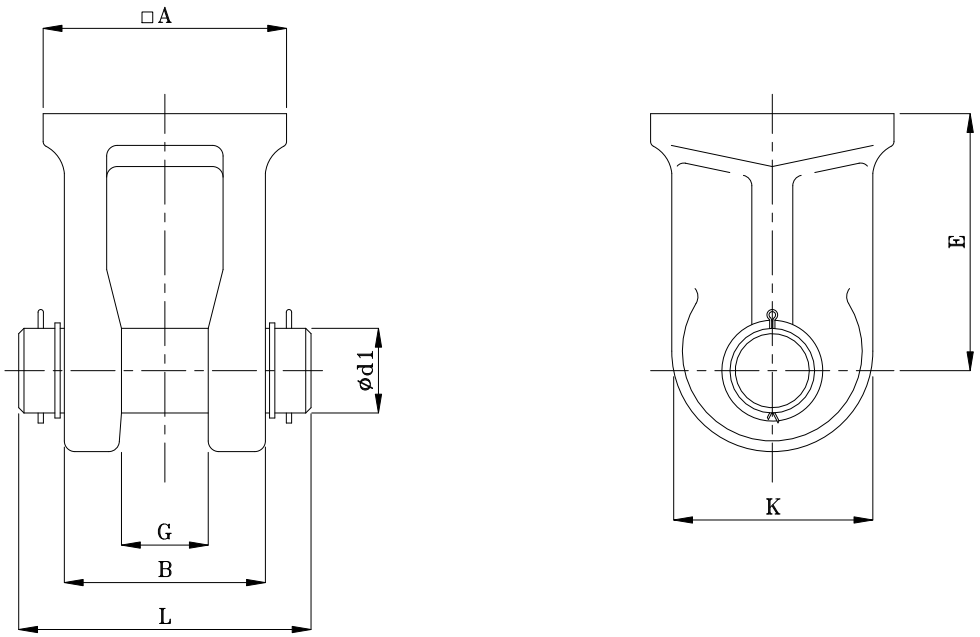


TABLE OF DIMENSIONS

ød1	A	B	K	E	G	L	a (NOTE-1)
12	40	34	24	35	12	60	3
16	50	44	32	40	17	70	3
20	65	57	46	50	20	90	3
24	75	68	53	60	22	105	3
33	95	80	64	90	27	125	3.5
40	120	93	80	110	32	140	4
45	120	110	90	120	37	165	5.5
50	120	120	100	130	42	185	7.5
60	150	150	120	140	50	210	8.5

NOTE:

1- a=WELD THICKNESS FOR CLEVIS TO EXISTING.

MATERIAL:

CLEVIS: ASTM A675 Gr.70

PIN: ASTM A668 Cl.F

SUPPORT DESCRIPTION:	SHEET
WELD-ON CLEVIS G-09	1 1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 59 از 394

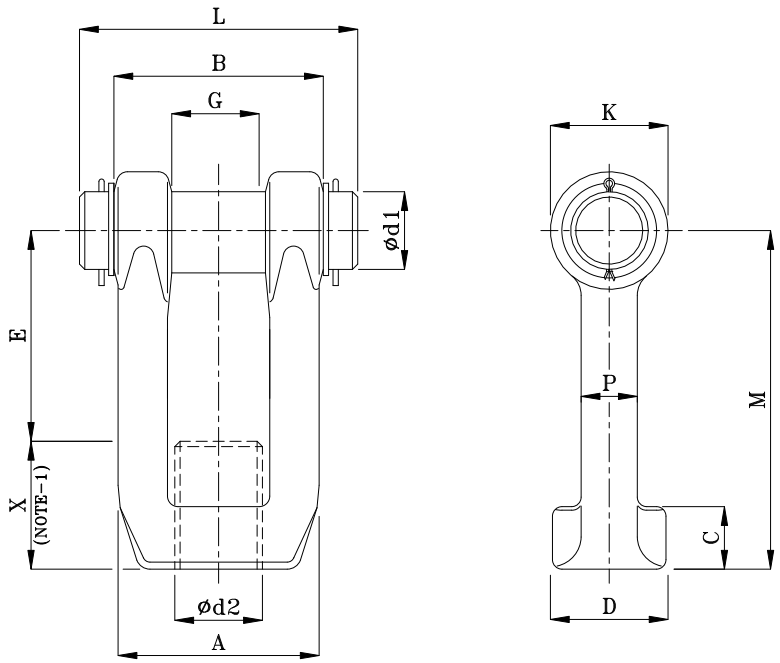


TABLE OF DIMENSIONS

ød2	ød1	M	C	D	A	E	G	L	B	K	P	X
M10	10	50	11	17	23	35	11	50	25	21	5x9	15
M12	12	70	15	25	33	50	12	60	34	24	8x12	20
M16	16	80	20	33	42	50	17	70	44	32	11x15	30
M20	20	90	25	40	55	55	20	90	57	46	16x21	35
M24	24	110	30	46	65	65	22	105	68	53	19x25	45
M30	33	130	35	51	72	80	27	125	80	64	19x29	50
M36	40	150	40	61	85	90	32	140	93	80	22x36	60
M42	45	170	50	72	100	100	37	165	110	90	27x40	70
M48	50	180	60	83	120	95	42	185	130	100	33x44	85

NOTE:

1- TABULATED VALUES WILL BE USED FOR INSTALLATION AND MAY BE VARIED DURING ADJUSTMENT AT FIELD.

MATERIAL:

CLEVIS: ASTM A668 Cl.C

PIN: ASTM A668 Cl.F

SUPPORT DESCRIPTION:	SHEET
CLEVIS WITH PIN G-10	1 1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

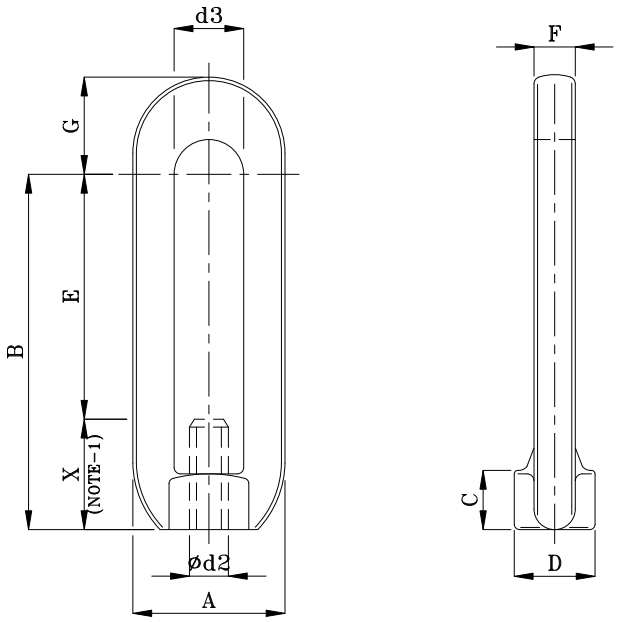


TABLE OF DIMENSIONS

ød2	d3	A	B	C	D	E	F	G	X
M10	13	24	40	11	17	25	5	15	15
M12	17	33	60	15	24	40	6	19	20
M16	25	44	75	20	30	45	10	26	30
M20	29	59	90	25	35	55	10	35	35
M24	35	72	110	30	44	65	15	44	45
M30	42	88	127	37	50	75	17	54	52
M36	47	100	140	45	60	75	20	62	65
M42	52	110	157	52	70	85	25	72	72
M48	62	120	180	60	80	85	30	78	95

NOTE:

1- TABULATED VALUE WILL BE USED FOR INSTALLATION AND MAY BE VARIED DURING ADJUSTMENT AT FIELD.

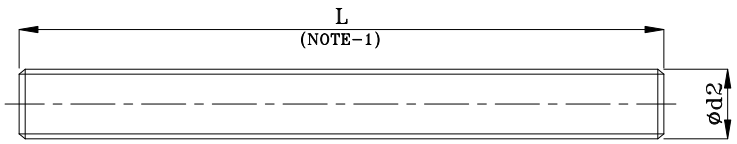
MATERIAL:

ASTM A668 Cl.C

SUPPORT DESCRIPTION:	SHEET
EYE NUT G-11	1 1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 61 از 394
	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02



ød2	L
M10	NOTE-1
M12	
M16	
M20	
M24	
M30	
M36	
M42	
M48	

NOTE:

1- LENGTH OF THREADED ROD SHALL BE CALCULATED PER CASE.

MATERIAL:

M10-M16: ASTM A36

M20-M48: ASTM A572 Gr.50

SUPPORT DESCRIPTION:	SHEET
THREADED ROD G-12	1 1

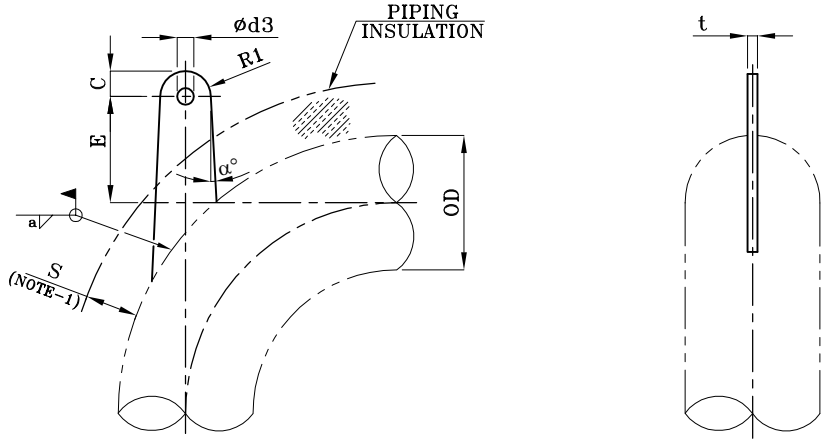


TABLE OF DIMENSIONS

OD	E	C	R1	t	ød3	a	α°
2"	135	22	17.5	8	12.5	3	3
3"	140	28	22.5	10	16.5	4.5	5
4"	140	28	22.5	10	16.5	4.5	5
6"	150	40	32.5	20	24.5	5.5	6
8"	145	40	32.5	20	24.5	5.5	6
10"	145	40	32.5	20	24.5	5.5	6
12"	145	50	40	20	34	6.5	8
14"	125	50	40	20	34	6.5	8
16'	115	50	40	20	34	6.5	8
18'	120	65	50	25	41	6.5	8
20"	110	65	50	25	41	6.5	8
24"	95	65	50	25	41	6.5	8

NOTE:

1- LUG DIMENSIONS HAVE BEEN CALCULATED ACCORDING TO PIPING INSULATION THICKNESS UP TO 100mm, MORE THAN 100mm, LUG DIMENSIONS SHALL BE CALCULATED PER CASE.

MATERIAL:

FOR CARBON STEEL: ASTM A36
FOR ALLOY STEEL: A387 Gr.91 Cl.2
FOR STAINLESS STEEL: A240 Gr.316

SUPPORT DESCRIPTION:	SHEET
WELD-ON LUG FOR ELBOW G-13	1
	1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 63 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02

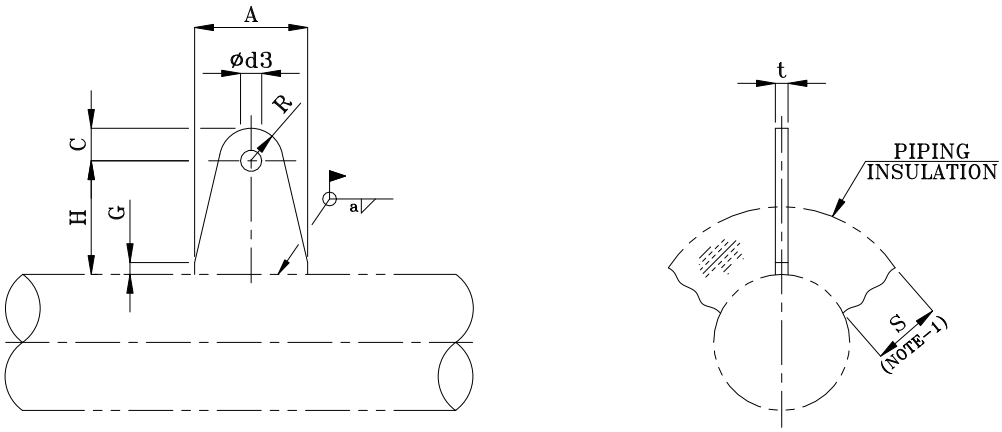


TABLE OF DIMENSIONS

ød3	A	H	R	C	G	t	a
10.5	30	115	15	15	10	8	3
12.5	65	115	17.5	22	10	10	3
16.5	70	120	22.5	28	10	12	4.5
20.5	120	125	30	37	10	15	4.5
24.5	130	130	32.5	40	10	20	5.5
34	165	140	40	50	10	25	6.5
41	230	150	50	65	10	30	6.5

NOTE:

1- LUG DIMENSIONS HAVE BEEN CALCULATED ACCORDING TO PIPING INSULATION THICKNESS UP TO 100mm, MORE THAN 100mm, LUG DIMENSIONS SHALL BE CALCULATED PER CASE.

MATERIAL:

FOR CARBON STEEL: ASTM A36
FOR ALLOY STEEL: A387 Gr.91 Cl.2
FOR STAINLESS STEEL: A240 Gr.316

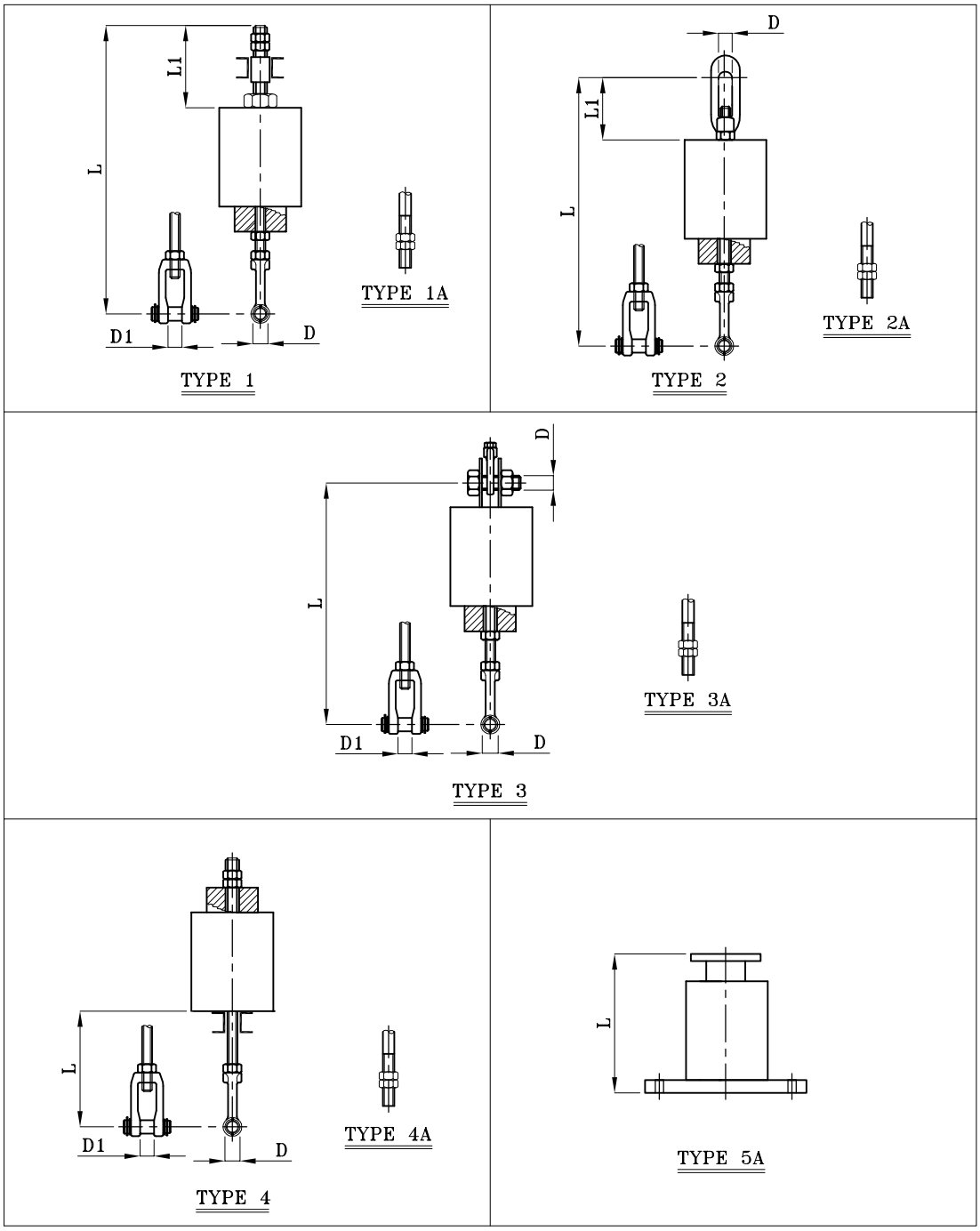
SUPPORT DESCRIPTION:	SHEET
WELD-ON LUG FOR STRAIGHT PIPE G-14	1 1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



NOTE:
1- DIAMETER "D" OF PIN AND DIAMETER "D1" OF CLEVIS SHALL BE SPECIFIED BY SUPPORT ENGINEER..

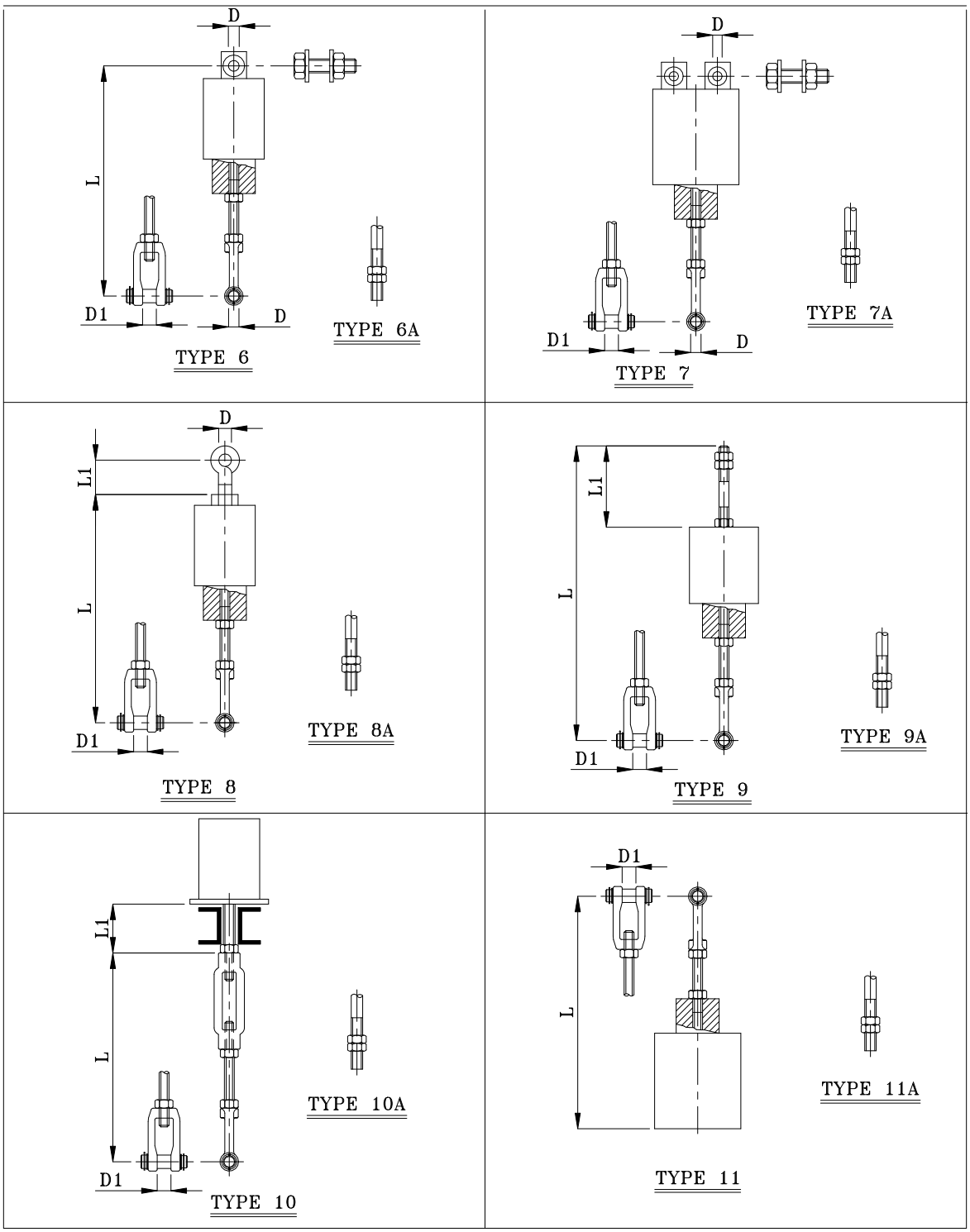
SUPPORT DESCRIPTION:	SHEET
TYPES OF SPRING SUPPORTS G-15	1 2

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

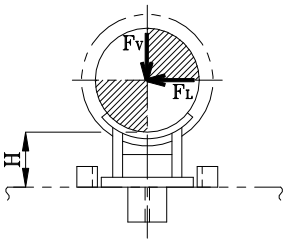
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

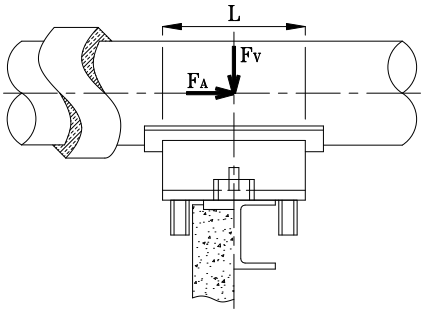


NOTE:

1- DIAMETER "D" OF PIN AND DIAMETER "D1" OF CLEVIS SHALL BE SPECIFIED BY SUPPORT ENGINEER..

SUPPORT DESCRIPTION:	SHEET
TYPES OF SPRING SUPPORTS G-15	2 2





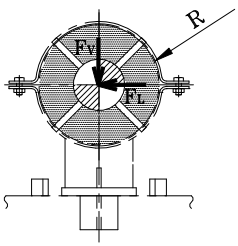
ALLOWABLE LOAD FOR SHOES(Kg)-Fv

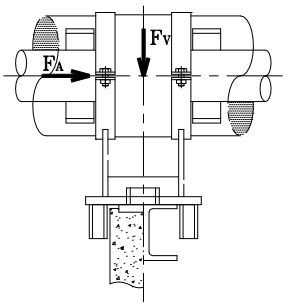
RUN PIPE SIZE	H(mm) \ L(mm)	100	200	300	400	500	600	700
1/2"~2"	100	200	400	600	800	1000	–	–
	150	140	300	450	600	750	–	–
	200	100	230	350	450	600	–	–
3"~6"	100	210	450	680	920	1100	–	–
	150	170	350	540	720	900	–	–
	200	140	290	450	600	750	–	–
8"~14"	100	1500	4500	8000	11700	14000	–	–
	150						–	–
	200	1200	3800	6800	10000	13500	–	–
16"	100	–	–	8300	12400	16700	21100	–
	150	–	–					–
	200	–	–	7100	10500	14500	18500	–
18"~20"	100	–	–	7900	11900	16200	20500	–
	150	–	–					–
	200	–	–	7200	11000	15000	19000	–
24"	100	–	–	7100	10900	14900	19200	–
	150	–	–					–
	200	–	–					–
26"~28"	100	–	–	6500	10100	13900	17900	–
	150	–	–					–
	200	–	–					–
30"~32"	100	–	–	6000	9300	13000	16900	–
	150	–	–					–
	200	–	–					–
34"~36"	100	–	–	5600	8700	12300	16000	–
	150	–	–					–
	200	–	–					–
38"~40"	100	–	–	–	11000	14900	18900	23000
	150	–	–	–				
	200	–	–	–				
42"~44"	100	–	–	–	10400	14200	18100	22100
	150	–	–	–				
	200	–	–	–				
46"~48"	100	–	–	–	10100	13900	17800	21800
	150	–	–	–				
	200	–	–	–				
52"~56"	100	–	–	–	8900	12400	16000	19800
	150	–	–	–				
	200	–	–	–				

NOTE:

1- ALLOWABLE VERTICAL LOAD "Fv" HAS BEEN CALCULATED BASED ON μ=0.3, ALSO "Fv" IS THE MAX. CONCENTRATED VERTICAL LOAD AND "FL"=0.3x"Fv" AND "FA"=0.3x"Fv" WHICH ARE APPLIED CONCURRENTLY.

SUPPORT DESCRIPTION:	SHEET
ALLOWABLE LOADS FOR SHOE G-16	1
	3





ALLOWABLE LOAD FOR SHOES(Kg)-Fv

RUN PIPE SIZE	A	LENGTH OF SHOE(mm) / HEIGHT OF SHOE(mm)	200	300	400	500	600	700	800	900	1000	1100
1/2" ~ 1 1/2"	136~163	100	2000							–	–	–
		150								–	–	–
		200								–	–	–
	224~451	100								–	–	–
		150								–	–	–
		200								–	–	–
2" ~ 5"	163~251	100	5000								–	–
		150									–	–
		200									–	–
	274~392	100	7000								–	–
		150									–	–
		200									–	–
	430~548	100	8500								–	–
		150									–	–
		200									–	–
6" ~ 18"	274~392	100	–	7000								–
		150	–									–
		200	–									–
	430~578	100	–	8500								–
		150	–									–
		200	–									–
	630~778	100	–	9500								–
		150	–									–
		200	–									–
	830~970	100	–	11000								–
		150	–									–
		200	–									–
20" ~ 30"	630~778	100	–	9500								
		150	–									
		200	–									
	830~970	100	–	11500								
		150	–									
		200	–									
	1020~1170	100	–	12500								
		150	–									
		200	–									
	1220~1370	100	–	13500								
		150	–									
		200	–									

NOTE:

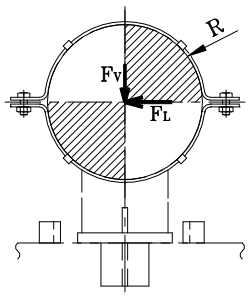
1- ALLOWABLE VERTICAL LOAD "Fv" HAS BEEN CALCULATED BASED ON μ=0.3, ALSO "Fv" IS THE MAX. CONCENTRATED VERTICAL LOAD AND "FL"=0.3x"Fv" AND "FA"=0.3x"Fv" WHICH ARE APPLIED CONCURRENTLY.

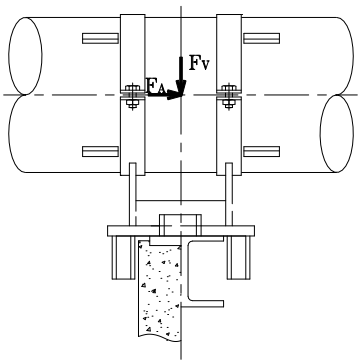
2- ABOVE MENTIONED ALLOWABLE LOADS ARE CALCULATED FOR SHOE CONFIGURATION. ALLOWABLE LOAD OF CLAMP SHALL BE CHECKED SEPARATELY.

SUPPORT DESCRIPTION:

ALLOWABLE LOADS FOR SHOE (COLD INSULATION) G-16

SHEET 2 3





ALLOWABLE LOAD FOR SHOES(Kg)–Fv

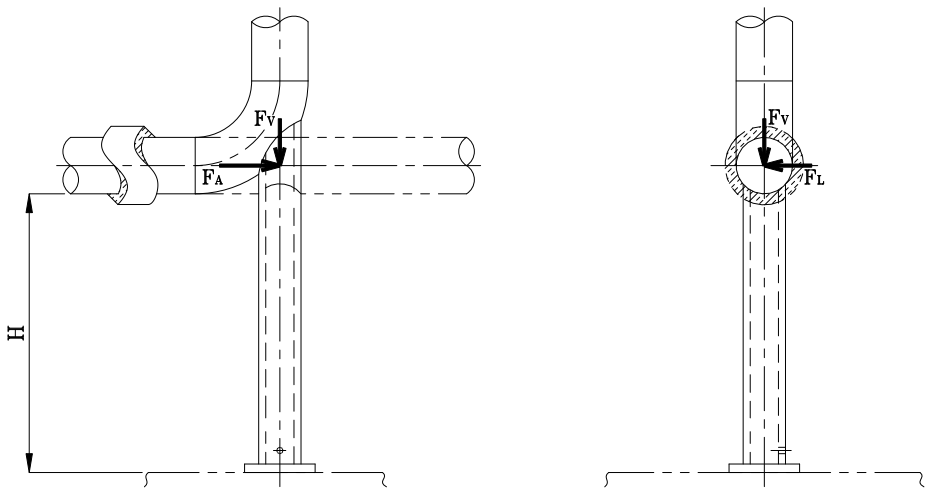
RUN PIPE SIZE	LENGTH OF SHOE(mm) / HEIGHT OF SHOE(mm)	200	300	400	500	600	700	800	900	1000	1100
1/2" ~ 1 1/2"	100	180							–	–	–
	150								–	–	–
	200								–	–	–
3" ~ 6"	100	550							–	–	–
	150								–	–	–
	200								–	–	–
8" ~ 10"	100	5000								–	–
	150									–	–
	200									–	–
12" ~ 20"	100	6500								–	–
	150									–	–
	200									–	–
22" ~ 28"	100	–	10000								–
	150	–									–
	200	–									–
30" ~ 36"	100	–	11500								–
	150	–									–
	200	–									–
38" ~ 42"	100	–	13000								
	150	–									
	200	–									

NOTE:

1– ALLOWABLE VERTICAL LOAD "Fv" HAS BEEN CALCULATED BASED ON μ=0.3, ALSO "Fv" IS THE MAX. CONCENTRATED VERTICAL LOAD AND "FL"=0.3x"Fv" AND "FA"=0.3x"Fv" WHICH ARE APPLIED CONCURRENTLY.

2– ABOVE MENTIONED ALLOWABLE LOADS ARE CALCULATED FOR SHOE CONFIGURATION. ALLOWABLE LOAD OF CLAMP SHALL BE CHECKED SEPARATELY.

SUPPORT DESCRIPTION:	SHEET
ALLOWABLE LOADS FOR CLAMPED SHOE G–16	3
	3



ALLOWABLE LOAD FOR DUMMY(Kg)–Fv

RUN PIPE SIZE \ H(mm)	600	900	1200	1400
2”	250	160	130	100
3”	330	220	160	140
4”	960	660	500	420
6”	1500	1050	800	700
8”~10”	3100	2200	1700	1450
12”~14”	5100	3600	2800	2400
16”~18”	7500	5400	4200	3600
20”	10000	7200	5700	5000
24”~26”	12000	8700	6900	6000
28”~30”	15000	11000	8800	7700
32”~34”	18000	13000	11000	9500
36”	20000	16500	13000	11000

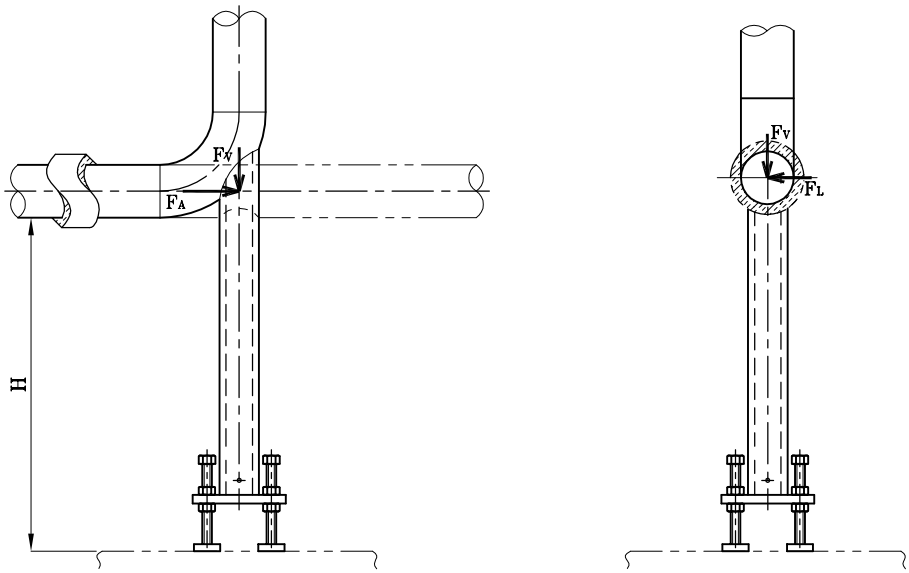
NOTE:

1– ALLOWABLE VERTICAL LOAD ”Fv” HAS BEEN CALCULATED BASED ON μ=0.3, ALSO ”Fv” IS THE MAX. CONCENTRATED VERTICAL LOAD AND ”FL”=0.3x”Fv” AND ”FA”=0.3x”Fv” WHICH ARE APPLIED CONCURRENTLY.

SUPPORT DESCRIPTION:	SHEET
ALLOWABLE LOADS FOR DUMMY G–17	1 3

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 70 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	



ALLOWABLE LOAD FOR DUMMY(Kg)-Fv

H(mm) / RUN PIPE SIZE	600	900	1200	1400
2"	250	160	130	100
3"	330	220	160	140
4"	960	660	500	420
6"	1500	1050	800	700
8"~10"	3100	2200	1700	1450
12"~14"	5100	3600	2800	2400
16"~18"	7500	5400	4200	3600
20"	10000	7200	5700	5000
24"	12000	8700	6900	6000

NOTE:

1- ALLOWABLE VERTICAL LOAD "Fv" HAS BEEN CALCULATED BASED ON μ=0.3, ALSO "Fv" IS THE MAX. CONCENTRATED VERTICAL LOAD AND "FL"=0.3x"Fv" AND "FA"=0.3x"Fv" WHICH ARE APPLIED APPLIED CONCURRENTLY.

SUPPORT DESCRIPTION:	SHEET
ALLOWABLE LOADS FOR DUMMY G-17	2 3

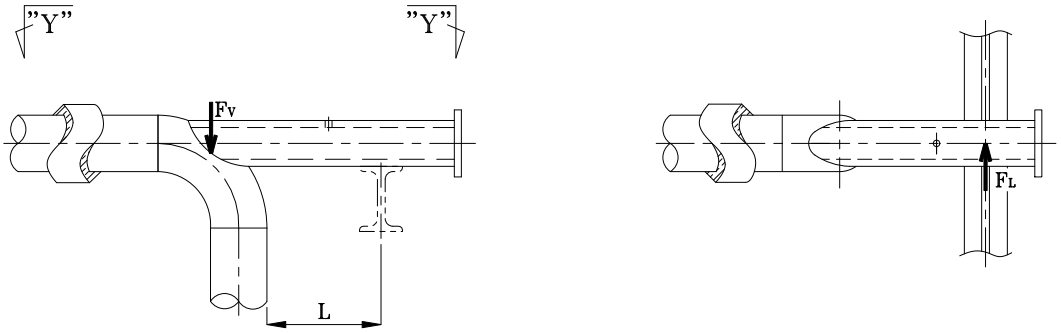
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 71 از 394



VIEW "Y" ~ "Y"

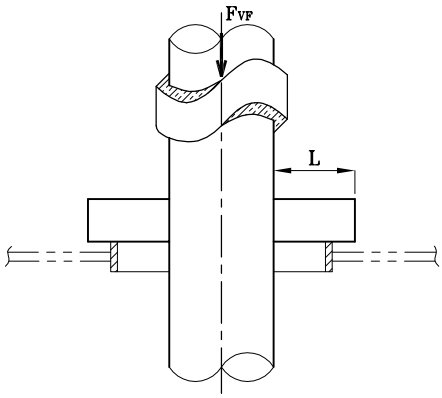
ALLOWABLE LOAD FOR DUMMY(Kg)-Fv

L(mm) / RUN PIPE SIZE	500	700	900	1100	1300	1500	1700	1900	2100
2"	90	65	50	40	35	30	25	20	15
3"~4"	140	100	80	65	55	45	40	35	30
6"	430	310	240	190	160	140	130	115	100
8"~10"	790	560	440	360	310	270	230	210	190
12"	1650	1200	930	760	650	560	500	440	400
14"~16"	2800	2000	1550	1250	1100	940	840	760	680
18"~20"	4300	3100	2400	1950	1650	1450	1300	1150	1000
24"	6100	4400	3400	2800	2300	2000	1800	1600	1500
28"	7400	5300	4100	3300	2800	2500	2200	1900	1800
30"~32"	9600	6900	5300	4400	3700	3200	2800	2500	2300
36"	12100	8700	6700	5500	4700	4000	3600	3200	2900

NOTE:

1- ALLOWABLE LOAD "Fv" HAS BEEN CALCULATED BASED ON μ=0.3, ALSO "Fv" IS THE MAX. CONCENTRATED LOAD AND "FL"=0.3x"Fv" WHICH ARE APPLIED CONCURRENTLY.

SUPPORT DESCRIPTION:	SHEET
ALLOWABLE LOADS FOR DUMMY G-17	3
	3



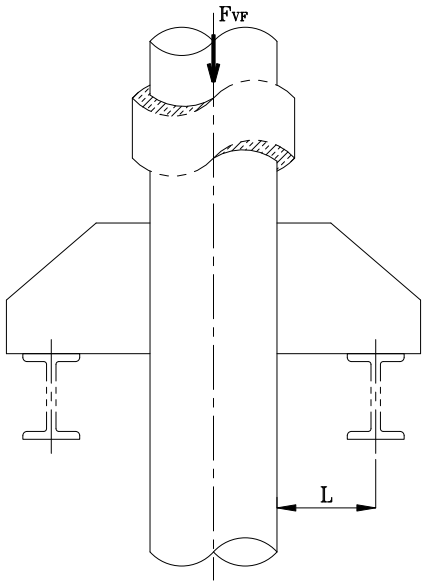
ALLOWABLE LOAD FOR WELDED PROP(Kg)

RUN PIPE SIZE / L(mm)	1/2"~3/4"	1"~2"
	FVF	FVF
110	130	180
130	110	150
150	100	130
170	90	120
190	80	110
210	70	100

NOTE:

1- ALLOWABLE VERTICAL LOAD "Fv" HAS BEEN CALCULATED BASED ON μ=0, AND "FVF" HAS BEEN CALCULATED BASED ON μ=0.3 WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

SUPPORT DESCRIPTION:	SHEET
ALLOWABLE LOADS FOR "SG" REMOVABLE PROP G-18	1 4



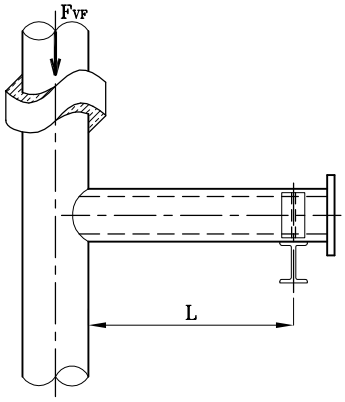
ALLOWABLE LOAD FOR WELDED PROP(Kg)-F_{VF}

RUN PIPE SIZE \ L(mm)	200	300	400	500	600	800	1000	1200	1500
3"	180	–	90	–	60	40	–	–	–
4"	260	–	130	–	85	65	–	–	–
6"	340	–	170	–	110	85	–	–	–
8"	–	–	870	–	580	440	350	–	–
10"~12"	–	–	1260	–	840	630	500	–	–
14"~16"	–	–	–	1620	–	1000	800	680	540
18"~20"	–	–	–	2400	–	1560	1240	1040	820
24"	–	–	–	3500	–	2200	1800	1500	1200

NOTE:

1- ALLOWABLE VERTICAL LOAD "F_{VF}" HAS BEEN CALCULATED BASED ON μ=0.3, WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

SUPPORT DESCRIPTION:	SHEET
ALLOWABLE LOADS FOR "SG" REMOVABLE PROP G-18	2 4



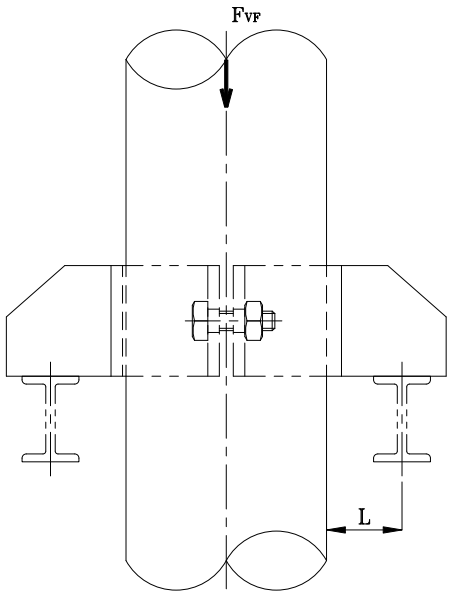
ALLOWABLE LOAD FOR TRUNNION (Kg)–FVF

RUN PIPE SIZE \ L(mm)	500	700	1000	1200
2"	110	80	50	40
3"~4"	130	95	65	50
6"	410	300	210	170
8"~10"	740	530	370	310
12"	1570	1130	800	670
14"	4000	2900	2000	1700
16"	5600	4000	2900	2400
18"	6700	4900	3400	2900
20"~26"	8700	6400	4500	3800
28"~30"	11000	8000	5700	4800
32"~36"	13400	9800	7000	5800

NOTE:

1- ALLOWABLE VERTICAL LOAD "FVF" HAS BEEN CALCULATED BASED ON μ=0.3, WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

SUPPORT DESCRIPTION:	SHEET
ALLOWABLE LOADS FOR "SG" REMOVABLE PROP G-18	3 4



ALLOWABLE LOAD FOR REMOVABLE PROP(Kg)-FVF

RUN PIPE SIZE \ L(mm)	200	300	400	500	600	800	1000	1200
1/2"~1+1/2"	30	–	15	–	10	8	–	–
2"~3"	100	–	50	–	30	25	–	–
4"~6"	180	–	90	–	60	45	–	–
8"	–	–	410	–	270	200	–	–
10"~12"	–	–	880	–	590	440	–	–
14"~16"	–	–	–	1100	–	720	580	480
18"~20"	–	–	–	1800	–	1100	940	750
24"	–	–	–	1900	–	1200	1000	950

NOTE:

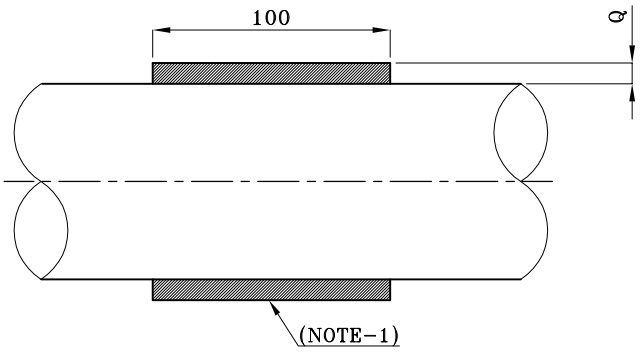
1- ALLOWABLE VERTICAL LOAD "FVF" HAS BEEN CALCULATED BASED ON μ=0.3, WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

2- THE ALLOWABLE LOAD ARE MENTIONED ABOVE HAVE BEEN CALCULATED BASED ON LUGS AND ALLOWABLE LOAD OF CLAMP SHALL BE CHECKED SEPARATELY.

SUPPORT DESCRIPTION:	SHEET
ALLOWABLE LOADS FOR "SG" REMOVABLE PROP G-18	4 4

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 76 از 394
	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	



$Q=(A/2-OD/2+15)$

SUPPORT DESCRIPTION:	SHEET
LAMINATED RING G-19	1 1

NOTE:

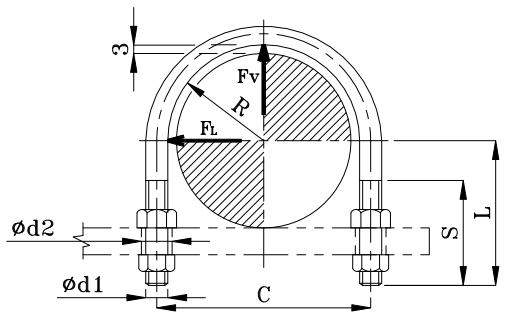
1- LAMINATED RING SHALL BE BONDED TO PIPE BY FILED.

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

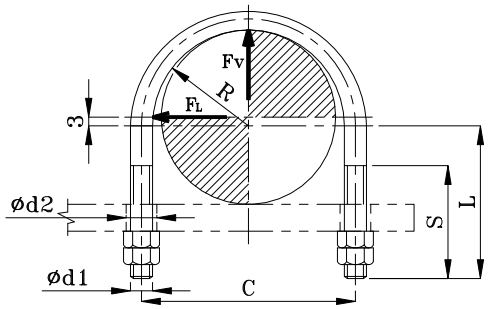
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 77 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

053-073-9184

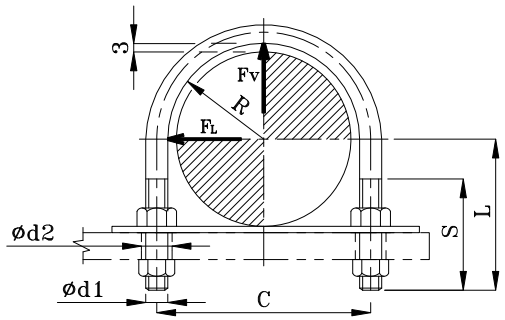


TYPE "A"
GUIDE

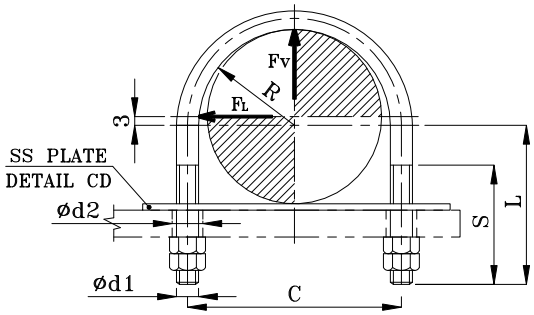


TYPE "B"
ANCHOR
(NOTE-1)

CS AND AS LINES

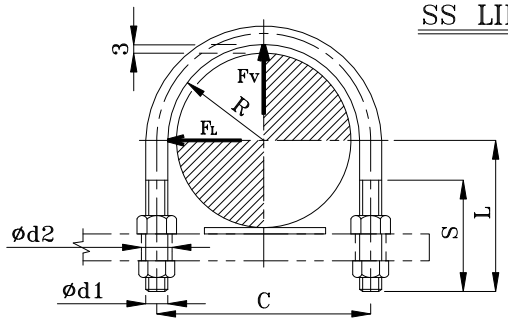


TYPE "C"
GUIDE

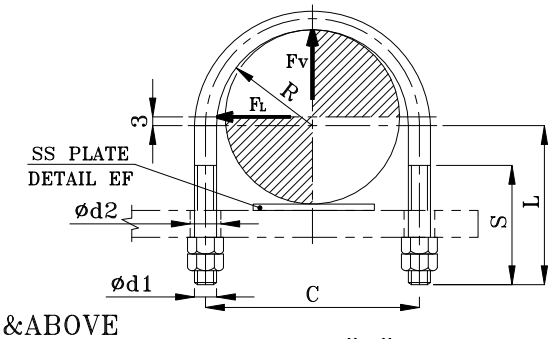


TYPE "D"
ANCHOR
(NOTE-1)

SS LINES-1+1/2"&BELOW

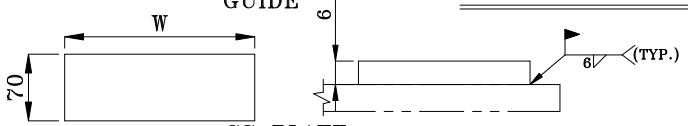


TYPE "E"
GUIDE



TYPE "F"
ANCHOR
(NOTE-1)

SS LINES-2"&ABOVE



SS PLATE
DETAIL EF

INDICATION:

SA-01- (1) (2)

1-TYPE MARK
2-NPS MARK

NOTE:

1- ANCHOR TYPE CAN BE APPLIED BY PULLING DOWN THE GUIDE TYPE U-BOLT.

2- "S" AND "L" HAVE BEEN CALCULATED BASED ON PLATE THICKNESS UP TO 18mm, MORE THAN 18mm CALCULATE "S" AND "L".

3- FOR CU-NI AND SS PIPES, ANTI CORROSION TAPE SHALL BE APPLIED BETWEEN PIPE AND U-BOLT.

4- ALLOWABLE LOADS HAVE BEEN CALCULATED BASED ON T(MAX.)=370 AND μ=0.3, ALSO "Fv", "FL" AND "FA" ARE THE MAX. CONCENTRATED LOAD WHICH ARE APPLIED SEPARATELY.

MATERIAL:
U-BOLT: ASTM A36-GALV, NUT: A325

SUPPORT DESCRIPTION:	SHEET
U-BOLT 3/8" ~ 24"	1
SA-01	3

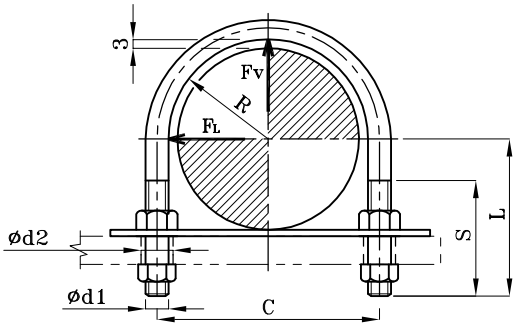
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

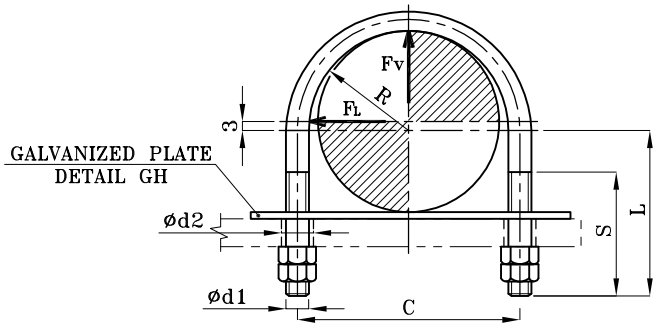
STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK

شماره صفحه: 78 از 394

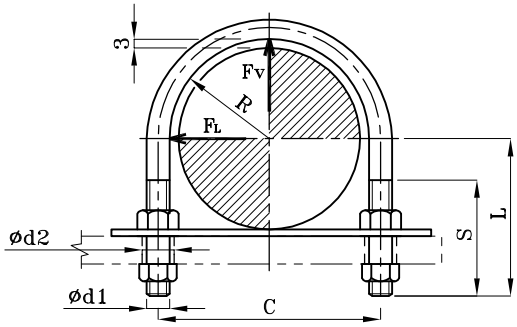


TYPE "G"
GUIDE

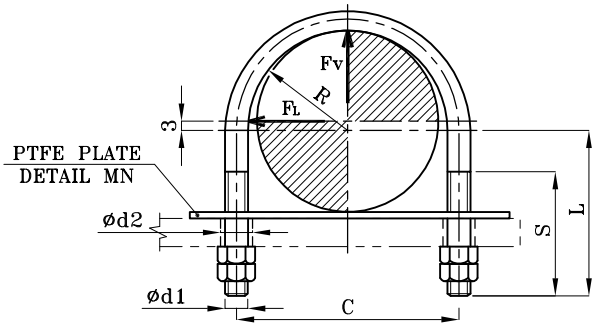


TYPE "H"
ANCHOR
(NOTE-1)

GALVANAZED LINES

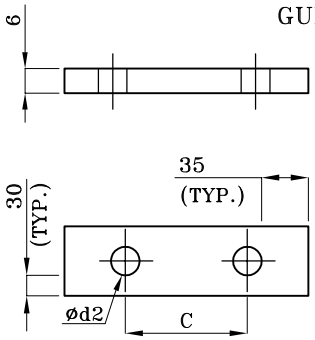


TYPE "M"
GUIDE

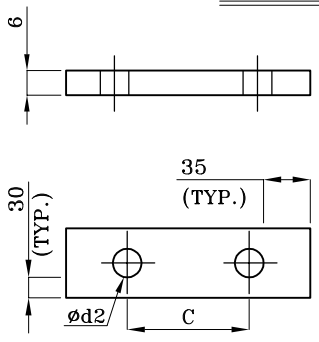


TYPE "N"
ANCHOR
(NOTE-1)

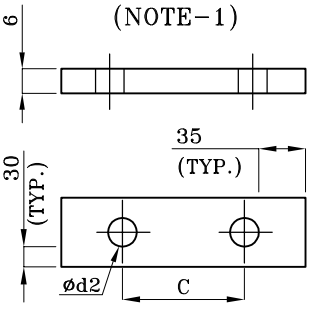
CU-NI LINES



SS PLATE
DETAIL CD



GALVANIZED PLATE
DETAIL GH



PTFE PLATE
DETAIL MN

NOTE:

1- ANCHOR TYPE CAN BE APPLIED BY PULLING DOWN THE GUIDE TYPE U-BOLT.

2- "S" AND "L" HAVE BEEN CALCULATED BASED ON PLATE THICKNESS UP TO 18mm, MORE THAN 18mm CALCULATE "S" AND "L".

3- FOR CU-NI AND SS PIPES, ANTI CORROSION TAPE SHALL BE APPLIED BETWEEN PIPE AND U-BOLT.

4- ALLOWABLE LOADS HAVE BEEN CALCULATED BASED ON T(MAX.)=370 AND μ=0.3, ALSO "Fv", "FL" AND "FA" ARE THE MAX. CONCENTRATED LOAD WHICH ARE APPLIED SEPARATELY.

MATERIAL:
U-BOLT: ASTM A36-GALV, NUT: A325

INDICATION:

SA-01- [ ][ ][ ]
(1) (2)

1-TYPE MARK
2-NPS MARK

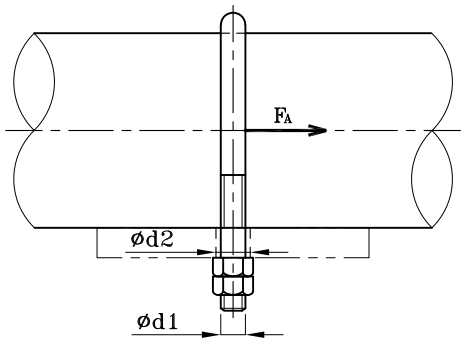
SUPPORT DESCRIPTION:	SHEET
U-BOLT 3/8" ~ 24"	2
SA-01	3

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



TYPICAL SIDE VIEW
ANCHOR TYPE

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	ød1	ød2	R	C	S (NOTE-2)	L (NOTE-2)	W	ALLOWABLE LOADS (kg) FL	Fv	FA
0C	3/8"	M6	8	12	30	50	50	–	70	200	25
0A	1/2"	M6	8	14	34	55	55	–			
0B	3/4"	M8	10	16	40	50	55	–	130	500	45
01	1"	M8	10	20	48	55	60	–			
1A	1+1/2"	M12	14	27	66	65	75	–	270	700	80
02	2"	M12	14	33	78	70	85	45			
03	3"	M16	18	48	112	80	110	45	200	1200	60
04	4"	M16	18	60	136	80	120	55			
06	6"	M16	18	87	190	95	145	85			
08	8"	M20	22	113	246	95	180	110	240	2500	
10	10"	M20	22	140	300	100	205	135			
12	12"	M24	26	165	354	120	240	160		3500	80
14	14"	M24	26	181	386	120	255	180			
16	16"	M24	26	206	436	120	280	205			
18	18"	M24	26	232	488	120	305	230			
20	20"	M33	35	257	547	155	345	255	500	6000	150
24	24"	M33	35	308	649	155	395	305			

INDICATION:

SA-01- [ ] [ ]
(1) (2)

1-TYPE MARK
2-NPS MARK

NOTE:

1- ANCHOR TYPE CAN BE APPLIED BY PULLING DOWN THE GUIDE TYPE U-BOLT.

2- "S" AND "L" HAVE BEEN CALCULATED BASED ON PLATE THICKNESS UP TO 18mm, MORE THAN 18mm CALCULATE "S" AND "L".

3- FOR CU-NI AND SS PIPES, ANTI CORROSION TAPE SHALL BE APPLIED BETWEEN PIPE AND U-BOLT.

4- ALLOWABLE LOADS HAVE BEEN CALCULATED BASED ON T(MAX.)=370 AND μ=0.3, ALSO "Fv", "FL" AND "FA" ARE THE MAX. CONCENTRATED LOAD WHICH ARE APPLIED SEPARATELY.

MATERIAL:
U-BOLT: ASTM A36-GALV, NUT: A325

SUPPORT DESCRIPTION:	SHEET
U-BOLT 3/8" ~ 24"	3
SA-01	3

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

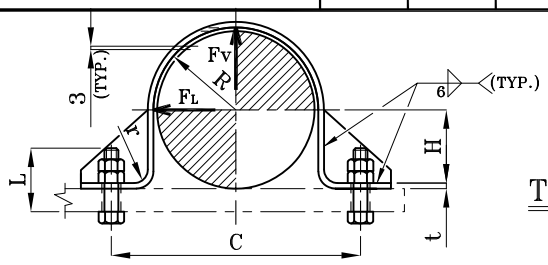
PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

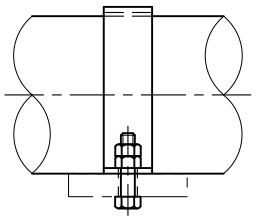
STANDARD PIPE SUPPORT DRAWINGS

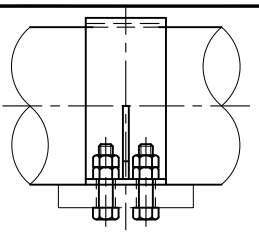
نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK

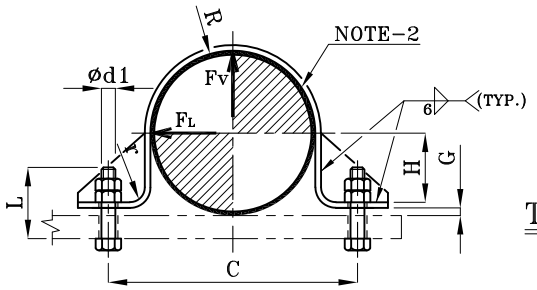
شماره صفحه: 80 از 394



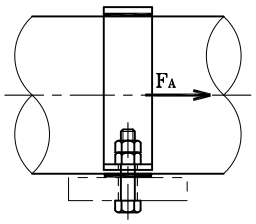
TYPE "A"
GUIDE


1/2"~4"

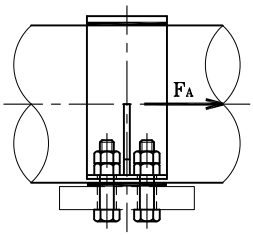

6"~24"



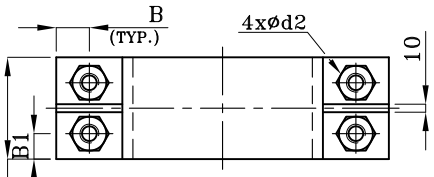
TYPE "B"
ANCHOR

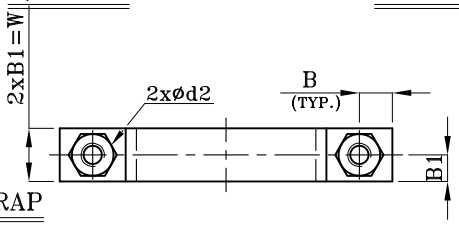


1/2"~4"



6"~24"





DETAIL FOR STRAP

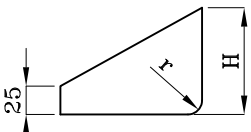
NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	4xød1 B1=W	LxS (TYPE-A) (NOTE-1)	LxS (TYPE-B) (NOTE-1)	ød2	t	r	R	C	B	W	B1	G (NOTE-3)	H (TYPE-A)	H (TYPE-B)	ALLOWABLE LOADS (kg) FL	Fv	FA
0A	1/2"	M6	50x30	50x30	8	5	4	14	100	25	40	20	3	6	6	60	100	5
0B	3/4"	M6	50x30	50x30	8	5	4	16	100	25	40	20	3	8	8			
01	1"	M12	60x40	60x40	14	8	9	20	124	30	50	25	3	9	9	250	350	15
1A	1+1/2"	M12	60x40	60x40	14	8	9	27	140	30	50	25	3	16	16			
02	2"	M16	70x50	70x50	18	8	9	33	172	30	50	25	4	22	22			
03	3"	M16	70x50	70x50	18	8	9	48	200	30	100	50	8	37	35		450	30
04	4"	M16	70x50	70x50	18	8	9	60	224	30	100	50	8	49	47			
06	6"	M20	80x60	80x60	22	10	15	87	312	40	128	32	10	74	72	320	1500	60
08	8"	M20	80x60	80x60	22	10	15	113	364	40	128	32	5	100	98			
10	10"	M20	80x60	80x60	22	10	15	140	420	40	152	38	5	127	125	260	1700	110
12	12"	M20	80x60	80x60	22	10	15	165	470	40	152	38	5	152	150			
14	14"	M20	80x50	90x60	22	10	15	181	500	40	176	44	10	168	161			120
16	16"	M24	95x65	105x75	26	10	15	206	572	50	176	44	10	193	186			
18	18"	M24	95x65	105x75	26	10	15	232	624	50	200	50	10	219	212	230		130
20	20"	M24	95x65	105x75	26	12	18	257	682	50	220	55	10	242	235		2200	190
24	24"	M24	95x65	105x75	26	12	18	308	784	50	220	55	10	293	286			

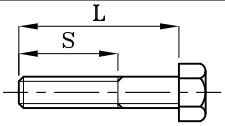
INDICATION:

SA-02- [ ] [ ] [ ]
(1) (2)

1-TYPE MARK
2-NPS MARK



DETAIL FOR STIFFENER



DETAIL FOR BOLT

NOTE:

1- "L" HAVE BEEN CALCULATED BASED ON PLATE THICKNESS UP TO 18mm, MORE THAN 18mm CALCULATE "L".

2- FOR "AS" AND "SS" PIPES, ANTI CORROSION TAPE SHALL BE APPLIED BETWEEN PIPE AND STRAP.

3- GAP "G" IS APPLICABLE FOR ANCHOR TYPE OF STRAP.

4- ALLOWABLE LOADS HAVE BEEN CALCULATED BASED ON T(MAX.)=370 AND μ=0.3, ALSO "Fv", "FL" AND "FA" ARE THE MAX. CONCENTRATED LOAD WHICH ARE APPLIED SEPARATELY.

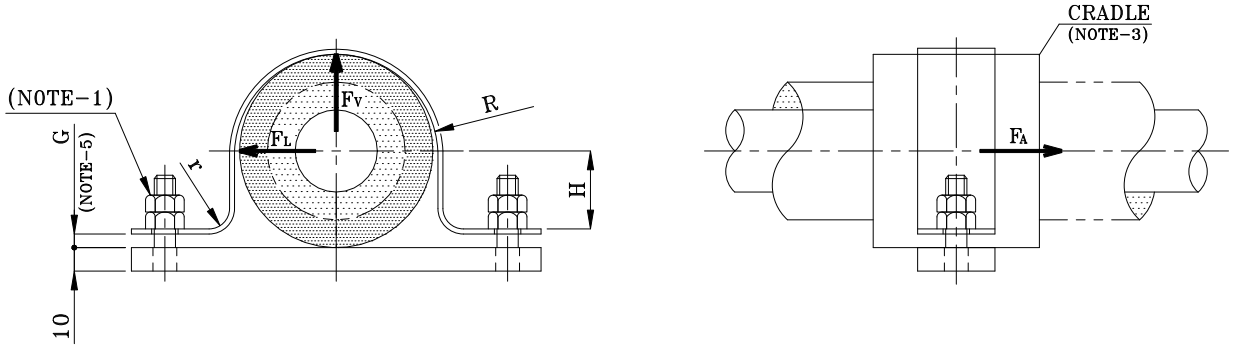
MATERIAL:
PLATE: A283 Gr.C, BOLT & NUT: A325

SUPPORT DESCRIPTION:	SHEET
STRAP 1/2" ~ 24"	1
SA-02	1

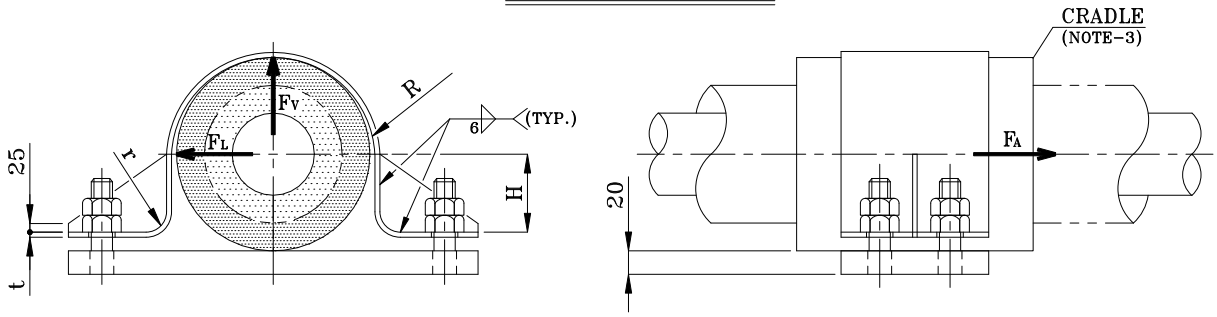
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02

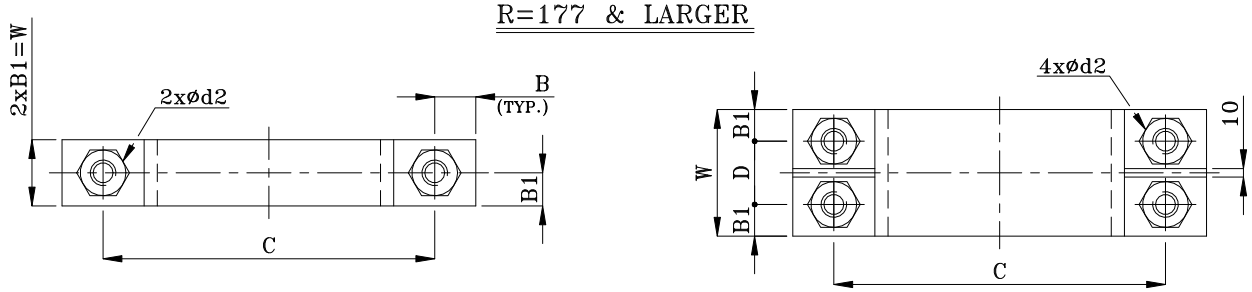
شماره صفحه: 82 از 394



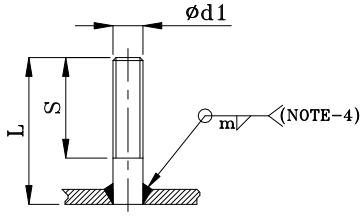
R=170 & SMALLER



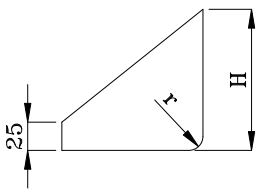
R=177 & LARGER



DETAIL FOR STRAP



DETAIL FOR BOLT



DETAIL FOR STIFFENER

INDICATION:

SA-04- [ ][ ] (1) - [ ] (2)

1-NPS MARK
2-INSULATION THK. MARK

NOTE:

1- TWO NUTS ARE REQUIRED PER EACH BOLT.

2- ALLOWABLE LOADS HAVE BEEN CALCULATED BASED ON μ=0.3, ALSO "Fv", "FL" AND "FA" ARE THE MAX. CONCENTRATED LOADS WHICH ARE APPLIED SEPARATELY.

3- FOR DETAIL OF CRADLE SEE (G-04).

4- FOR R=170 & SMALLER m=8, FOR R=177 & LARGER m=10.

5- GAP "G" MAY BE VARIED PER CASE.

MATERIAL:
PLATE: A283 Gr.C, BOLT & NUT: A325

SUPPORT DESCRIPTION:	SHEET
TIGHT STRAP (COLD INSULATION) 1" ~ 16"	1
SA-04	2

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 83 از 394

DIMENSION TABLE

R	C	B	t	r	H	W	B1	D	ød2	Md1xLxS	G	ALLOWABLE LOADS(kg)		
												FL	Fv	FA
70	235	30	8	9	48	80	40	–	18	M16x70x60	10	110	400	20
78	245	30	8	9	56	80	40	–	18	M16x70x60	10			
84	260	30	8	9	62	80	40	–	18	M16x70x60	10			
98	290	30	8	9	76	132	66	–	18	M16x70x60	10		500	40
111	315	30	8	9	89	132	66	–	18	M16x70x60	10			
120	335	30	8	9	98	132	66	–	18	M16x70x60	10			
127	345	30	8	9	106	132	66	–	18	M16x70x60	10			
138	395	35	10	15	110	132	66	–	22	M20x85x70	10	150	700	50
148	415	35	10	15	124	132	66	–	22	M20x85x70	10			
164	445	35	10	15	140	132	66	–	22	M20x85x70	10			
170	460	35	10	15	146	132	66	–	22	M20x85x70	10	240	1500	120
177	485	50	10	15	154	132	41	50	22	M20x85x70	10			
188	500	50	10	15	160	132	41	50	22	M20x85x70	10			
191	520	50	10	15	166	132	41	50	22	M20x85x70	10			
198	535	50	10	15	174	180	65	50	22	M20x85x70	10	160		
216	570	50	10	18	187	180	65	50	22	M20x85x70	10			
227	590	60	10	18	199	180	65	50	22	M20x85x70	15			
234	630	60	12	18	200	180	50	80	26	M24x100x80	15	340	2300	160
238	640	60	12	18	207	180	50	80	26	M24x100x80	15			
241	655	60	12	18	209	180	50	80	26	M24x100x80	15			
248	670	60	12	18	217	230	60	110	26	M24x100x80	15	270		180
257	685	60	12	18	226	230	60	110	26	M24x100x80	15			
266	705	60	12	18	230	230	60	110	26	M24x100x80	15			
281	720	60	12	18	250	230	60	110	26	M24x100x80	15			
291	750	60	15	18	254	230	60	110	26	M24x100x80	15	320	2900	200
307	770	60	15	18	273	230	60	110	26	M24x100x80	15			
316	800	60	15	18	280	230	60	110	26	M24x100x80	15			
332	850	75	15	25	292	230	55	120	32	M30x115x95	20			
341	900	75	15	25	301	230	55	120	32	M30x115x95	20			
357	950	75	15	25	318	230	55	120	32	M30x115x95	20			
366	1000	75	15	25	325	250	60	130	32	M30x115x95	20			
381	1050	75	15	25	343	250	60	130	32	M30x115x95	20		2000	
391	1100	75	15	25	351	250	60	130	32	M30x115x95	20			
407	1150	75	15	25	368	250	60	130	32	M30x115x95	20			
416	1200	75	15	25	377	250	60	130	32	M30x115x95	20			
432	1250	75	15	25	393	280	80	120	32	M30x115x95	20			
457	1300	75	15	25	418	280	80	120	32	M30x115x95	20			

NPS MARK:(1)

NPS MARK	INS. THK. / CRADLE THK. / PIPE SIZE(D)	R				
		25–50	51–100	101–150	151–200	201–250
		T=50	T=100	T=150	T=200	T=250
01	1”	70	120	170	–	–
1A	1+1/2”	78	127	177	227	–
02	2”	84	138	188	234	–
03	3”	98	148	198	248	–
04	4”	111	164	216	266	–
06	6”	138	188	238	291	–
08	8”	164	216	266	316	366
10	10”	191	241	291	341	391
12	12”	216	266	316	366	416
14	14”	234	281	332	381	432
16	16”	257	307	357	407	457

INSULATION THK. MARK:(2)

INSULATION THK.	25–50	51–100	101–150	151–200	201–250
INSULATION MARK	1	2	3	4	5

INDICATION:

SA–04–□□–□
(1) (2)

1–NPS MARK
2–INSULATION THK. MARK

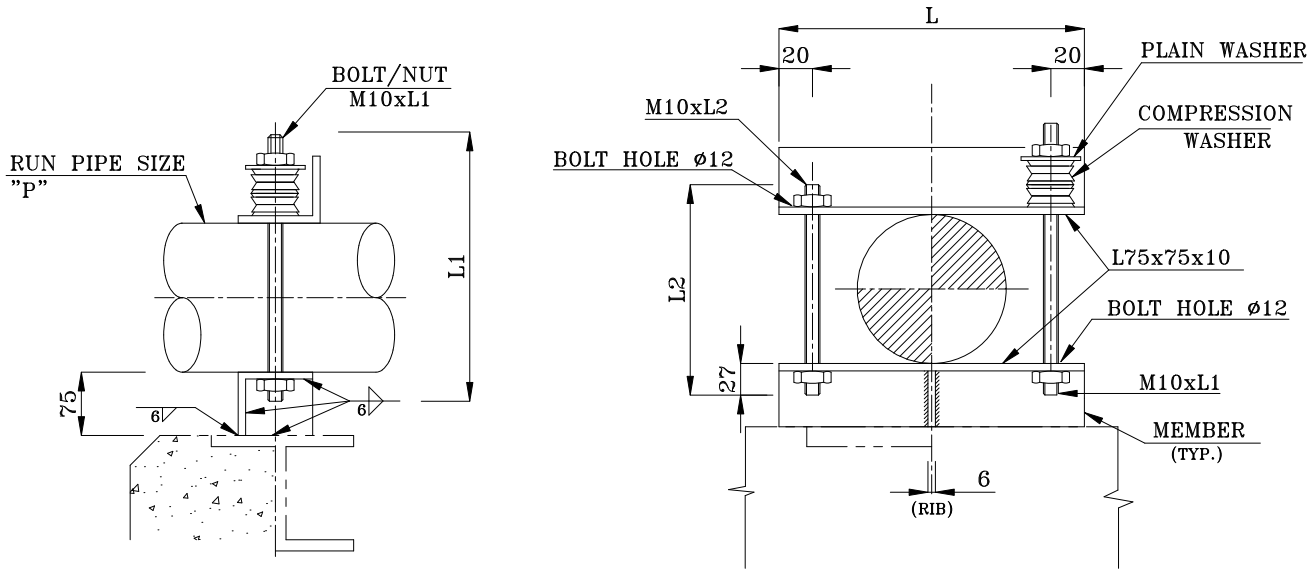
SUPPORT DESCRIPTION:	SHEET
TIGHT STRAP (COLD INSULATION) 1” ~ 16”	2
SA–04	2

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

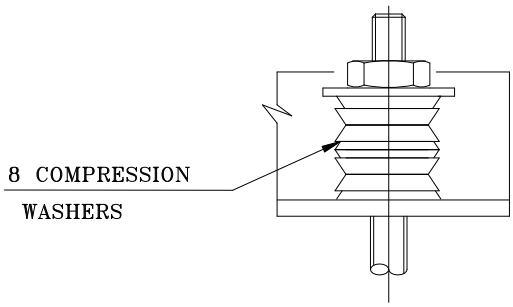
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



3" & SMALLER



NPS MARK:(1) UNIT (mm)

NPS MARK	PIPE SIZE NPS "P"	MEMBER L	BOLT/NUT L1	BOLT/NUT L2	COMPRESSION WASHER	ALLOW. LOAD(Kg)
0B	3/4"	130	95	85	DIN 2093B	700
01	1"	135	100	90	DIN 2093B	
1A	1-1/2"	150	120	105	DIN 2093B	
02	2"	160	130	115	DIN 2093B	
03	3"	190	155	145	DIN 2093B	

INDICATION:

SA-05-□□
(1)

1-NPS MARK

NOTE:

1- FIELD PROCEDURE FOR TIGHTENING BOLTS
1) TIGHTEN ALL NUTS BY HAND (FINGER TIGHT)
2) TURN NUT AT COMPRESSION WASHER 1/2 ADDITIONAL OR 180°
ACTUAL LOAD AT COMPRESSION WASHER : 175Kg

MATERIAL: STANDARD PROFILE: ASTM A36, BOLT & NUT: A325

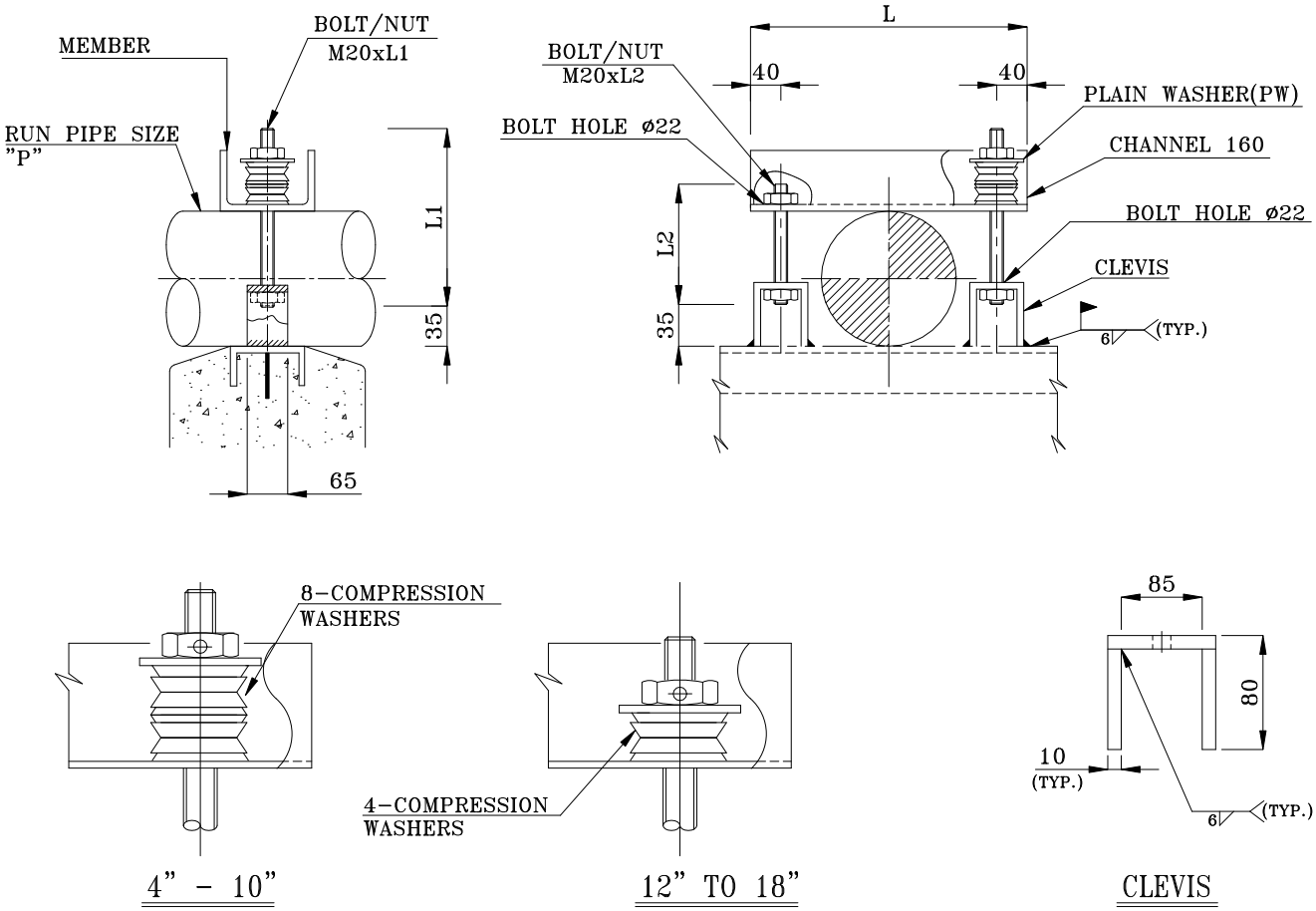
SUPPORT DESCRIPTION:	SHEET
HOLD DOWN (FOR BARE/HOT INSULATED PIPE WITH VIBRATION) 3" AND BELOW SA-05	1 3

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 85 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

053-073-9184



4" - 10"

12" TO 18"

CLEVIS

UNIT (mm)

SIZE MARK	TYPE	PIPE SIZE NPS "P"	MEMBER L	BOLT/NUT L1	BOLT/NUT L2	COMPRESSION WASHER	ALLOW. LOAD(Kg)
04	I	4"	320	140	115	DIN 2093B	1000
06		6"	380	190	170	DIN 2093B	
08		8"	425	240	220	DIN 2093B	
10		10"	470	300	275	DIN 2093B	
12	II	12"	500	345	325	DIN 2093B	2000
14		14"	530	380	360	DIN 2093B	
16		16"	580	425	405	DIN 2093B	
18		18"	630	480	460	DIN 2093B	

INDICATION:

SA-05- [|]
(1)

1-NPS MARK

NOTE:

1- FIELD PROCEDURE FOR TIGHTENING BOLTS
   1) TIGHTEN ALL NUTS BY HAND (FINGER TIGHT)
   2) TURN NUT AT COMPRESSION WASHER 1/4 ADDITIONAL OR 90°
   ACTUAL LOAD AT COMPRESSION WASHER : 250Kg FOR TYPE I AND 500Kg FOR TYPE II.

2- INSULATOR WILL NOT INSULATE HOLD DOWN AREA.

MATERIAL: STANDARD PROFILE: ASTM A36, BOLT & NUT: A325

SUPPORT DESCRIPTION:	SHEET
HOLD DOWN (FOR BARE/HOT INSULATED PIPE WITH VIBRATION) 4" ~ 18"	2
SA-05	3

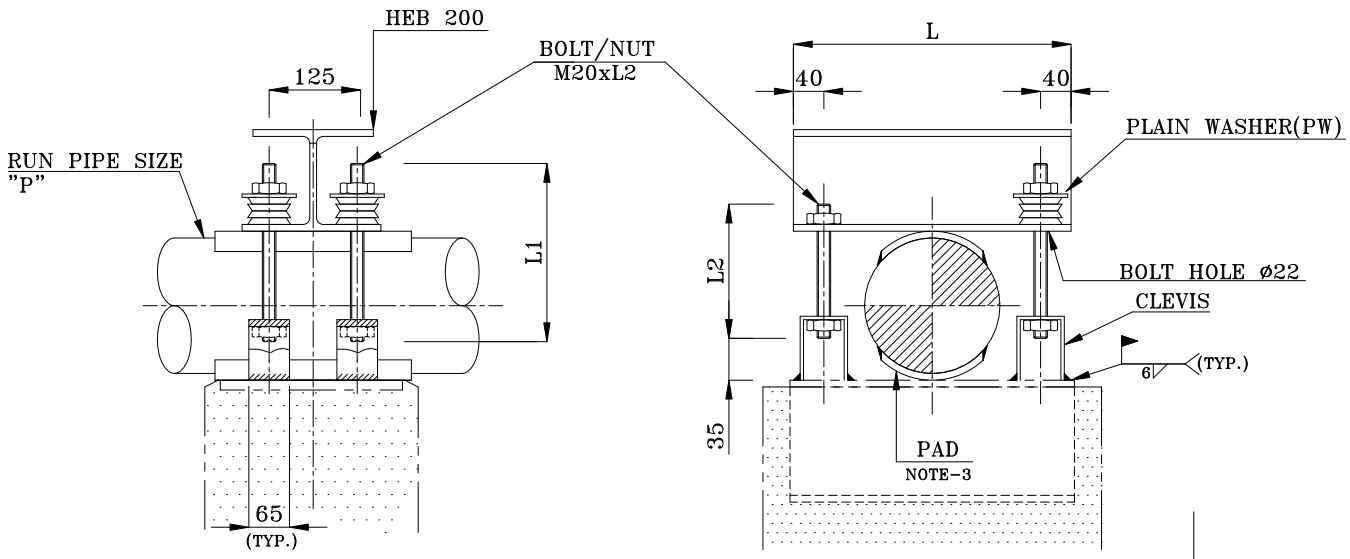
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

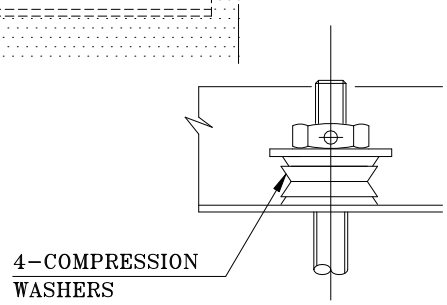
STANDARD PIPE SUPPORT DRAWINGS

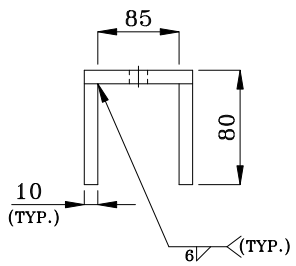
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 86 از 394



20" TO 36"





CLEVIS

UNIT (mm)

SIZE MARK	PIPE SIZE NPS "P"	MEMBER L	BOLT/NUT L1	BOLT/NUT L2	COMPRESSION WASHER	ALLOW. LOAD(Kg)
20	20"	680	550	535	DIN 2039B	4000
24	24"	780	650	635	DIN 2039B	
30	30"	935	800	790	DIN 2039B	
36	36"	1085	955	940	DIN 2039B	

INDICATION:

SA-05-□□
(1)

1-NPS MARK

NOTE:

1- FIELD PROCEDURE FOR TIGHTENING BOLTS
   1) TIGHTEN ALL NUTS BY HAND (FINGER TIGHT)
   2) TURN NUT AT COMPRESSION WASHER 1/4 ADDITIONAL OR 90°
   ACTUAL LOAD AT COMPRESSION WASHER : 500Kg
2- INSULATOR WILL NOT INSULATE HOLD DOWN AREA.
3- SEPARATED TAG. IS REQUIRED FOR PAD.

MATERIAL: STANDARD PROFILE: ASTM A36, BOLT & NUT: A325

SUPPORT DESCRIPTION:	SHEET
HOLD DOWN (FOR BARE/HOT INSULATED PIPE WITH VIBRATION) 20" ~ 36"	3
SA-05	3

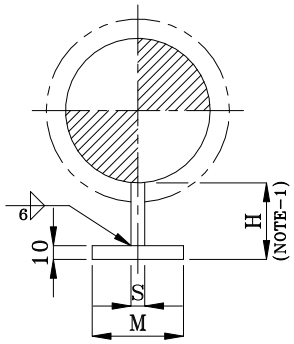
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

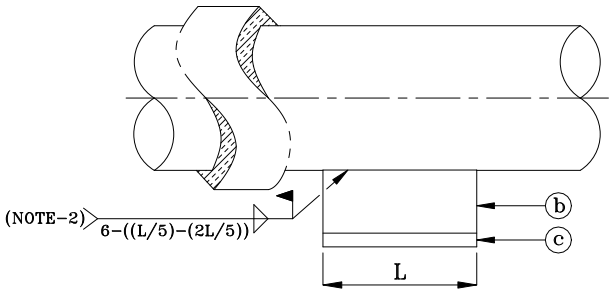
STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK

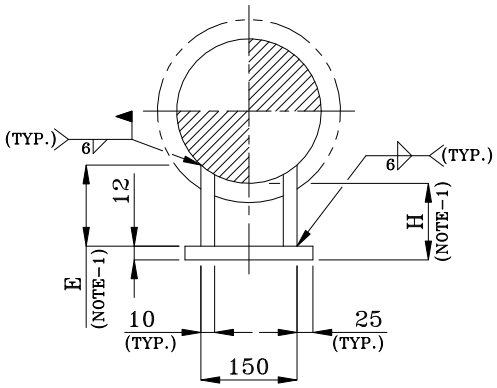
شماره صفحه: 87 از 394

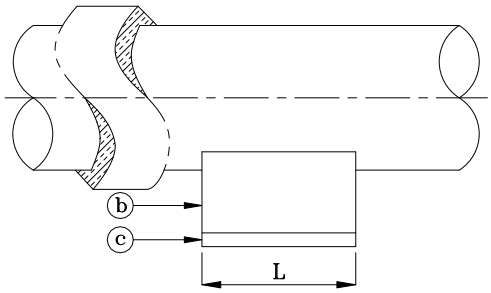


1/2"~2" : M=100, S=8
3"~6" : M=150, S=10



1/2"~6"





8"~14"

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E
0A	1/2"	–	–
0B	3/4"		
01	1"		
1A	1+1/2"		
02	2"		
03	3"		
04	4"		
06	6"		
08	8"	100	118
		150	168
		200	218
10	10"	100	111
		150	161
		200	211
12	12"	100	107
		150	157
		200	207
14	14"	100	105
		150	155
		200	205

LENGTH MARK:(4)

MARK	L	THERMAL MOVEMENT
1	100	UP TO 40mm
2	200	41mm TO 75mm
3	300	76mm TO 125mm
4	400	126mm TO 175mm
5	500	176mm TO 230mm
ABOVE 230mm THERMAL MOVEMENT ACTUAL LENGTH SHALL BE CALCULATED		

HEIGHT MARK:(3)

MARK	H	INSULATION THK.
1	100	UP TO 75mm
2	150	76mm TO 125mm
3	200	126mm TO 175mm
4	250	–
5	300	–
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED		

MATERIAL MARK:(1)

DES. TEMP	MEMBER \ MATERIAL OF RUN PIPE	CARBON STEEL
0°C TO 350°C	MARK	A
	ⓐ	–
	ⓑ	A283 Gr.C
	ⓒ	A283 Gr.C
350°C TO 400°C	MARK	B
	ⓐ	–
	ⓑ	A285 Gr.C
	ⓒ	A285 Gr.C

INDICATION:

SB-01-[ ][ ][ ]-[ ]-[ ]
(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

2- THIS TYPE OF WELDING IS USED FOR PIPES WITH NPS 1/2"~2", FOR NPS 3"~6" CONTINUOUS WELDING SHALL BE PERFORMED.

3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

SUPPORT DESCRIPTION:	SHEET
SLIDE SHOE (CS-WITHOUT PWHT) 1/2" ~ 14"	1
SB-01	4

NISOC

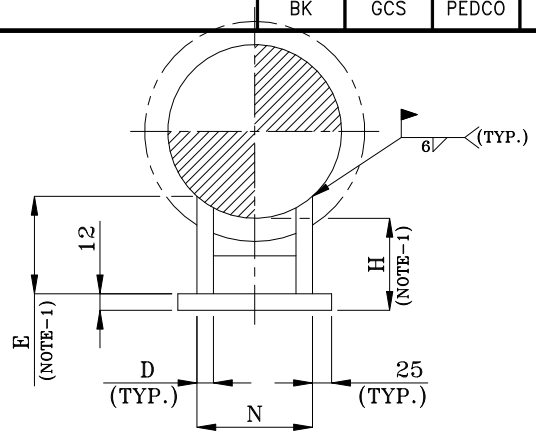
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سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

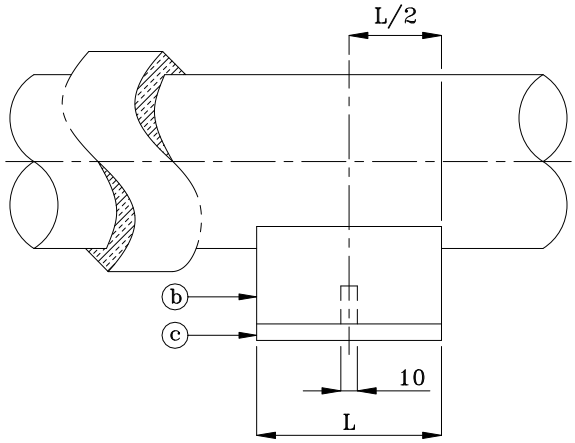
PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02





16"~28"

MATERIAL MARK:(1)

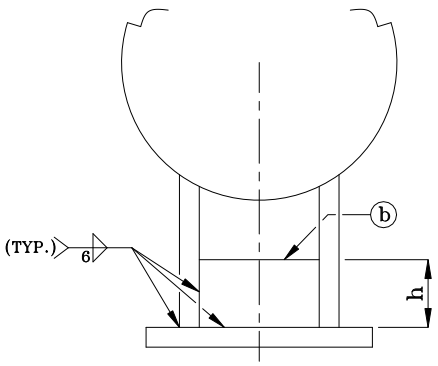
DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL
0°C TO 350°C	MARK	A
	ⓐ	–
	ⓑ	A283 Gr.C
	Ⓒ	A283 Gr.C
350°C TO 400°C	MARK	B
	ⓐ	–
	ⓑ	A285 Gr.C
	Ⓒ	A285 Gr.C

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	D
16	16"	100	131	250	10
		150	181		
		200	231		
18	18"	100	145	300	10
		150	195		
		200	245		
20	20"	100	137	300	10
		150	187		
		200	237		
24	24"	100	144	350	10
		150	194		
		200	244		
26	26"	100	156	400	12
		150	206		
		200	256		
28	28"	100	150	400	12
		150	200		
		200	250		

LENGTH MARK:(4)

MARK	L	THERMAL MOVEMENT
3	300	UP TO 75mm
4	400	76mm TO 125mm
5	500	126mm TO 175mm
6	600	176mm TO 230mm
ABOVE 230mm THERMAL MOVEMENT ACTUAL LENGTH SHALL BE CALCULATED		



DETAIL

HEIGHT MARK:(3)

MARK	H	INSULATION THK.	h
1	100	UP TO 75mm	50
2	150	76mm TO 125mm	100
3	200	126mm TO 175mm	150
4	250	–	200
5	300	–	250
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED			

INDICATION:

SB-01-□□□-□-□
(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

2- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

SUPPORT DESCRIPTION:	SHEET
SLIDE SHOE (CS-WITHOUT PWHT) 16" ~ 28"	2
SB-01	4

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

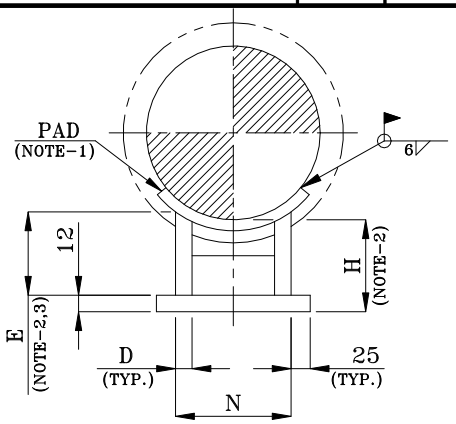
HIRGAN ENERGY

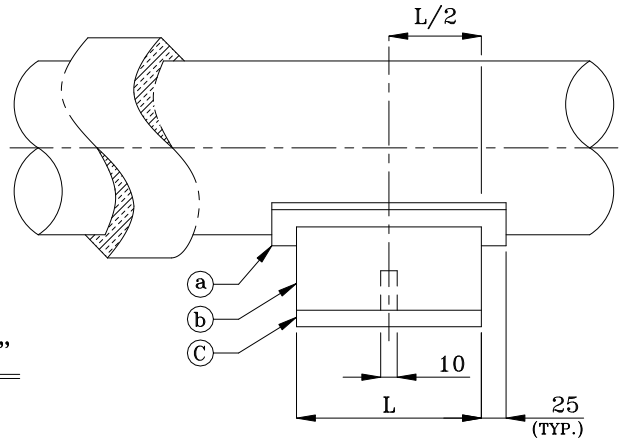
شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02





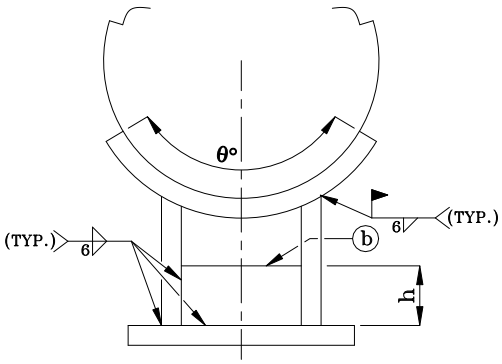
30"~36"

MATERIAL MARK:(1)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL
0°C TO 350°C	MARK	A
	ⓐ NOTE-1	–
	ⓑ	A283 Gr.C
	Ⓒ	A283 Gr.C
350°C TO 400°C	MARK	B
	ⓐ NOTE-1	–
	ⓑ	A285 Gr.C
	Ⓒ	A285 Gr.C

LENGTH MARK:(4)

MARK	L	THERMAL MOVEMENT
3	300	UP TO 75mm
4	400	76mm TO 125mm
5	500	126mm TO 175mm
6	600	176mm TO 230mm
ABOVE 230mm THERMAL MOVEMENT ACTUAL LENGTH SHALL BE CALCULATED		



DETAIL OF PAD

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	D	θ°
30	30"	100	150	450	12	90°
		150	200			
		200	250			
32	32"	100	145	450	12	90°
		150	195			
		200	245			
34	34"	100	157	500	12	90°
		150	207			
		200	257			
36	36"	100	152	500	12	90°
		150	202			
		200	252			

HEIGHT MARK:(3)

MARK	H	INSULATION THK.	h
1	100	UP TO 75mm	50
2	150	76mm TO 125mm	100
3	200	126mm TO 175mm	150
4	250	–	200
5	300	–	250
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED			

INDICATION:

SB-01-□□□-□-□

(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

3- DIMENSION "E" HAS BEEN CALCULATED BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED WITH RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.

4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

5- WEEP HOLE(ø=6mm) SHALL BE PROVIDED FOR PADS.

SUPPORT DESCRIPTION:	SHEET
SLIDE SHOE (CS-WITHOUT PWHT) 30" ~ 36"	3
SB-01	4

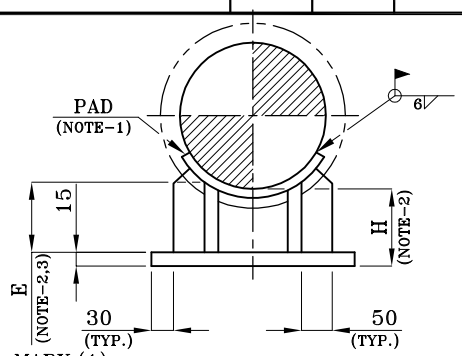
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

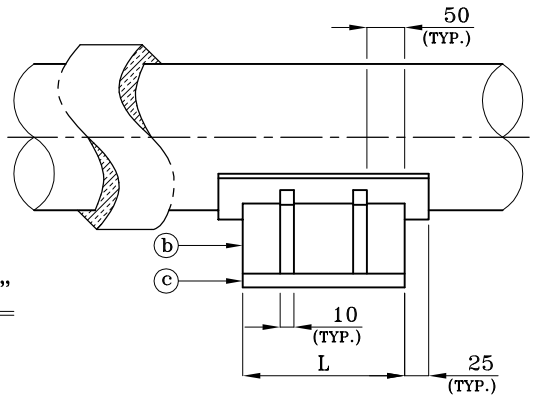
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 90 از 394

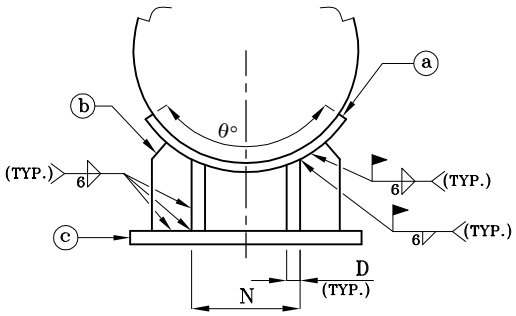




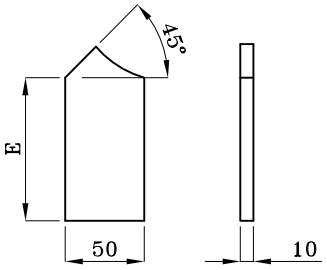
38"~56"

MATERIAL MARK:(1)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL
0°C TO 350°C	MARK	A
	ⓐ NOTE-1	–
	ⓑ	A283 Gr.C
	Ⓒ	A283 Gr.C
350°C TO 400°C	MARK	B
	ⓐ NOTE-1	–
	ⓑ	A285 Gr.C
	Ⓒ	A285 Gr.C



DETAIL OF PAD



DETAIL OF STIFFENER

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	D	θ°
38	38"	100	160	550	12	120°
		150	210			
		200	260			
40	40"	100	155	550	12	120°
		150	205			
		200	255			
42	42"	100	166	600	15	120°
		150	216			
		200	266			
44	44"	100	162	600	15	120°
		150	212			
		200	262			
46	46"	100	190	700	15	120°
		150	240			
		200	290			
48	48"	100	184	700	15	120°
		150	234			
		200	284			
52	52"	100	208	800	15	120°
		150	258			
		200	308			
56	56"	100	197	800	15	120°
		150	247			
		200	297			

LENGTH MARK:(4)

MARK	L	THERMAL MOVEMENT
4	400	UP TO 75mm
5	500	76mm TO 125mm
6	600	126mm TO 175mm
7	700	176mm TO 230mm
ABOVE 230mm THERMAL MOVEMENT ACTUAL LENGTH SHALL BE CALCULATED		

HEIGHT MARK:(3)

MARK	H	INSULATION THK.
1	100	UP TO 75mm
2	150	76mm TO 125mm
3	200	126mm TO 175mm
4	250	–
5	300	–
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED		

INDICATION:

SB-01-□□□-□-□
(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:
1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- DIMENSION "E" HAS BEEN CALCULATED BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED WITH RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.
4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
5- WEEP HOLE(ø=6mm) SHALL BE PROVIDED FOR PADS.

SUPPORT DESCRIPTION:	SHEET
SLIDE SHOE (CS-WITHOUT PWHT) 38" ~ 56"	4
SB-01	4

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

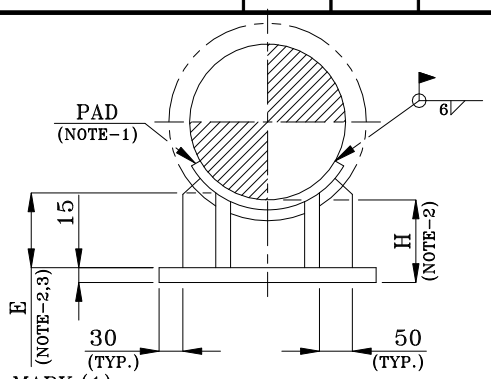
HIRGAN ENERGY

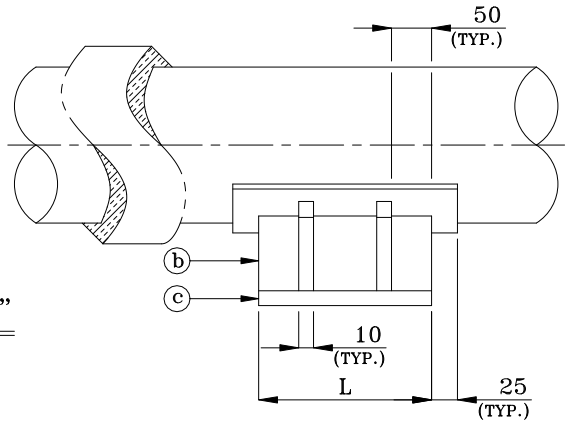
شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

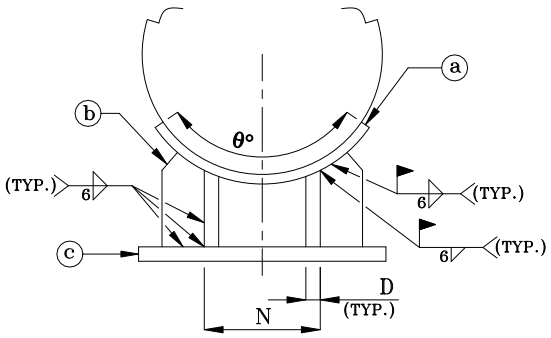




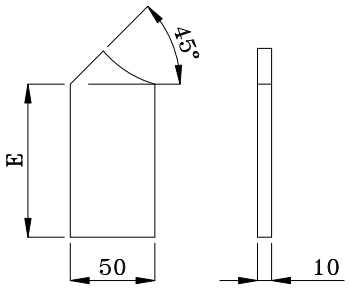
38"~56"

MATERIAL MARK:(1)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL
0°C TO 350°C	MARK	A
	ⓐ NOTE-1	–
	ⓑ	A283 Gr.C
	ⓒ	A283 Gr.C
350°C TO 400°C	MARK	B
	ⓐ NOTE-1	–
	ⓑ	A285 Gr.C
	ⓒ	A285 Gr.C



DETAIL OF PAD



DETAIL OF STIFFENER

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	D	θ°
38	38"	100	160	550	12	120°
		150	210			
		200	260			
40	40"	100	155	550	12	120°
		150	205			
		200	255			
42	42"	100	166	600	15	120°
		150	216			
		200	266			
44	44"	100	162	600	15	120°
		150	212			
		200	262			
46	46"	100	190	700	15	120°
		150	240			
		200	290			
48	48"	100	184	700	15	120°
		150	234			
		200	284			
52	52"	100	208	800	15	120°
		150	258			
		200	308			
56	56"	100	197	800	15	120°
		150	247			
		200	297			

LENGTH MARK:(4)

MARK	L	THERMAL MOVEMENT
4	400	UP TO 75mm
5	500	76mm TO 125mm
6	600	126mm TO 175mm
7	700	176mm TO 230mm
ABOVE 230mm THERMAL MOVEMENT ACTUAL LENGTH SHALL BE CALCULATED		

HEIGHT MARK:(3)

MARK	H	INSULATION THK.
1	100	UP TO 75mm
2	150	76mm TO 125mm
3	200	126mm TO 175mm
4	250	–
5	300	–
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED		

INDICATION:

SB-01-□□□-□-□

(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

3- DIMENSION "E" HAS BEEN CALCULATED BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED WITH RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.

4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

5- WEEP HOLE(ø=6mm) SHALL BE PROVIDED FOR PADS.

SUPPORT DESCRIPTION:	SHEET
SLIDE SHOE (CS-WITHOUT PWHT) 38" ~ 56"	4
SB-01	4

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

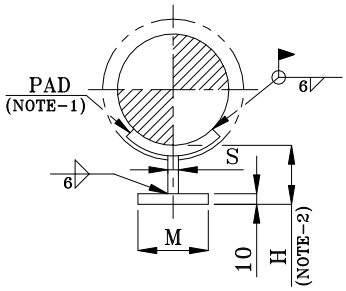
PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

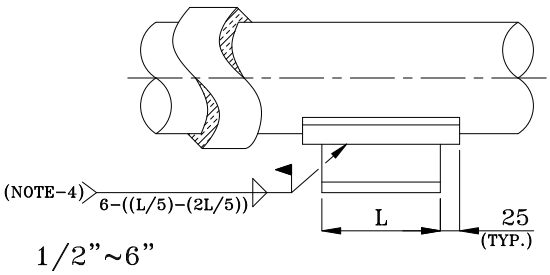
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

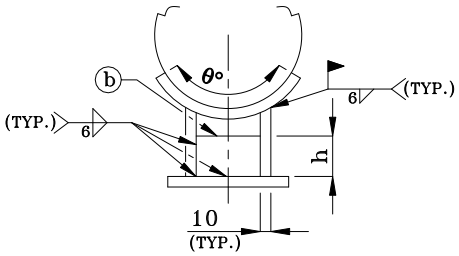
شماره صفحه: 91 از 394



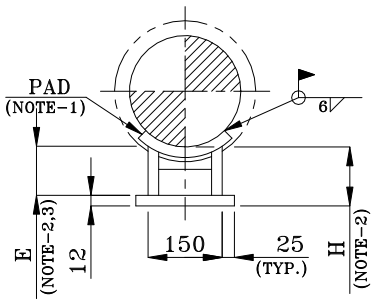
1/2"~2" : M=100, S=8
3"~6" : M=150, S=10

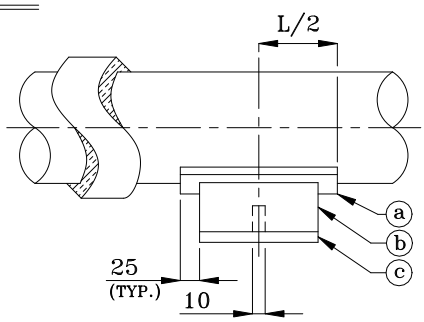


1/2"~6"



DETAIL OF PAD





8"~14"

LENGTH MARK:(4)

MARK	L	THERMAL MOVEMENT
1	100	UP TO 40mm
2	200	41mm TO 75mm
3	300	76mm TO 125mm
4	400	126mm TO 175mm
5	500	176mm TO 230mm
ABOVE 230mm THERMAL MOVEMENT ACTUAL LENGTH SHALL BE CALCULATED		

HEIGHT MARK:(3)

MARK	H	INSULATION THK.	h
1	100	UP TO 75mm	50
2	150	76mm TO 125mm	100
3	200	126mm TO 175mm	150
4	250	–	200
5	300	–	250
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED			

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	θ°
0A	1/2"	–	–	120°
0B	3/4"			
01	1"			
1A	1-1/2"			
02	2"			
03	3"			90°
04	4"			
06	6"			
08	8"	100	107	120°
		150	157	
		200	207	
10	10"	100	100	
		150	150	
		200	200	
12	12"	100	96	90°
		150	146	
		200	196	
14	14"	100	95	
		150	145	
		200	195	

MATERIAL MARK:(1)

DES. TEMP	MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ NOTE-1	–	–	–
	ⓑ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓒ	A283 Gr.C	A283 Gr.C	A283 Gr.C
350°C TO 400°C	MARK	B	E	H
	ⓐ NOTE-1	–	–	–
	ⓑ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓒ	A285 Gr.C	A285 Gr.C	A285 Gr.C
400°C TO 550°C	MARK	C	F	J
	ⓐ NOTE-1	–	–	–
	ⓑ	–	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	–	A285 Gr.C	A285 Gr.C

INDICATION:

SB-02-□□□-□-□
(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- DIMENSION "E" HAS BEEN CALCULATED BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED WITH RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.
4- THIS TYPE OF WELDING IS USED FOR PIPES WITH NPS 1/2"~2", FOR NPS 3"~6" CONTINUOUS WELDING SHALL BE PERFORMED.
5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
6- WEEP HOLE(ø=6mm) SHALL BE PROVIDED FOR PADS.

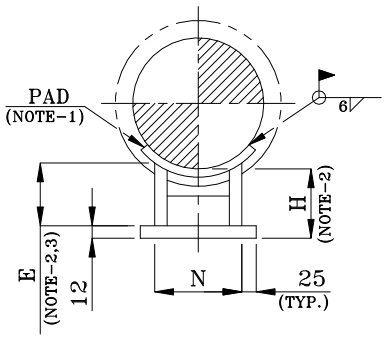
SUPPORT DESCRIPTION:	SHEET
SLIDE SHOE (CS-WITH PWHT, AS, SS) 1/2" ~ 14"	1
SB-02	3

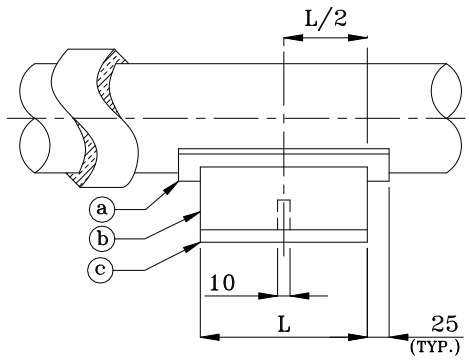
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02





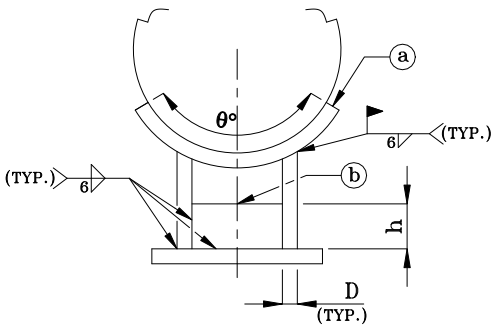
16"~36"

LENGTH MARK:(4)

MARK	L	THERMAL MOVEMENT
3	300	UP TO 75mm
4	400	76mm TO 125mm
5	500	126mm TO 175mm
6	600	176mm TO 230mm
ABOVE 230mm THERMAL MOVEMENT ACTUAL LENGTH SHALL BE CALCULATED		

HEIGHT MARK:(3)

MARK	H	INSULATION THK.	h
1	100	UP TO 75mm	50
2	150	76mm TO 125mm	100
3	200	126mm TO 175mm	150
4	250	–	200
5	300	–	250
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED			



DETAIL OF PAD

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	D	θ°
16	16"	100	120	250	10	105°
		150	170			
		200	220			
18	18"	100	132	300	10	105°
		150	182			
		200	232			
20	20"	100	126	300	10	105°
		150	176			
		200	226			
24	24"	100	132	350	10	90°
		150	182			
		200	232			
26	26"	100	144	400	12	90°
		150	194			
		200	244			
28	28"	100	139	400	12	90°
		150	189			
		200	239			
30	30"	100	150	450	12	90°
		150	200			
		200	250			
32	32"	100	145	450	12	90°
		150	195			
		200	245			
34	34"	100	157	500	12	90°
		150	207			
		200	257			
36	36"	100	152	500	12	90°
		150	202			
		200	252			

MATERIAL MARK:(1)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ NOTE-1	–	–	–
	ⓑ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓒ	A283 Gr.C	A283 Gr.C	A283 Gr.C
350°C TO 400°C	MARK	B	E	H
	ⓐ NOTE-1	–	–	–
	ⓑ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓒ	A285 Gr.C	A285 Gr.C	A285 Gr.C
400°C TO 550°C	MARK	C	F	J
	ⓐ NOTE-1	–	–	–
	ⓑ	–	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	–	A285 Gr.C	A285 Gr.C

INDICATION:

SB-02-□□-□-□
(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

3- DIMENSION "E" HAS BEEN CALCULATED BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED WITH RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.

4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

5- WEEP HOLE(ø=6mm) SHALL BE PROVIDED FOR PADS.

SUPPORT DESCRIPTION:	SHEET
SLIDE SHOE (CS-WITH PWHT, AS, SS) 16" ~ 36"	2
SB-02	3

NISOC

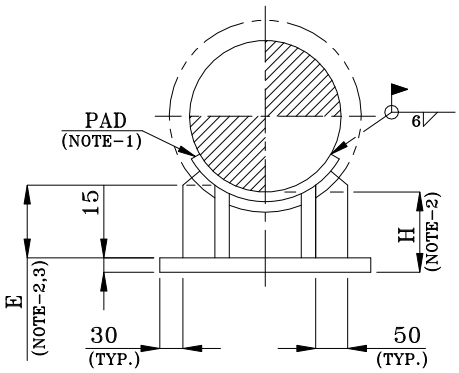
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

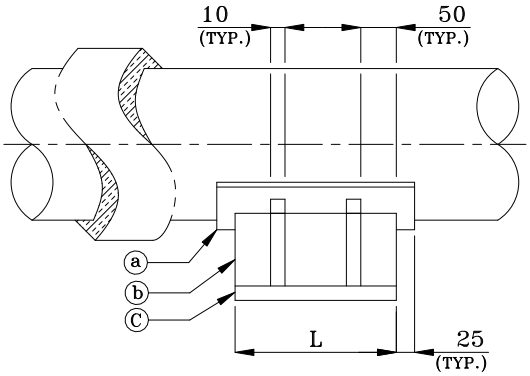
PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

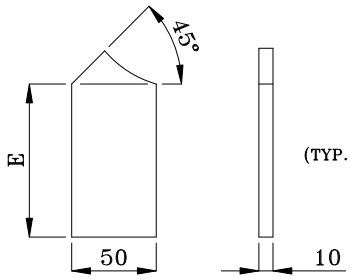
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

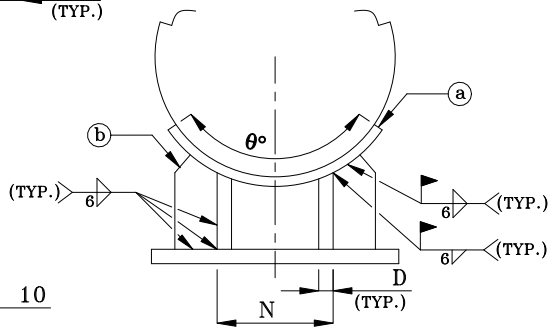




38"~56"



DETAIL OF STIFFENER



DETAIL OF PAD

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	N	D	H	E	θ°
38	38"	550	12	100	160	120°
				150	210	
				200	260	
40	40"	550	12	100	155	120°
				150	205	
				200	255	
42	42"	600	15	100	166	120°
				150	216	
				200	266	
44	44"	600	15	100	162	120°
				150	212	
				200	262	
46	46"	700	15	100	190	120°
				150	240	
				200	290	
48	48"	700	15	100	184	120°
				150	234	
				200	284	
52	52"	800	15	100	208	120°
				150	258	
				200	308	
56	56"	800	15	100	197	120°
				150	247	
				200	297	

LENGTH MARK:(4)

MARK	L	THERMAL MOVEMENT
4	400	UP TO 75mm
5	500	76mm TO 125mm
6	600	126mm TO 175mm
7	700	176mm TO 230mm
ABOVE 230mm THERMAL MOVEMENT ACTUAL LENGTH SHALL BE CALCULATED		

HEIGHT MARK:(3)

MARK	H	INSULATION THK.
1	100	UP TO 75mm
2	150	76mm TO 125mm
3	200	126mm TO 175mm
4	250	–
5	300	–
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED		

MATERIAL MARK:(1)

DES. TEMP / MATERIAL OF RUN PIPE — MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ NOTE-1	–	–	–
	ⓑ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	Ⓒ	A283 Gr.C	A283 Gr.C	A283 Gr.C
350°C TO 400°C	MARK	B	E	H
	ⓐ NOTE-1	–	–	–
	ⓑ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	Ⓒ	A285 Gr.C	A285 Gr.C	A285 Gr.C
400°C TO 550°C	MARK	C	F	J
	ⓐ NOTE-1	–	–	–
	ⓑ	–	A387 Gr.91 Cl.2	A240 Gr.316
	Ⓒ	–	A285 Gr.C	A285 Gr.C

INDICATION:

SB-02-□□-□-□
(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:
1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- DIMENSION "E" HAS BEEN CALCULATED BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED WITH RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.
4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
5- WEEP HOLE(ø=6mm) SHALL BE PROVIDED FOR PADS.

SUPPORT DESCRIPTION:	SHEET
SLIDE SHOE (CS-WITH PWHT, AS, SS) 38" ~ 56"	3
SB-02	3

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

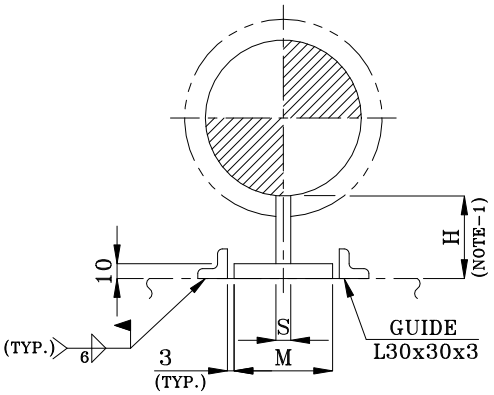
HIRGAN ENERGY

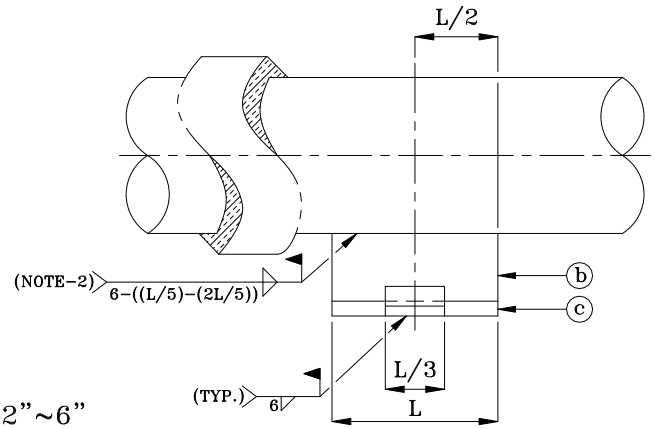
شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

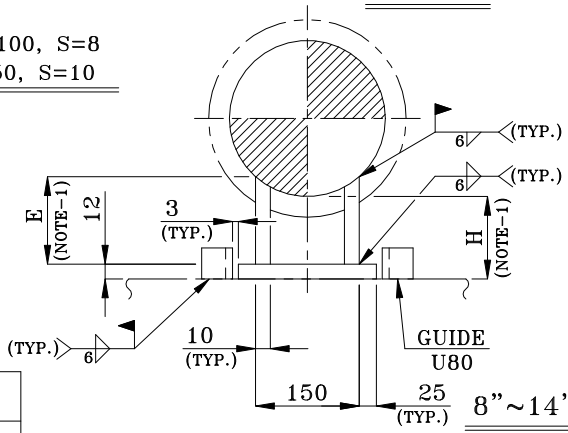


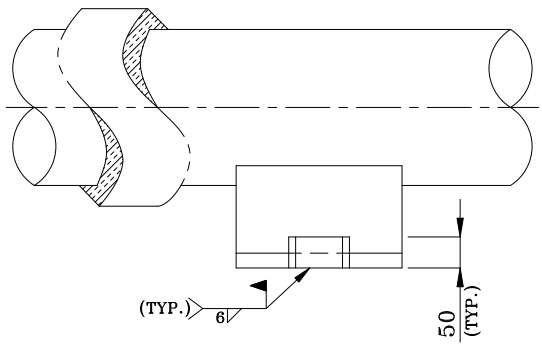


1/2"~2" : M=100, S=8

3"~6" : M=150, S=10

1/2"~6"





8"~14"

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E
0A	1/2"	–	–
0B	3/4"		
01	1"		
1A	1+1/2"		
02	2"		
03	3"		
04	4"		
06	6"		
08	8"	100	118
		150	168
		200	218
10	10"	100	111
		150	161
		200	211
12	12"	100	107
		150	157
		200	207
14	14"	100	105
		150	155
		200	205

LENGTH MARK:(4)

MARK	L	THERMAL MOVEMENT
1	100	UP TO 40mm
2	200	41mm TO 75mm
3	300	76mm TO 125mm
4	400	126mm TO 175mm
5	500	176mm TO 230mm
ABOVE 230mm THERMAL MOVEMENT ACTUAL LENGTH SHALL BE CALCULATED		

HEIGHT MARK:(3)

MARK	H	INSULATION THK.
1	100	UP TO 75mm
2	150	76mm TO 125mm
3	200	126mm TO 175mm
4	250	–
5	300	–
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED		

MATERIAL MARK:(1)

DES. TEMP	MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL
0°C TO 350°C	MARK	A
	ⓐ	–
	ⓑ	A283 Gr.C
	ⓒ	A283 Gr.C
350°C TO 400°C	MARK	B
	ⓐ	–
	ⓑ	A285 Gr.C
	ⓒ	A285 Gr.C

INDICATION:

SB-03-□□-□-□

(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

2- THIS TYPE OF WELDING IS USED FOR PIPES WITH NPS 1/2"~2", FOR NPS 3"~6" CONTINUOUS WELDING SHALL BE PERFORMED.

3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

MATERIAL:

STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
GUIDE SHOE (CS-WITHOUT PWHT) 1/2" ~ 14"	1
SB-03	4

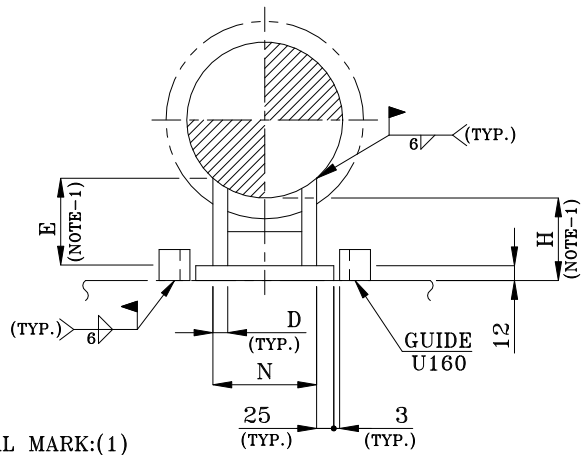
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

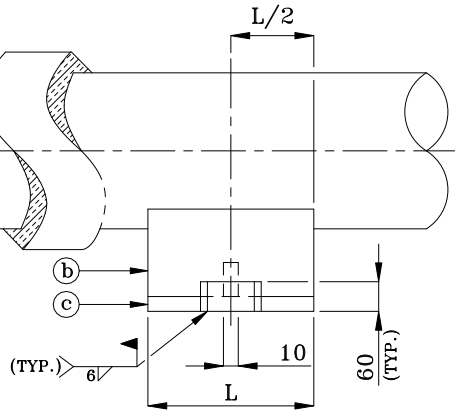
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

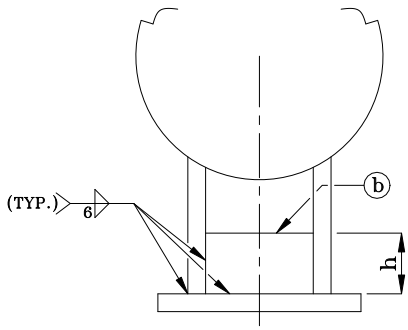
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 95 از 394





16"~28"



DETAIL

MATERIAL MARK:(1)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL
0 °C TO 350°C	MARK	A
	ⓐ	–
	ⓑ	A283 Gr.C
	Ⓒ	A283 Gr.C
350 °C TO 400°C	MARK	B
	ⓐ	–
	ⓑ	A285 Gr.C
	Ⓒ	A285 Gr.C

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	D
16	16"	100	131	250	10
		150	181		
		200	231		
18	18"	100	145	300	10
		150	195		
		200	245		
20	20"	100	137	300	10
		150	187		
		200	237		
24	24"	100	144	350	10
		150	194		
		200	244		
26	26"	100	156	400	12
		150	206		
		200	256		
28	28"	100	150	400	12
		150	200		
		200	250		

LENGTH MARK:(4)

MARK	L	THERMAL MOVEMENT
3	300	UP TO 75mm
4	400	76mm TO 125mm
5	500	126mm TO 175mm
6	600	176mm TO 230mm
ABOVE 230mm THERMAL MOVEMENT ACTUAL LENGTH SHALL BE CALCULATED		

HEIGHT MARK:(3)

MARK	H	INSULATION THK.	h
1	100	UP TO 75mm	50
2	150	76mm TO 125mm	100
3	200	126mm TO 175mm	150
4	250	–	200
5	300	–	250
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED			

INDICATION:

SB-03-□□□-□-□
(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

2- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

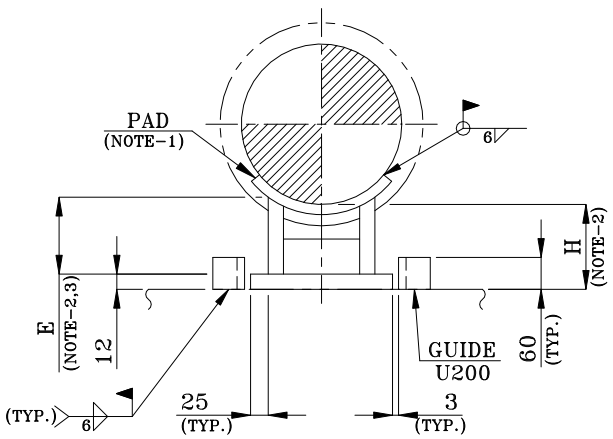
MATERIAL:
STANDARD PROFILE: ASTM A36

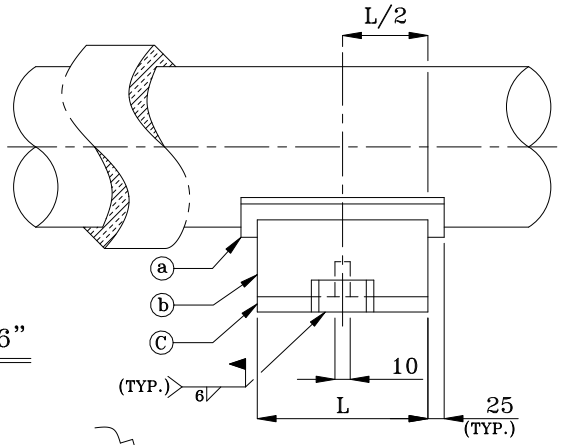
SUPPORT DESCRIPTION:	SHEET
GUIDE SHOE (CS-WITHOUT PWHT) 16" ~ 28"	2
SB-03	4

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

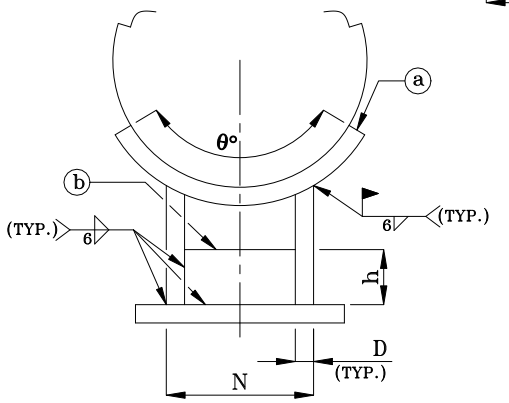
شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 96 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02





30"~36"



DETAIL OF PAD

MATERIAL MARK:(1)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL
0 °C TO 350°C	MARK	A
	ⓐ NOTE-1	–
	ⓑ	A283 Gr.C
	Ⓒ	A283 Gr.C
350 °C TO 400°C	MARK	B
	ⓐ NOTE-1	–
	ⓑ	A285 Gr.C
	Ⓒ	A285 Gr.C

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	D	θ°
30	30"	100	150	450	12	90°
		150	200			
		200	250			
32	32"	100	145	450	12	90°
		150	195			
		200	245			
34	34"	100	157	500	12	90°
		150	207			
		200	257			
36	36"	100	152	500	12	90°
		150	202			
		200	252			

LENGTH MARK:(4)

MARK	L	THERMAL MOVEMENT
3	300	UP TO 75mm
4	400	76mm TO 125mm
5	500	126mm TO 175mm
6	600	176mm TO 230mm
ABOVE 230mm THERMAL MOVEMENT ACTUAL LENGTH SHALL BE CALCULATED		

HEIGHT MARK:(3)

MARK	H	INSULATION THK.	h
1	100	UP TO 75mm	50
2	150	76mm TO 125mm	100
3	200	126mm TO 175mm	150
4	250	–	200
5	300	–	250
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED			

INDICATION:

SB-03-[ ][ ]-[ ]-[ ]
(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

3- DIMENSION "E" HAS BEEN CALCULATED BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED WITH RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.

4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

5- WEEP HOLE(ø=6mm) SHALL BE PROVIDED FOR PADS.

MATERIAL:
STANDARD PROFILE: ASTM A36

GUIDE SHOE SUPPORT DESCRIPTION: (CS-WITHOUT PWHT) 30" ~ 36" SB-03	SHEET 3 4

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

HIRGAN ENERGY

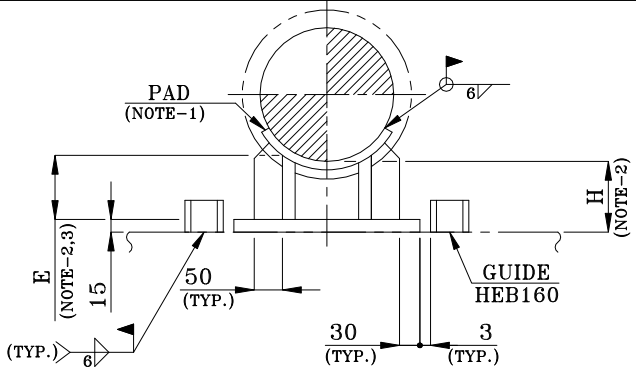
شماره پیمان:

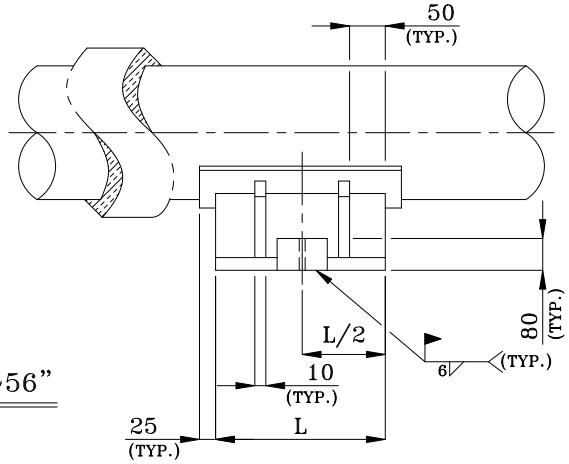
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK

شماره صفحه: 97 از 394

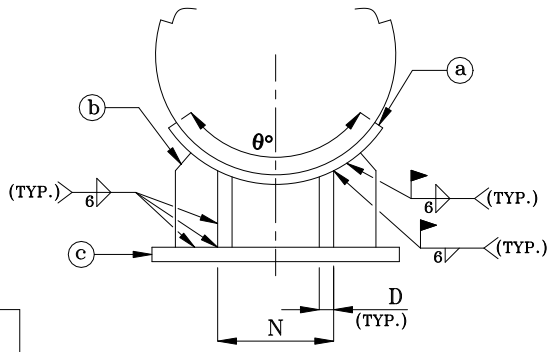




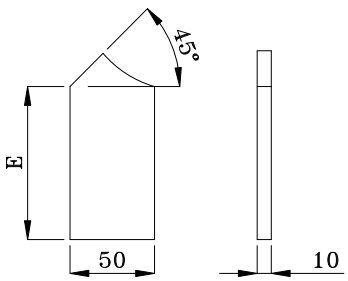
38"~56"

MATERIAL MARK:(1)

DES. TEMP / MATERIAL OF RUN PIPE — MEMBER		CARBON STEEL
0°C TO 350°C	MARK	A
	ⓐ NOTE-1	–
	ⓑ	A283 Gr.C
	Ⓒ	A283 Gr.C
350°C TO 400°C	MARK	B
	ⓐ NOTE-1	–
	ⓑ	A285 Gr.C
	Ⓒ	A285 Gr.C



DETAIL OF PAD



DETAIL OF STIFFENER

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	D	θ°
38	38"	100	160	550	12	120°
		150	210			
		200	260			
40	40"	100	155	550	12	120°
		150	205			
		200	255			
42	42"	100	166	600	15	120°
		150	216			
		200	266			
44	44"	100	162	600	15	120°
		150	212			
		200	262			
46	46"	100	190	700	15	120°
		150	240			
		200	290			
48	48"	100	184	700	15	120°
		150	234			
		200	284			
52	52"	100	208	800	15	120°
		150	258			
		200	308			
56	56"	100	197	800	15	120°
		150	247			
		200	297			

LENGTH MARK:(4)

MARK	L	THERMAL MOVEMENT
4	400	UP TO 75mm
5	500	76mm TO 125mm
6	600	126mm TO 175mm
7	700	176mm TO 230mm
ABOVE 230mm THERMAL MOVEMENT ACTUAL LENGTH SHALL BE CALCULATED		

HEIGHT MARK:(3)

MARK	H	INSULATION THK.
1	100	UP TO 75mm
2	150	76mm TO 125mm
3	200	126mm TO 175mm
4	250	–
5	300	–
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED		

INDICATION:

SB-03-□□□-□-□

(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

3- DIMENSION "E" HAS BEEN CALCULATED BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED WITH RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.

4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

5- WEEP HOLE(ø=6mm) SHALL BE PROVIDED FOR PADS.

MATERIAL:

STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
GUIDE SHOE (CS-WITHOUT PWHT) 38" ~ 56"	4
SB-03	4

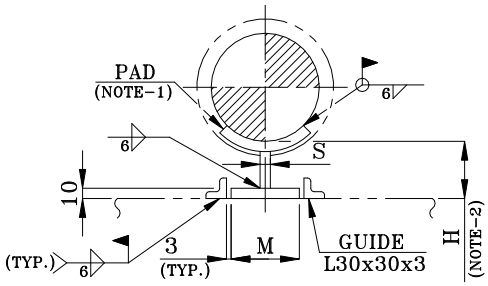
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

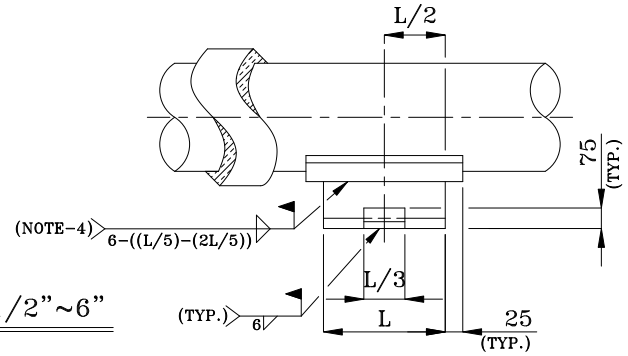
STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK

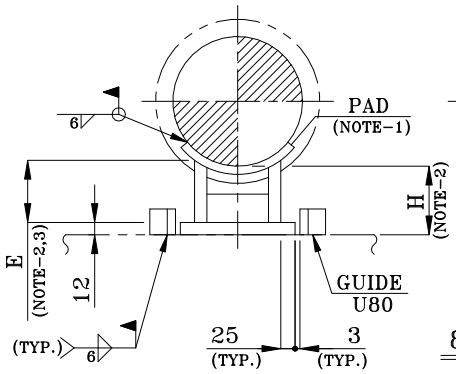
شماره صفحه: 98 از 394

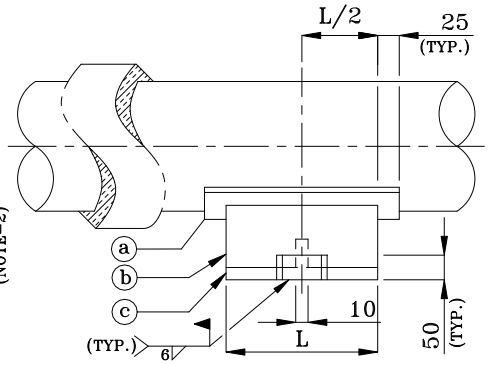


1/2"~2" : M=100, S=8
3"~6" : M=150, S=10

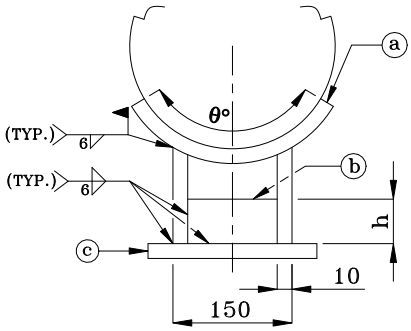


1/2"~6"





8"~14"



DETAIL OF PAD

LENGTH MARK:(4)

MARK	L	THERMAL MOVEMENT
1	100	UP TO 40mm
2	200	41mm TO 75mm
3	300	76mm TO 125mm
4	400	126mm TO 175mm
5	500	176mm TO 230mm
ABOVE 230mm THERMAL MOVEMENT ACTUAL LENGTH SHALL BE CALCULATED		

HEIGHT MARK:(3)

MARK	H	INSULATION THK.	h
1	100	UP TO 75mm	50
2	150	76mm TO 125mm	100
3	200	126mm TO 175mm	150
4	250	–	200
5	300	–	250
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED			

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	θ°
0A	1/2"	–	–	120°
0B	3/4"			
01	1"			
1A	1+1/2"			
02	2"			
03	3"			90°
04	4"			
06	6"			
08	8"	100	107	120°
		150	157	
		200	207	
10	10"	100	100	
		150	150	
		200	200	
12	12"	100	96	90°
		150	146	
		200	196	
14	14"	100	95	
		150	145	
		200	195	

MATERIAL MARK:(1)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ NOTE-1	–	–	–
	ⓑ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓒ	A283 Gr.C	A283 Gr.C	A283 Gr.C
350°C TO 400°C	MARK	B	E	H
	ⓐ NOTE-1	–	–	–
	ⓑ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓒ	A285 Gr.C	A285 Gr.C	A285 Gr.C
400°C TO 550°C	MARK	C	F	J
	ⓐ NOTE-1	–	–	–
	ⓑ	–	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	–	A285 Gr.C	A285 Gr.C

INDICATION:

SB-04-□□□-□-□
(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- DIMENSION "E" HAS BEEN CALCULATED BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED WITH RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.
4- THIS TYPE OF WELDING IS USED FOR PIPES WITH NPS 1/2"~2", FOR NPS 3"~6" CONTINUOUS WELDING SHALL BE PERFORMED. 5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
6- WEEP HOLE(ø=6mm) SHALL BE PROVIDED FOR PADS.
MATERIAL: STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
GUIDE SHOE (CS-WITH PWHT, AS, SS) 1/2" ~ 14"	1
SB-04	3

NISOC

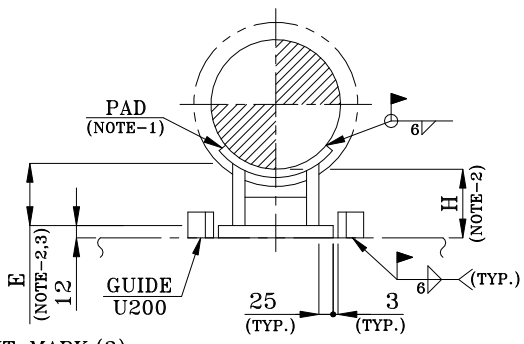
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

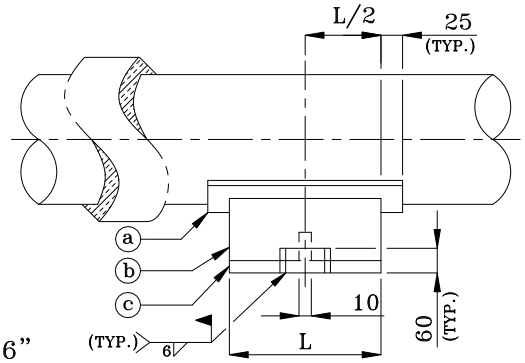
PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

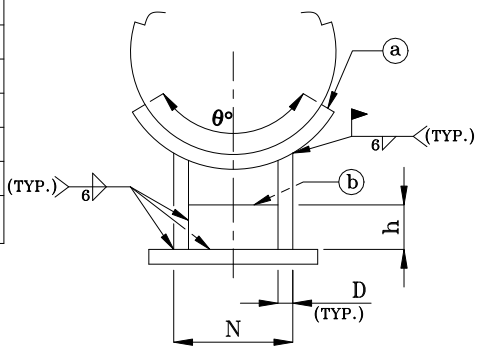




HEIGHT MARK:(3)

MARK	H	INSULATION THK.	h
1	100	UP TO 75mm	50
2	150	76mm TO 125mm	100
3	200	126mm TO 175mm	150
4	250	–	200
5	300	–	250
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED			

16"~36"



DETAIL OF PAD

LENGTH MARK:(4)

MARK	L	THERMAL MOVEMENT
3	300	UP TO 75mm
4	400	76mm TO 125mm
5	500	126mm TO 175mm
6	600	176mm TO 230mm
ABOVE 230mm THERMAL MOVEMENT ACTUAL LENGTH SHALL BE CALCULATED		

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	D	θ°
16	16"	100	120	250	10	105°
		150	170			
		200	220			
18	18"	100	132	300	10	105°
		150	182			
		200	232			
20	20"	100	126	300	10	105°
		150	176			
		200	226			
24	24"	100	132	350	10	90°
		150	182			
		200	232			
26	26"	100	144	400	12	90°
		150	194			
		200	244			
28	28"	100	139	400	12	90°
		150	189			
		200	239			
30	30"	100	150	450	12	90°
		150	200			
		200	250			
32	32"	100	145	450	12	90°
		150	195			
		200	245			
34	34"	100	157	500	12	90°
		150	207			
		200	257			
36	36"	100	152	500	12	90°
		150	202			
		200	252			

MATERIAL MARK:(1)

DES. TEMP	MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0 °C TO 350°C	MARK	A	D	G
	ⓐ NOTE-1	–	–	–
	ⓑ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓒ	A283 Gr.C	A283 Gr.C	A283 Gr.C
350°C TO 400°C	MARK	B	E	H
	ⓐ NOTE-1	–	–	–
	ⓑ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓒ	A285 Gr.C	A285 Gr.C	A285 Gr.C
400°C TO 550°C	MARK	C	F	J
	ⓐ NOTE-1	–	–	–
	ⓑ	–	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	–	A285 Gr.C	A285 Gr.C

INDICATION:

SB-04-□□□-□-□
(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

3- DIMENSION "E" HAS BEEN CALCULATED BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED WITH RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.

4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

5- WEEP HOLE(ø=6mm) SHALL BE PROVIDED FOR PADS.

MATERIAL: STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:
GUIDE SHOE
(CS-WITH PWHT, AS, SS)
16" ~ 36"
SB-04

SHEET 2 / 3

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

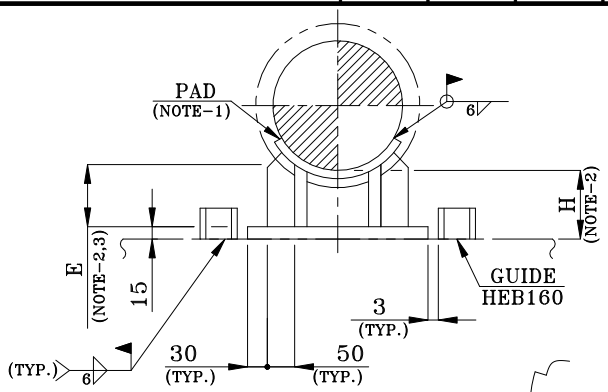
PEDCO

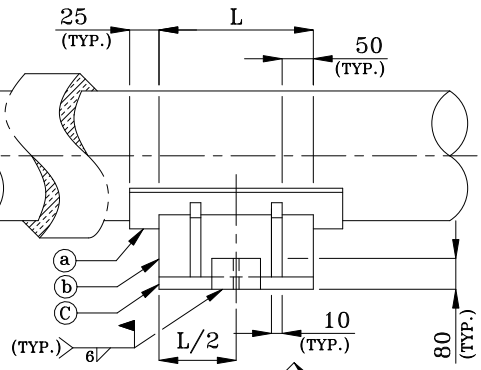
HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



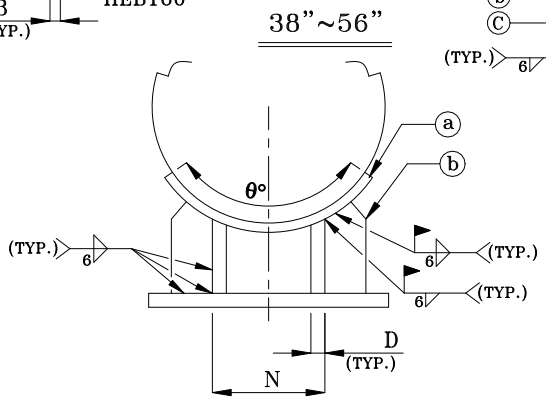


HEIGHT MARK:(3)

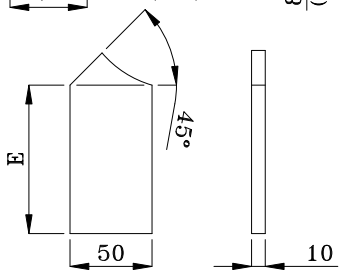
MARK	H	INSULATION THK.
1	100	UP TO 75mm
2	150	76mm TO 125mm
3	200	126mm TO 175mm
4	250	–
5	300	–
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED		

LENGTH MARK:(4)

MARK	L	THERMAL MOVEMENT
4	400	UP TO 75mm
5	500	76mm TO 125mm
6	600	126mm TO 175mm
7	700	176mm TO 230mm
ABOVE 230mm THERMAL MOVEMENT ACTUAL LENGTH SHALL BE CALCULATED		



DETAIL OF PAD



DETAIL OF STIFFENER

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	N	D	H	E	θ°
38	38"	550	12	100	160	120°
				150	210	
				200	260	
40	40"	550	12	100	155	120°
				150	205	
				200	255	
42	42"	600	15	100	166	120°
				150	216	
				200	266	
44	44"	600	15	100	162	120°
				150	212	
				200	262	
46	46"	700	15	100	190	120°
				150	240	
				200	290	
48	48"	700	15	100	184	120°
				150	234	
				200	284	
52	52"	800	15	100	208	120°
				150	258	
				200	308	
56	56"	800	15	100	197	120°
				150	247	
				200	297	

MATERIAL MARK:(1)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0 °C TO 350°C	MARK	A	D	G
	ⓐ NOTE-1	–	–	–
	ⓑ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	Ⓒ	A283 Gr.C	A283 Gr.C	A283 Gr.C
350°C TO 400°C	MARK	B	E	H
	ⓐ NOTE-1	–	–	–
	ⓑ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	Ⓒ	A285 Gr.C	A285 Gr.C	A285 Gr.C
400°C TO 550°C	MARK	C	F	J
	ⓐ NOTE-1	–	–	–
	ⓑ	–	A387 Gr.91 Cl.2	A240 Gr.316
	Ⓒ	–	A285 Gr.C	A285 Gr.C

INDICATION:

SB-04-□□□-□-□
(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

3- DIMENSION "E" HAS BEEN CALCULATED BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED WITH RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.

4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

5- WEEP HOLE(ø=6mm) SHALL BE PROVIDED FOR PADS.

MATERIAL: STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
GUIDE SHOE (CS-WITH PWHT, AS, SS) 38" ~ 56"	3
SB-04	3

NISOC

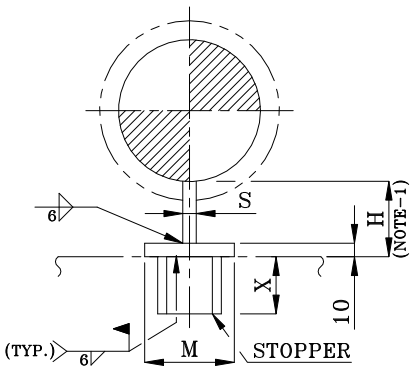
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO
HIRGAN ENERGY

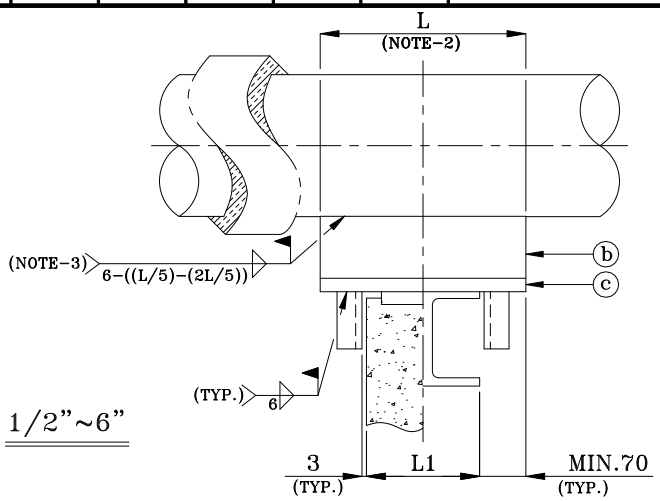
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

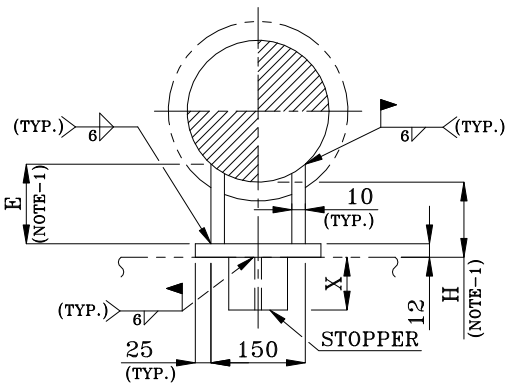
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



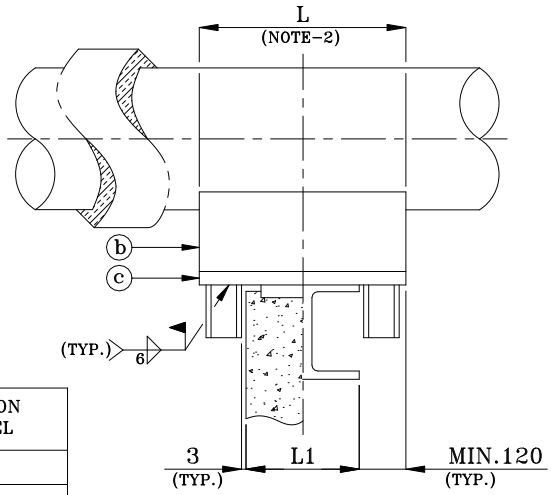
1/2"~2" : M=100, S=8
3"~6" : M=150, S=10



1/2"~6"



8"~14"



NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	STOPPER
0A	1/2"	–	–	U80
0B	3/4"			
01	1"			
1A	1+1/2"			
02	2"			
03	3"			
04	4"			
06	6"			
08	8"	100	118	HEB100
		150	168	
		200	218	
10	10"	100	111	
		150	161	
		200	211	
12	12"	100	107	
		150	157	
		200	207	
14	14"	100	105	
		150	155	
		200	205	

MATERIAL MARK:(1)

DES. TEMP	MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL
0°C TO 350°C	MARK	A
	ⓐ	–
	ⓑ	A283 Gr.C
	ⓒ	A283 Gr.C
350°C TO 400°C	MARK	B
	ⓐ	–
	ⓑ	A285 Gr.C
	ⓒ	A285 Gr.C

STOPPER MARK:(5)

MARK	X
1	100
2	200
3	300
4	400
5	500

HEIGHT MARK:(3)

MARK	H	INSULATION THK.
1	100	UP TO 75mm
2	150	76mm TO 125mm
3	200	126mm TO 175mm
4	250	–
5	300	–

ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED

LENGTH MARK:(4)

MARK	L
3	300
4	400
5	500
6	600
7	700

INDICATION:

SB-05-[ ][ ][ ]-[ ]-[ ][ ]
(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK
5-STOPPER LENGTH MARK

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
2- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM "L1".
3- THIS TYPE OF WELDING IS USED FOR PIPES WITH NPS 1/2"~2", FOR NPS 3"~6" CONTINUOUS WELDING SHALL BE PERFORMED.
4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:
STOPPER SHOE
(CS-WITHOUT PWHT)
1/2" ~ 14"
SB-05

SHEET 1 4

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

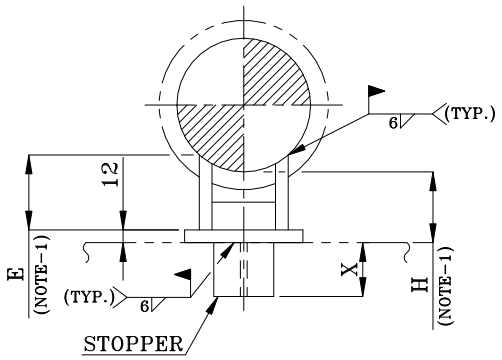
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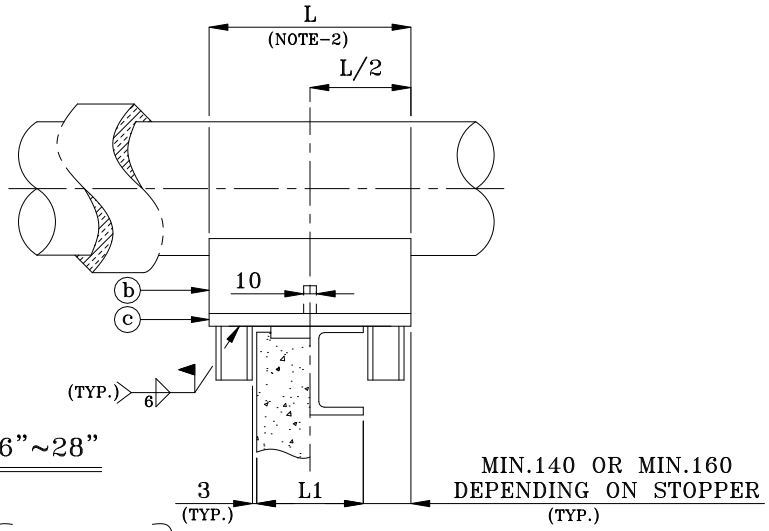
HIRGAN ENERGY

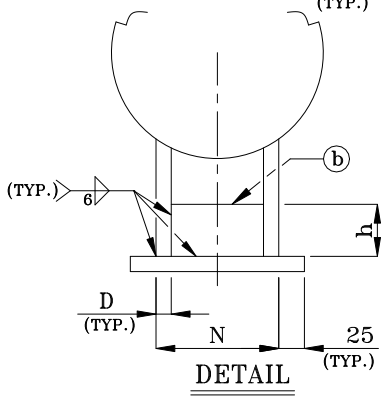
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02







MATERIAL MARK:(1)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL
0°C TO 350°C	MARK	A
	ⓐ	–
	ⓑ	A283 Gr.C
	Ⓒ	A283 Gr.C
350°C TO 400°C	MARK	B
	ⓐ	–
	ⓑ	A285 Gr.C
	Ⓒ	A285 Gr.C

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	D	STOPPER
16	16"	100	131	250	10	HEB120
		150	181			
		200	231			
18	18"	100	145	300	10	
		150	195			
		200	245			
20	20"	100	137	300	10	
		150	187			
		200	237			
24	24"	100	144	350	10	HEB140
		150	194			
		200	244			
26	26"	100	156	400	12	
		150	206			
		200	256			
28	28"	100	150	400	12	
		150	200			
		200	250			

STOPPER MARK:(5)

MARK	X
1	100
2	200
3	300
4	400
5	500

LENGTH MARK:(4)

MARK	L
4	400
5	500
6	600
7	700
8	800

HEIGHT MARK:(3)

MARK	H	INSULATION THK.	h
1	100	UP TO 75mm	50
2	150	76mm TO 125mm	100
3	200	126mm TO 175mm	150
4	250	–	200
5	300	–	250
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED			

INDICATION:

SB-05-□□□-□-□□
(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK
5-STOPPER LENGTH MARK

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

2- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM "L1".

3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

MATERIAL:
STANDARD PROFILE: ASTM A36

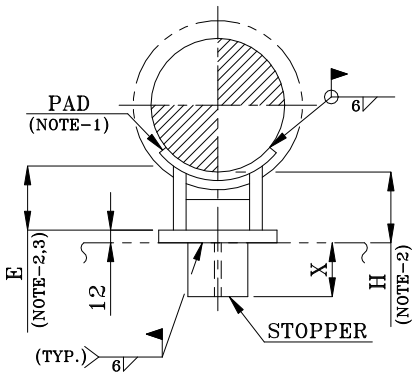
SUPPORT DESCRIPTION:	SHEET
STOPPER SHOE (CS-WITHOUT PWHT) 16" ~ 28"	2
SB-05	4

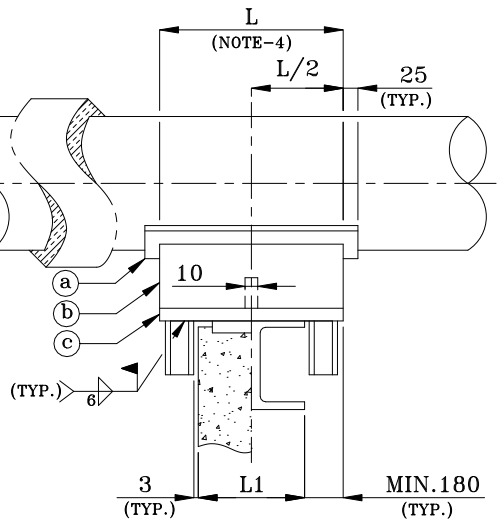
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
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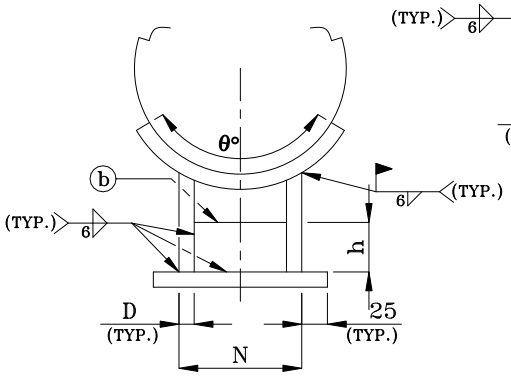
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02





30"~36"



DETAIL OF PAD

MATERIAL MARK:(1)

DES. TEMP / MATERIAL OF RUN PIPE — MEMBER		CARBON STEEL
0°C TO 350°C	MARK	A
	ⓐ NOTE-1	–
	ⓑ	A283 Gr.C
	Ⓒ	A283 Gr.C
350°C TO 400°C	MARK	B
	ⓐ NOTE-1	–
	ⓑ	A285 Gr.C
	Ⓒ	A285 Gr.C

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	D	θ°	STOPPER
30	30"	100	150	450	12	90°	HEB160
		150	200				
		200	250				
32	32"	100	145	450	12	90°	
		150	195				
		200	245				
34	34"	100	157	500	12	90°	
		150	207				
		200	257				
36	36"	100	152	500	12	90°	
		150	202				
		200	252				

STOPPER MARK:(5)

MARK	X
2	200
3	300
4	400
5	500
6	600

HEIGHT MARK:(3)

MARK	H	INSULATION THK.	h
1	100	UP TO 75mm	50
2	150	76mm TO 125mm	100
3	200	126mm TO 175mm	150
4	250	–	200
5	300	–	250
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED			

LENGTH MARK:(4)

MARK	L
5	500
6	600
7	700
8	800

INDICATION:

SB-05-□□□-□-□□
(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK
5-STOPPER LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- DIMENSION "E" HAS BEEN CALCULATED BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED IN RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.
4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM "L1".
5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
6- WEEP HOLE(ø=6mm) SHALL BE PROVIDED FOR PADS.

MATERIAL: STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
STOPPER SHOE (CS-WITHOUT PWHT) 30" ~ 36"	3
SB-05	4

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

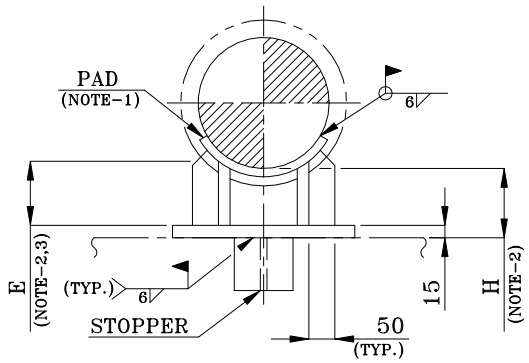
HIRGAN ENERGY

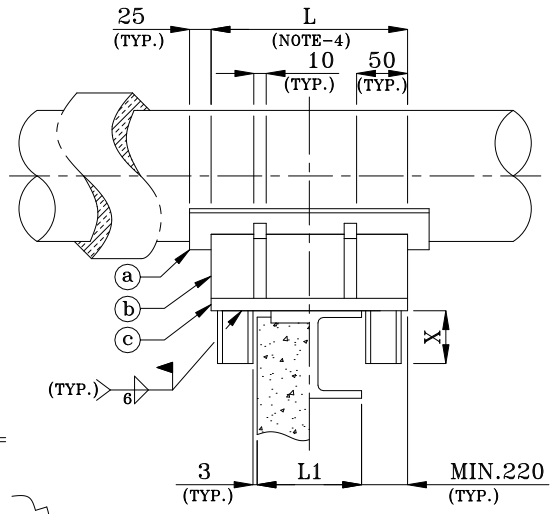
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 104 از 394

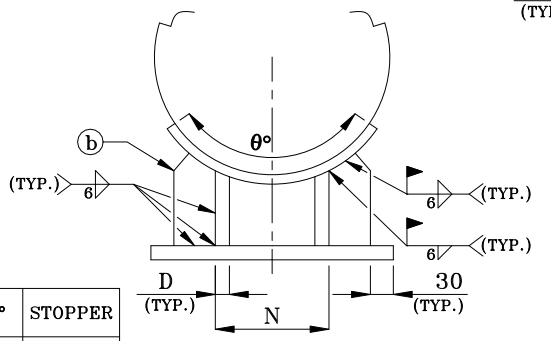




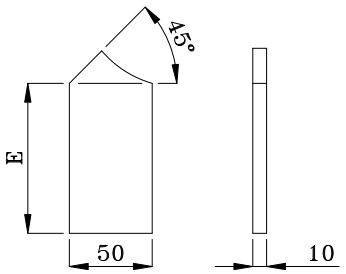
MATERIAL MARK:(1)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL
0 °C TO 350°C	MARK	A
	ⓐ NOTE-1	–
	ⓑ	A283 Gr.C
	ⓒ	A283 Gr.C
350 °C TO 400°C	MARK	B
	ⓐ NOTE-1	–
	ⓑ	A285 Gr.C
	ⓒ	A285 Gr.C

38"~56"



DETAIL OF PAD



DETAIL OF STIFFENER

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	D	θ°	STOPPER
38	38"	100	160	550	12	120°	HEB200
		150	210				
		200	260				
40	40"	100	155	550	12	120°	
		150	205				
		200	255				
42	42"	100	166	600	15	120°	
		150	216				
		200	266				
44	44"	100	162	600	15	120°	
		150	212				
		200	262				
46	46"	100	190	700	15	120°	
		150	240				
		200	290				
48	48"	100	184	700	15	120°	
		150	234				
		200	284				
52	52"	100	208	800	15	120°	
		150	258				
		200	308				
56	56"	100	197	800	15	120°	
		150	247				
		200	297				

LENGTH MARK:(4)

MARK	L
5	600
6	700
7	800
8	900
9	1000

STOPPER MARK:(5)

MARK	X
2	200
3	300
4	400
5	500
6	600

HEIGHT MARK:(3)

MARK	H	INSULATION THK.
1	100	UP TO 75mm
2	150	76mm TO 125mm
3	200	126mm TO 175mm
4	250	–
5	300	–
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED		

INDICATION:

SB-05-□□□-□-□□

(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK
5-STOPPER LENGTH MARK

NOTE:
1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- DIMENSION "E" HAS BEEN CALCULATED BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED IN RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.
4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM "L1".
5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
6- WEEP HOLE(ø=6mm) SHALL BE PROVIDED FOR PADS.
MATERIAL: STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
STOPPER SHOE (CS-WITHOUT PWHT) 38" ~ 56"	4
SB-05	4

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

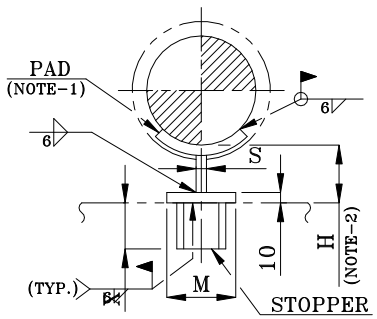
PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

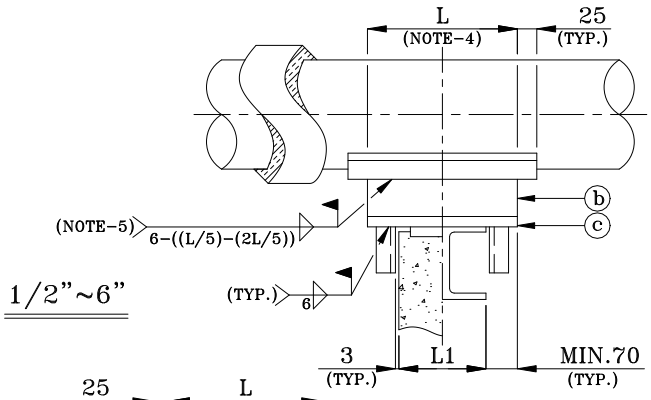
STANDARD PIPE SUPPORT DRAWINGS

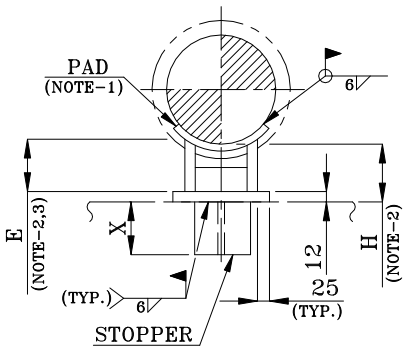
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

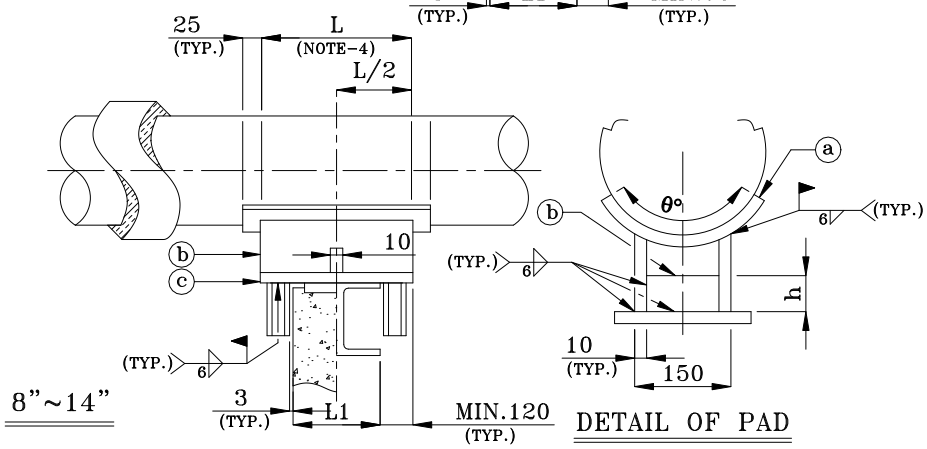
شماره صفحه: 105 از 394



1/2"~2" : M=100, S=8
3"~6" : M=150, S=10







MATERIAL MARK:(1)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ NOTE-1	–	–	–
	ⓑ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓒ	A283 Gr.C	A283 Gr.C	A283 Gr.C
350°C TO 400°C	MARK	B	E	H
	ⓐ NOTE-1	–	–	–
	ⓑ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓒ	A285 Gr.C	A285 Gr.C	A285 Gr.C
400°C TO 550°C	MARK	C	F	J
	ⓐ NOTE-1	–	–	–
	ⓑ	–	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	–	A285 Gr.C	A285 Gr.C

HEIGHT MARK:(3)

MARK	H	INSULATION THK.	h
1	100	UP TO 75mm	50
2	150	76mm TO 125mm	100
3	200	126mm TO 175mm	150
4	250	–	200
5	300	–	250

ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	θ°	STOPPER
0A	1/2"	–	–	120°	U80
0B	3/4"				
01	1"				
1A	1+1/2"				
02	2"				
03	3"			90°	
04	4"				
06	6"				
08	8"	100	107	120°	HEB100
		150	157		
		200	207		
10	10"	100	100		
		150	150		
		200	200		
12	12"	100	96	90°	
		150	146		
		200	196		
14	14"	100	95		
		150	145		
		200	195		

LENGTH MARK:(4)

MARK	L
3	300
4	400
5	500
6	600
7	700

STOPPER MARK:(5)

MARK	X
1	100
2	200
3	300
4	400
5	500

INDICATION:

SB-06-□□□-□-□□

(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK
5-STOPPER LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT. 2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

3- DIMENSION "E" HAS BEEN CALCULATED BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED IN RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.

4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM "L1".

5- THIS TYPE OF WELDING IS USED FOR PIPES WITH NPS 1/2"~2", FOR NPS 3"~6" CONTINUOUS WELDING SHALL BE PERFORMED. 6- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

7- WEEP HOLE(ø=6mm) SHALL BE PROVIDED FOR PADS.

MATERIAL: STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:
STOPPER SHOE
(CS-WITH PWHT, AS, SS)
1/2" ~ 14"
SB-06

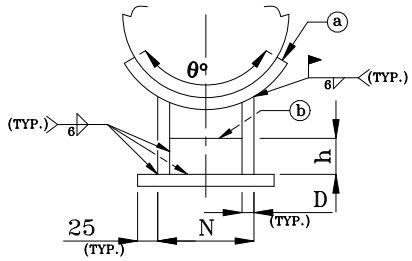
SHEET
1
3

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

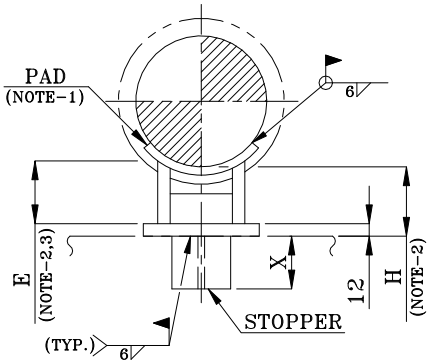
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 106 از 394

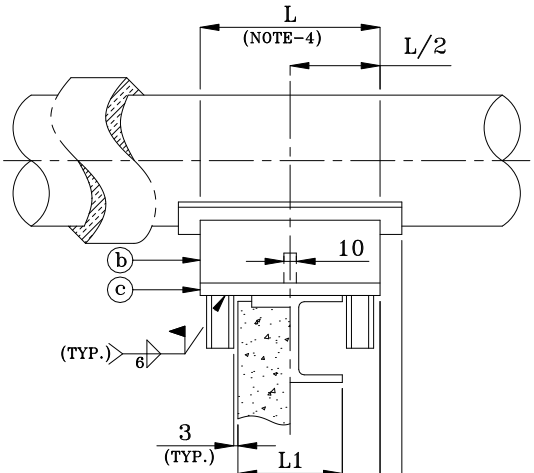
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

053-073-9184



DETAIL OF PAD





16"~36"

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	D	θ°	STOPPER
16	16"	100	120	250	10	105°	HEB120
		150	170				
		200	220				
18	18"	100	132	300	10	105°	
		150	182				
		200	232				
20	20"	100	126	300	10	105°	
		150	176				
		200	226				
24	24"	100	132	350	10	90°	HEB140
		150	182				
		200	232				
26	26"	100	144	400	12	90°	
		150	194				
		200	244				
28	28"	100	139	400	12	90°	
		150	189				
		200	239				
30	30"	100	150	450	12	90°	HEB160
		150	200				
		200	250				
32	32"	100	145	450	12	90°	
		150	195				
		200	245				
34	34"	100	157	500	12	90°	
		150	207				
		200	257				
36	36"	100	152	500	12	90°	
		150	202				
		200	252				

MATERIAL MARK:(1)

DES. TEMP	MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ NOTE-1	–	–	–
	ⓑ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓒ	A283 Gr.C	A283 Gr.C	A283 Gr.C
350°C TO 400°C	MARK	B	E	H
	ⓐ NOTE-1	–	–	–
	ⓑ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓒ	A285 Gr.C	A285 Gr.C	A285 Gr.C
400°C TO 550°C	MARK	C	F	J
	ⓐ NOTE-1	–	–	–
	ⓑ	–	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	–	A285 Gr.C	A285 Gr.C

LENGTH MARK:(4)

MARK	L
4	400
5	500
6	600
7	700
8	800

STOPPER MARK:(5)

MARK	X
1	100
2	200
3	300
4	400
5	500
6	600

HEIGHT MARK:(3)

MARK	H	INSULATION THK.	h
1	100	UP TO 75mm	50
2	150	76mm TO 125mm	100
3	200	126mm TO 175mm	150
4	250	–	200
5	300	–	250

ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED

INDICATION:

SB-06-[ ][ ][ ]-[ ]-[ ][ ]
(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK
5-STOPPER LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

3- DIMENSION "E" HAS BEEN CALCULATED BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED IN RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.

4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM "L1".

5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

6- WEEP HOLE(ø=6mm) SHALL BE PROVIDED FOR PADS.

MATERIAL: STANDARD PROFILE: ASTM A36

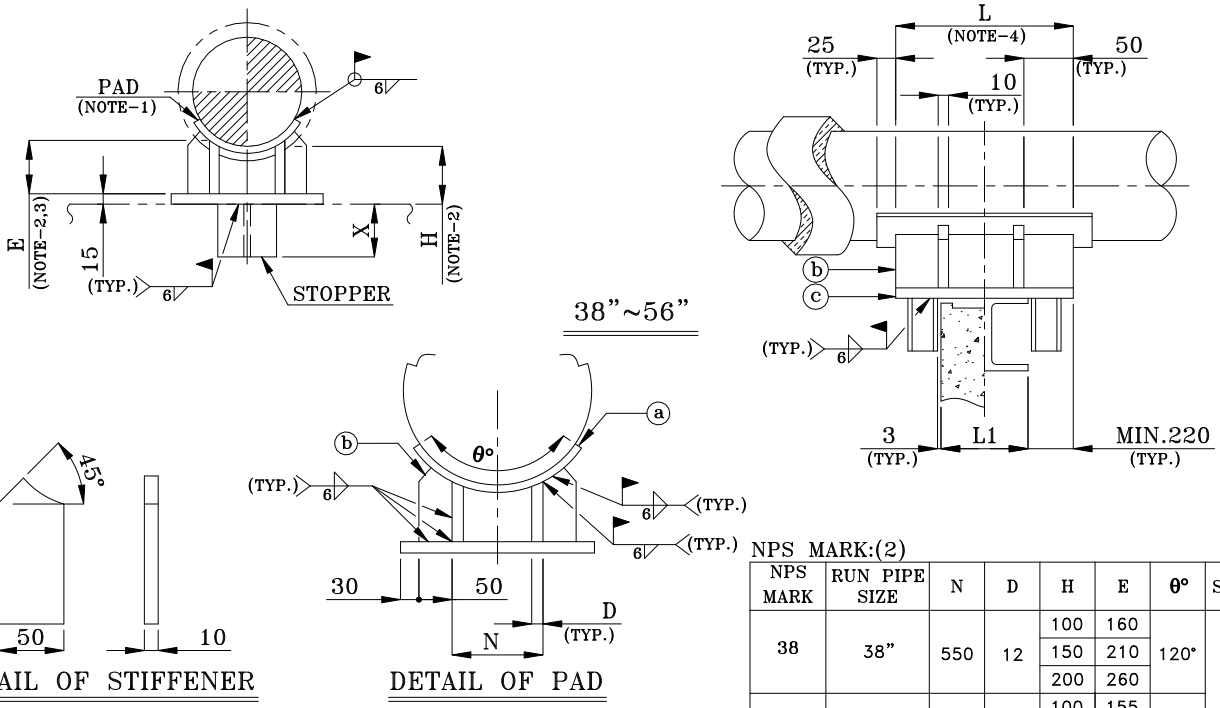
SUPPORT DESCRIPTION:	SHEET
STOPPER SHOE (CS-WITH PWHT, AS, SS) 16" ~ 36"	2
SB-06	3

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 107 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

053-073-9184



NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	N	D	H	E	θ°	STOPPER
38	38"	550	12	100	160	120°	HEB200
				150	210		
				200	260		
40	40"	550	12	100	155	120°	
				150	205		
				200	255		
42	42"	600	15	100	166	120°	
				150	216		
				200	266		
44	44"	600	15	100	162	120°	
				150	212		
				200	262		
46	46"	700	15	100	190	120°	
				150	240		
				200	290		
48	48"	700	15	100	184	120°	
				150	234		
				200	284		
52	52"	800	15	100	208	120°	
				150	258		
				200	308		
56	56"	800	15	100	197	120°	
				150	247		
				200	297		

STOPPER MARK:(5)

MARK	X
2	200
3	300
4	400
5	500
6	600

LENGTH MARK:(4)

MARK	L
5	600
6	700
7	800
8	900
9	1000

HEIGHT MARK:(3)

MARK	H	INSULATION THK.
1	100	UP TO 75mm
2	150	76mm TO 125mm
3	200	126mm TO 175mm
4	250	–
5	300	–

ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED

MATERIAL MARK:(1)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ NOTE-1	–	–	–
	ⓑ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓒ	A283 Gr.C	A283 Gr.C	A283 Gr.C
350°C TO 400°C	MARK	B	E	H
	ⓐ NOTE-1	–	–	–
	ⓑ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓒ	A285 Gr.C	A285 Gr.C	A285 Gr.C
400°C TO 550°C	MARK	C	F	J
	ⓐ NOTE-1	–	–	–
	ⓑ	–	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	–	A285 Gr.C	A285 Gr.C

INDICATION:

SB-06-□□□-□-□□

(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK
5-STOPPER LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

3- DIMENSION "E" HAS BEEN CALCULATED BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED IN RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.

4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM "L1".

5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

6- WEEP HOLE(ø=6mm) SHALL BE PROVIDED FOR PADS.

MATERIAL: STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
STOPPER SHOE (CS-WITH PWHT, AS, SS) 38" ~ 56"	3
SB-06	3

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

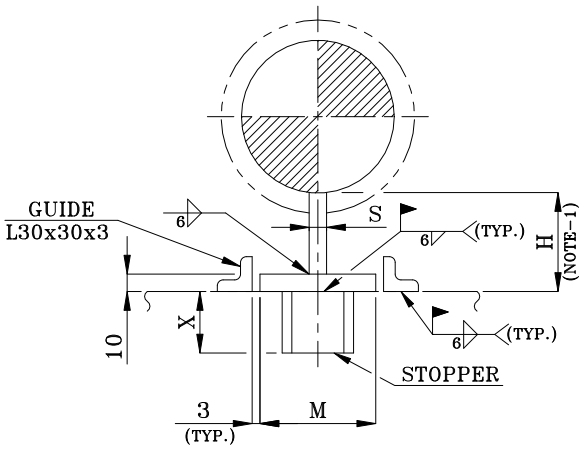
PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

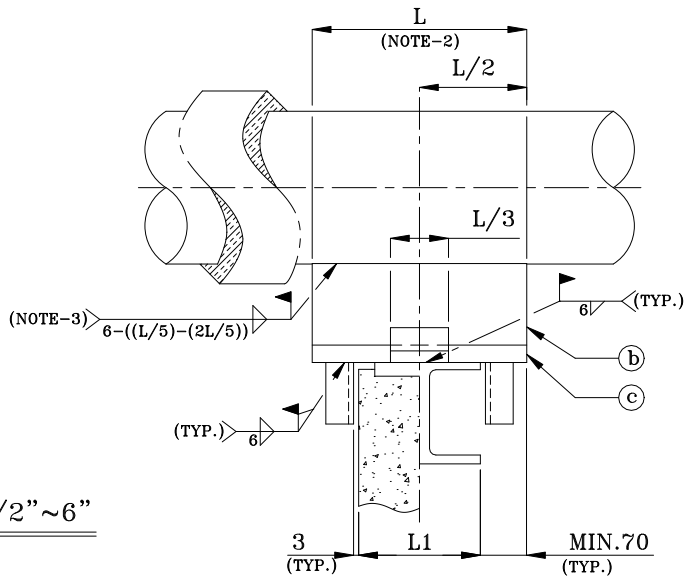
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

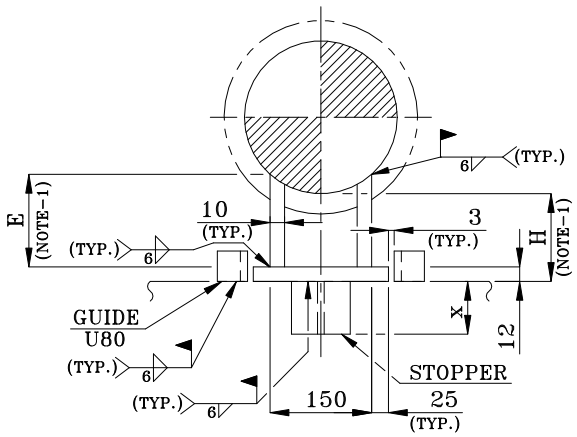
شماره صفحه: 108 از 394

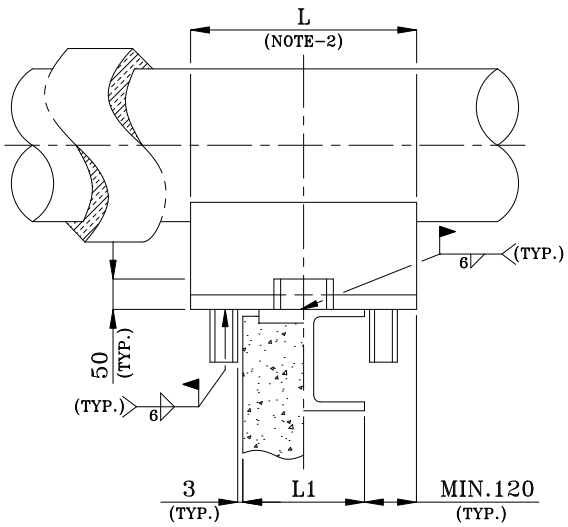


1/2"~2" : M=100, S=8
3"~6" : M=150, S=10



1/2"~6"





8"~14"

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	STOPPER
0A	1/2"	–	–	U80
0B	3/4"			
01	1"			
1A	1+1/2"			
02	2"			
03	3"			
04	4"			
06	6"			
08	8"	100	118	HEB100
		150	168	
		200	218	
10	10"	100	111	
		150	161	
		200	211	
12	12"	100	107	
		150	157	
		200	207	
14	14"	100	105	
		150	155	
		200	205	

MATERIAL MARK:(1)

DES. TEMP	MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL
0°C TO 350°C	MARK	A
	ⓐ	–
	ⓑ	A283 Gr.C
	ⓒ	A283 Gr.C
350°C TO 400°C	MARK	B
	ⓐ	–
	ⓑ	A285 Gr.C
	ⓒ	A285 Gr.C

LENGTH MARK:(4)

MARK	L
3	300
4	400
5	500
6	600
7	700

STOPPER MARK:(5)

MARK	X
1	100
2	200
3	300
4	400
5	500

HEIGHT MARK:(3)

MARK	H	INSULATION THK.
1	100	UP TO 75mm
2	150	76mm TO 125mm
3	200	126mm TO 175mm
4	250	–
5	300	–
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED		

INDICATION:

SB-07-□□□-□-□□
(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK
5-STOPPER LENGTH MARK

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
2- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM "L1".
3- THIS TYPE OF WELDING IS USED FOR PIPES WITH NPS 1/2"~2", FOR NPS 3"~6" CONTINUOUS WELDING SHALL BE PERFORMED.
4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:
SEMI ANCHOR SHOE
(CS-WITHOUT PWHT)
1/2" ~ 14"
SB-07

SHEET 1 4

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

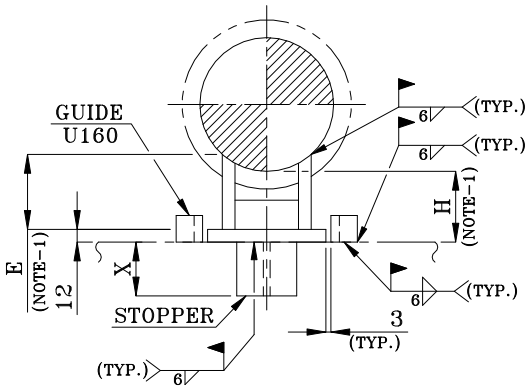
HIRGAN ENERGY

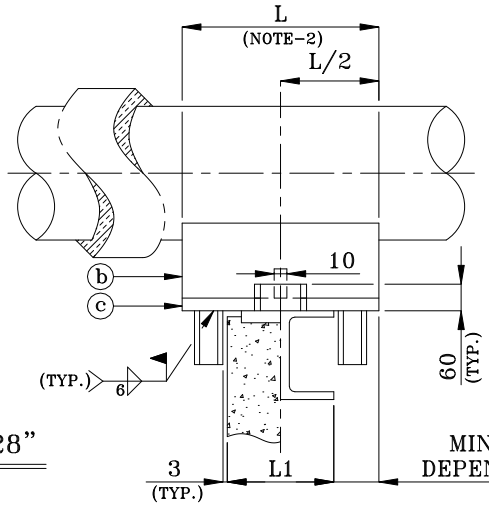
شماره پیمان:

053-073-9184

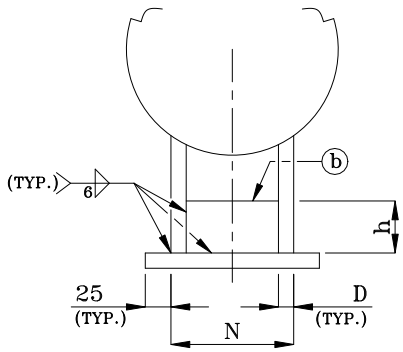
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02





16"~28"



DETAIL

MATERIAL MARK:(1)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL
0°C TO 350°C	MARK	A
	ⓐ	–
	ⓑ	A283 Gr.C
	Ⓒ	A283 Gr.C
350°C TO 400°C	MARK	B
	ⓐ	–
	ⓑ	A285 Gr.C
	Ⓒ	A285 Gr.C

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	D	STOPPER
16	16"	100	131	250	10	HEB120
		150	181			
		200	231			
18	18"	100	145	300	10	
		150	195			
		200	245			
20	20"	100	137	300	10	
		150	187			
		200	237			
24	24"	100	144	350	10	HEB140
		150	194			
		200	244			
26	26"	100	156	400	12	
		150	206			
		200	256			
28	28"	100	150	400	12	
		150	200			
		200	250			

STOPPER MARK:(5)

MARK	X
1	100
2	200
3	300
4	400
5	500

LENGTH MARK:(4)

MARK	L
4	400
5	500
6	600
7	700
8	800

HEIGHT MARK:(3)

MARK	H	INSULATION THK.	h
1	100	UP TO 75mm	50
2	150	76mm TO 125mm	100
3	200	126mm TO 175mm	150
4	250	–	200
5	300	–	250

ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED

INDICATION:

SB-07-□□□-□-□□ (1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK
5-STOPPER LENGTH MARK

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

2- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM "L1".

3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

MATERIAL:

STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
SEMI ANCHOR SHOE (CS-WITHOUT PWHT) 16" ~ 28"	2
SB-07	4

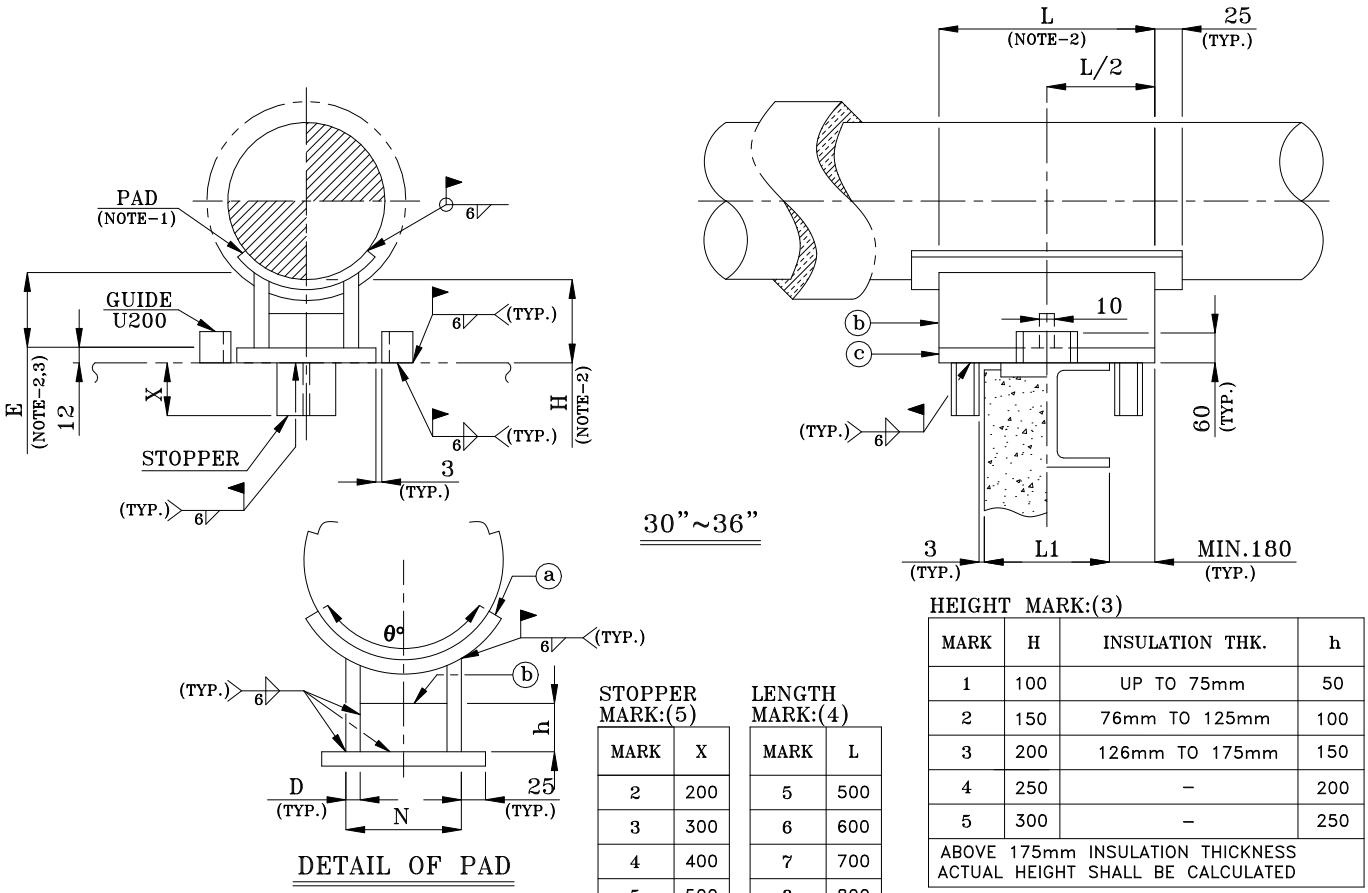
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 110 از 394



DETAIL OF PAD

HEIGHT MARK:(3)

MARK	H	INSULATION THK.	h
1	100	UP TO 75mm	50
2	150	76mm TO 125mm	100
3	200	126mm TO 175mm	150
4	250	–	200
5	300	–	250

ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED

STOPPER MARK:(5)

MARK	X
2	200
3	300
4	400
5	500
6	600

LENGTH MARK:(4)

MARK	L
5	500
6	600
7	700
8	800

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	D	θ°	STOPPER
30	30"	100	150	450	12	90°	HEB160
		150	200				
		200	250				
32	32"	100	145	450	12	90°	
		150	195				
		200	245				
34	34"	100	157	500	12	90°	
		150	207				
		200	257				
36	36"	100	152	500	12	90°	
		150	202				
		200	252				

MATERIAL MARK:(1)

DES. TEMP / MATERIAL OF RUN PIPE MEMBER		CARBON STEEL
0°C TO 350°C	MARK	A
	ⓐ NOTE-1	–
	ⓑ	A283 Gr.C
	ⓒ	A283 Gr.C
350°C TO 400°C	MARK	B
	ⓐ NOTE-1	–
	ⓑ	A285 Gr.C
	ⓒ	A285 Gr.C

INDICATION:

SB-07-□□□-□-□□-□□
(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK
5-STOPPER LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- DIMENSION "E" HAS BEEN CALCULATED BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED IN RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.
4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM "L1".
5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
6- WEEP HOLE(ø=6mm) SHALL BE PROVIDED FOR PADS.

MATERIAL: STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
SEMI ANCHOR SHOE (CS-WITHOUT PWHT) 30" ~ 36"	3
SB-07	4

NISOC

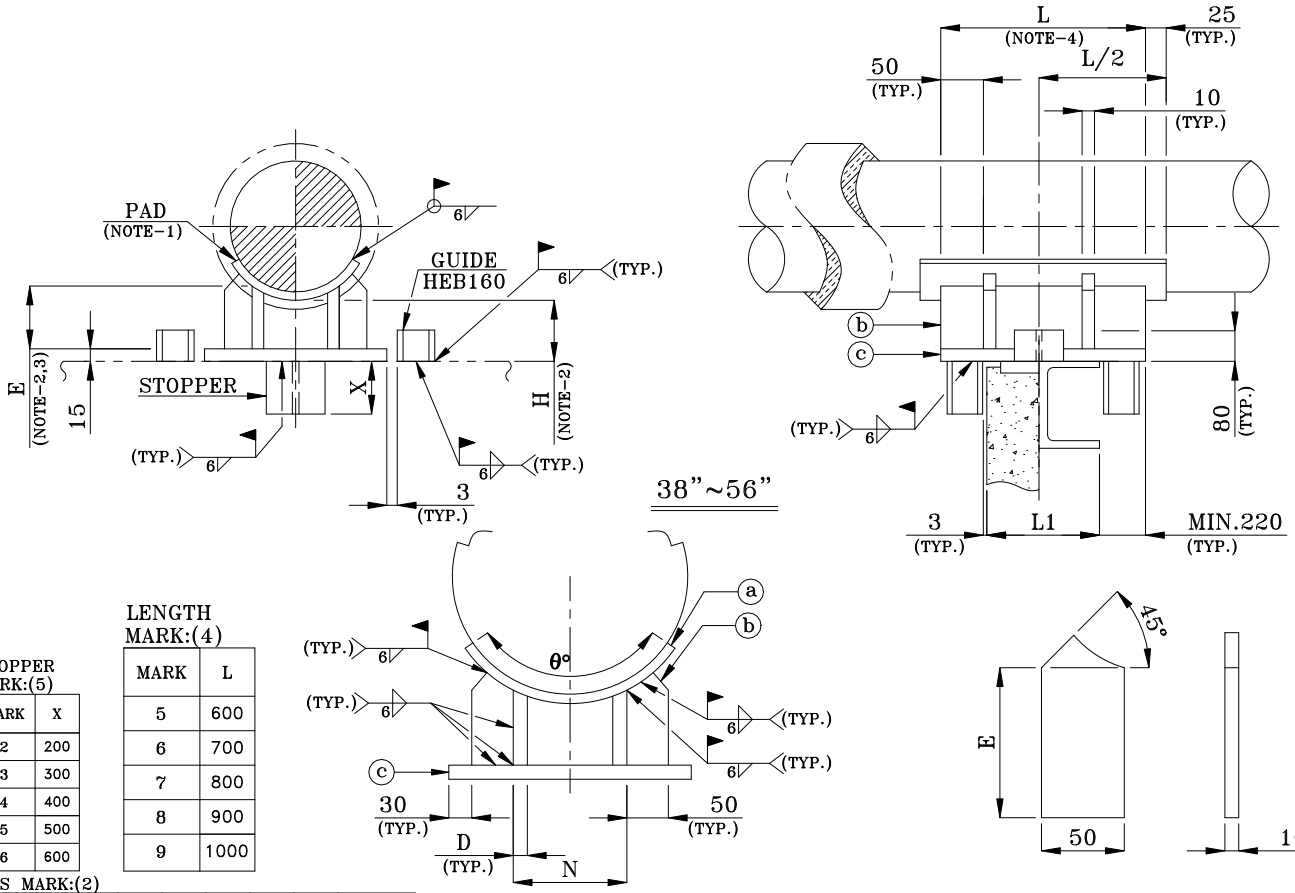
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



LENGTH MARK:(4)

MARK	L
5	600
6	700
7	800
8	900
9	1000

STOPPER MARK:(5)

MARK	X
2	200
3	300
4	400
5	500
6	600

DETAIL OF PAD

DETAIL OF STIFFENER

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	D	θ°	STOPPER
38	38"	100	160	550	12	120°	HEB200
		150	210				
		200	260				
40	40"	100	155	550	12	120°	
		150	205				
		200	255				
42	42"	100	166	600	15	120°	
		150	216				
		200	266				
44	44"	100	162	600	15	120°	
		150	212				
		200	262				
46	46"	100	190	700	15	120°	
		150	240				
		200	290				
48	48"	100	184	700	15	120°	
		150	234				
		200	284				
52	52"	100	208	800	15	120°	
		150	258				
		200	308				
56	56"	100	197	800	15	120°	
		150	247				
		200	297				

MATERIAL MARK:(1)

DES. TEMP / MATERIAL OF RUN PIPE — MEMBER		CARBON STEEL
0°C TO 350°C	MARK	A
	ⓐ NOTE-1	–
	ⓑ	A283 Gr.C
	ⓒ	A283 Gr.C
350°C TO 400°C	MARK	B
	ⓐ NOTE-1	–
	ⓑ	A285 Gr.C
	ⓒ	A285 Gr.C

HEIGHT MARK:(3)

MARK	H	INSULATION THK.
1	100	UP TO 75mm
2	150	76mm TO 125mm
3	200	126mm TO 175mm
4	250	–
5	300	–

ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED

INDICATION:

SB-07-□□□-□-□□ (1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK
5-STOPPER LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- DIMENSION "E" HAS BEEN CALCULATED BASED ON PIPES WITH SCH. STD, SO THIS
4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM "L1".
5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
6- WEEP HOLE(ø=6mm) SHALL BE PROVIDED FOR PADS.

MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:
SEMI ANCHOR SHOE
(CS-WITHOUT PWHT)
38" ~ 56"

SB-07

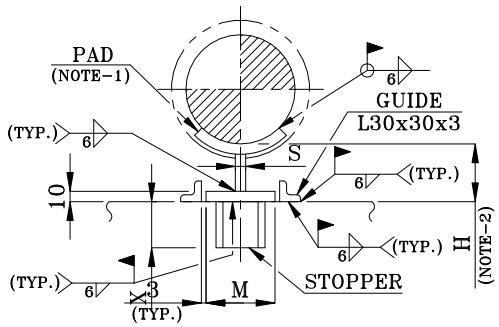
SHEET 4

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

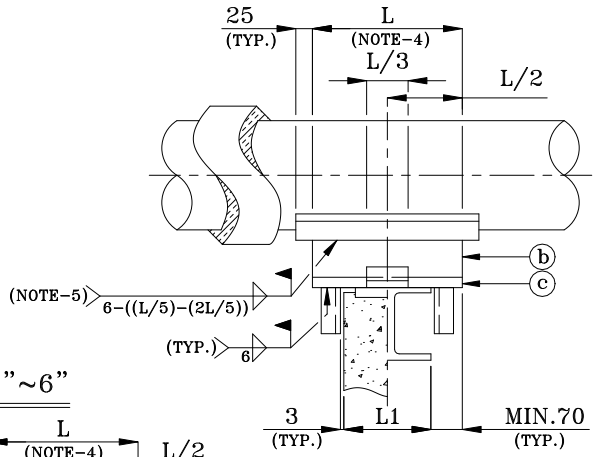
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 112 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

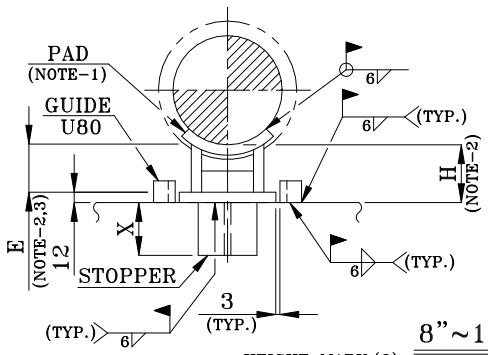
053-073-9184

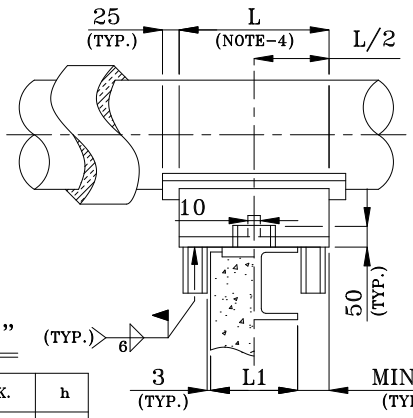


1/2"~2" : M=100, S=8
3"~6" : M=150, S=10

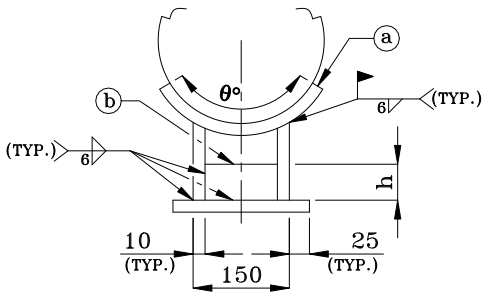


1/2"~6"





8"~14"



DETAIL OF PAD

LENGTH MARK:(4)

MARK	L
3	300
4	400
5	500
6	600
7	700

STOPPER MARK:(5)

MARK	X
1	100
2	200
3	300
4	400
5	500

HEIGHT MARK:(3)

MARK	H	INSULATION THK.	h
1	100	UP TO 75mm	50
2	150	76mm TO 125mm	100
3	200	126mm TO 175mm	150
4	250	-	200
5	300	-	250

ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	θ°	STOPPER
0A	1/2"	-	-	120°	U80
0B	3/4"				
01	1"				
1A	1+1/2"				
02	2"				
03	3"			90°	
04	4"				
06	6"				
08	8"	100	107	120°	HEB100
		150	157		
		200	207		
10	10"	100	100		
		150	150		
		200	200		
12	12"	100	96	90°	
		150	146		
		200	196		
14	14"	100	95		
		150	145		
		200	195		

MATERIAL MARK:(1)

DES. TEMP	MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ NOTE-1	-	-	-
	ⓑ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓒ	A283 Gr.C	A283 Gr.C	A283 Gr.C
350°C TO 400°C	MARK	B	E	H
	ⓐ NOTE-1	-	-	-
	ⓑ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓒ	A285 Gr.C	A285 Gr.C	A285 Gr.C
400°C TO 550°C	MARK	C	F	J
	ⓐ NOTE-1	-	-	-
	ⓑ	-	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	-	A285 Gr.C	A285 Gr.C

INDICATION:

SB-08-□□-□-□□
(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK
5-STOPPER LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT. 2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

3- DIMENSION "E" HAS BEEN CALCULATED BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED IN RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.

4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM "L1".
5- THIS TYPE OF WELDING IS USED FOR PIPES WITH NPS 1/2"~2", FOR NPS 3"~6" CONTINUOUS WELDING SHALL BE PERFORMED. 6- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
7- WEEP HOLE(ø=6mm) SHALL BE PROVIDED FOR PADS.
MATERIAL: STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:
SEMI ANCHOR SHOE
(CS-WITH PWHT, AS, SS)
1/2" ~ 14"
SB-08

SHEET 1 / 3

NISOC

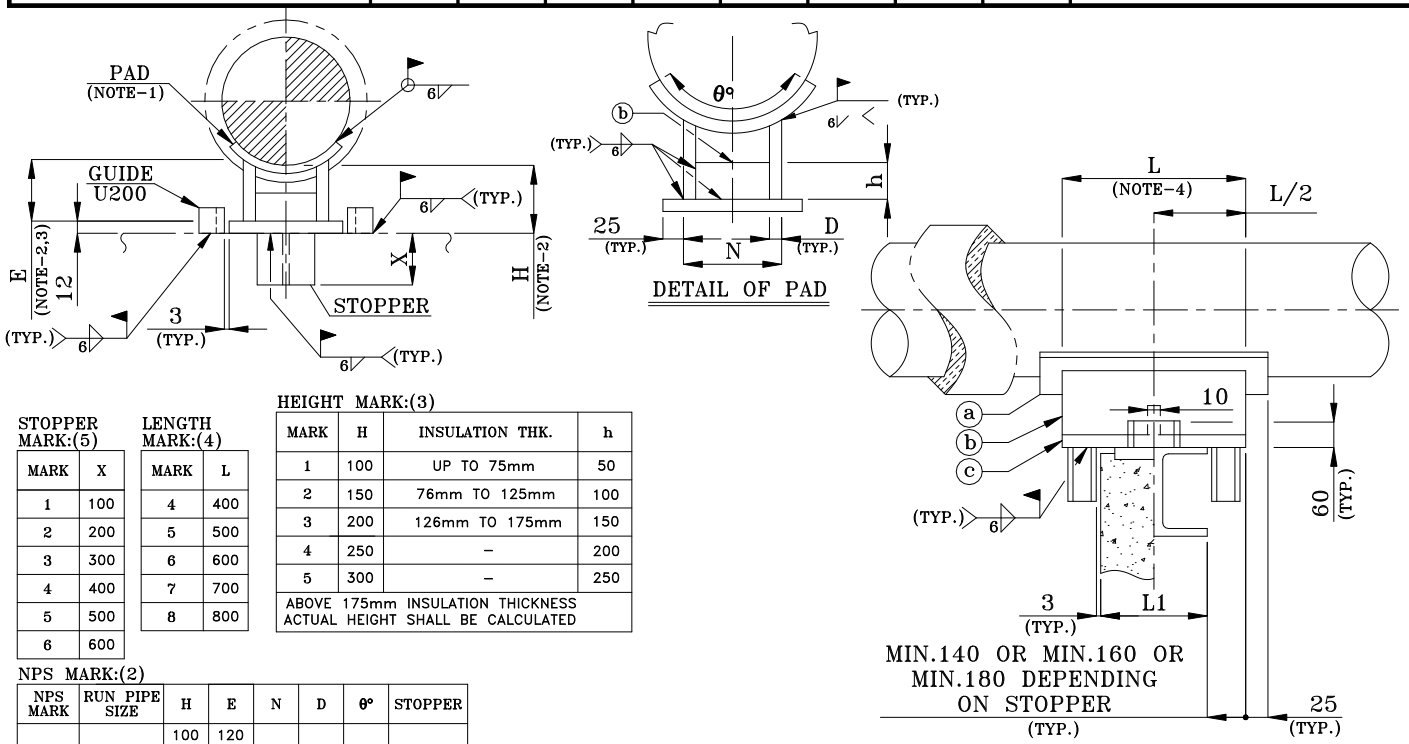
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



16"~36"

STOPPER MARK:(5)

MARK	X
1	100
2	200
3	300
4	400
5	500
6	600

LENGTH MARK:(4)

MARK	L
4	400
5	500
6	600
7	700
8	800

HEIGHT MARK:(3)

MARK	H	INSULATION THK.	h
1	100	UP TO 75mm	50
2	150	76mm TO 125mm	100
3	200	126mm TO 175mm	150
4	250	–	200
5	300	–	250
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED			

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	D	θ°	STOPPER
16	16"	100	120	250	10	105°	HEB120
		150	170				
		200	220				
18	18"	100	132	300	10	105°	
		150	182				
		200	232				
20	20"	100	126	300	10	105°	
		150	176				
		200	226				
24	24"	100	132	350	10	90°	HEB140
		150	182				
		200	232				
26	26"	100	144	400	12	90°	
		150	194				
		200	244				
28	28"	100	139	400	12	90°	
		150	189				
		200	239				
30	30"	100	150	450	12	90°	HEB160
		150	200				
		200	250				
32	32"	100	145	450	12	90°	
		150	195				
		200	245				
34	34"	100	157	500	12	90°	
		150	207				
		200	257				
36	36"	100	152	500	12	90°	
		150	202				
		200	252				

MATERIAL MARK:(1)

DES. TEMP	MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ NOTE-1	–	–	–
	ⓑ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓒ	A283 Gr.C	A283 Gr.C	A283 Gr.C
350°C TO 400°C	MARK	B	E	H
	ⓐ NOTE-1	–	–	–
	ⓑ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓒ	A285 Gr.C	A285 Gr.C	A285 Gr.C
400°C TO 550°C	MARK	C	F	J
	ⓐ NOTE-1	–	–	–
	ⓑ	–	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	–	A285 Gr.C	A285 Gr.C

INDICATION:

SB-08-□□□-□-□□
(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK
5-STOPPER LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

3- DIMENSION "E" HAS BEEN CALCULATED BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED IN RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.

4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM "L1".

5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

6- WEEP HOLE(ø=6mm) SHALL BE PROVIDED FOR PADS.

MATERIAL: STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:
SEMI ANCHOR SHOE
(CS-WITH PWHT, AS, SS)
16" ~ 36"
SB-08

SHEET 2 / 3

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

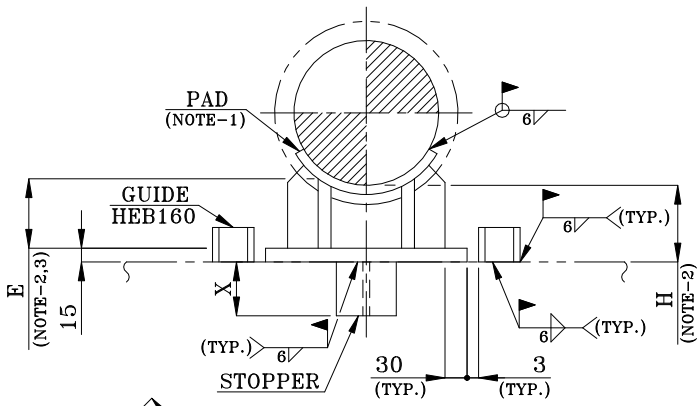
PEDCO
HIRGAN ENERGY

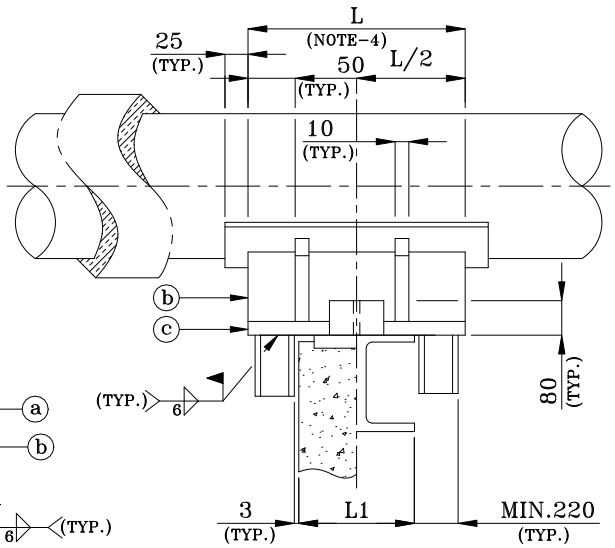
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

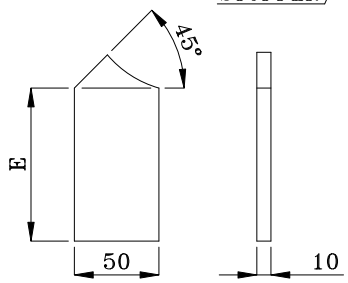
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 114 از 394

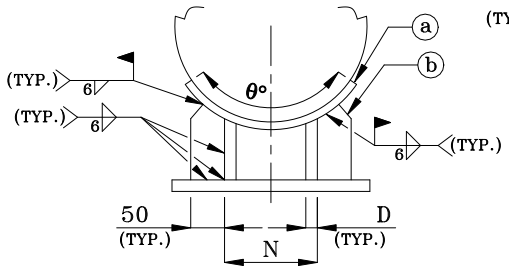




38"~56"



DETAIL OF STIFFENER



DETAIL OF PAD

LENGTH MARK:(4)

MARK	L
5	600
6	700
7	800
8	900
9	1000

STOPPER MARK:(5)

MARK	X
2	200
3	300
4	400
5	500
6	600

HEIGHT MARK:(3)

MARK	H	INSULATION THK.
1	100	UP TO 75mm
2	150	76mm TO 125mm
3	200	126mm TO 175mm
4	250	–
5	300	–
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED		

MATERIAL MARK:(1)

DES. TEMP	MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ NOTE-1	–	–	–
	ⓑ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓒ	A283 Gr.C	A283 Gr.C	A283 Gr.C
350°C TO 400°C	MARK	B	E	H
	ⓐ NOTE-1	–	–	–
	ⓑ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓒ	A285 Gr.C	A285 Gr.C	A285 Gr.C
400°C TO 550°C	MARK	C	F	J
	ⓐ NOTE-1	–	–	–
	ⓑ	–	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	–	A285 Gr.C	A285 Gr.C

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	N	D	H	E	θ°	STOPPER
38	38"	550	12	100	160	120°	HEB200
				150	210		
				200	260		
40	40"	550	12	100	155	120°	
				150	205		
				200	255		
42	42"	600	15	100	166	120°	
				150	216		
				200	266		
44	44"	600	15	100	162	120°	
				150	212		
				200	262		
46	46"	700	15	100	190	120°	
				150	240		
				200	290		
48	48"	700	15	100	184	120°	
				150	234		
				200	284		
52	52"	800	15	100	208	120°	
				150	258		
				200	308		
56	56"	800	15	100	197	120°	
				150	247		
				200	297		

INDICATION:

SB-08-□□□-□-□□
(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK
5-STOPPER LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- DIMENSION "E" HAS BEEN CALCULATED BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED IN RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.
4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM "L1".
5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
6- WEEP HOLE(ø=6mm) SHALL BE PROVIDED FOR PADS.

MATERIAL: STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:
SEMI ANCHOR SHOE
(CS-WITH PWHT, AS, SS)
38" ~ 56"

SB-08

SHEET 3

3

NISOC

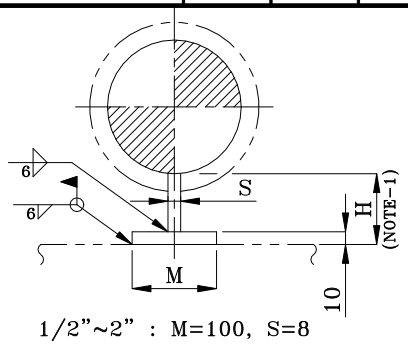
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سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO
HIRGAN ENERGY

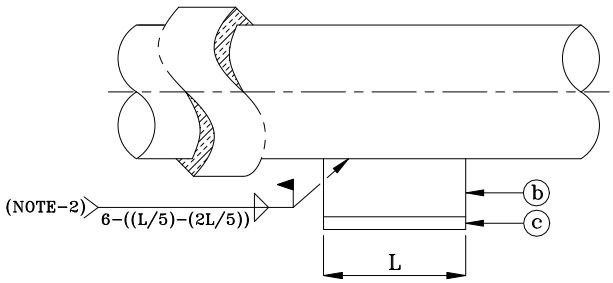
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

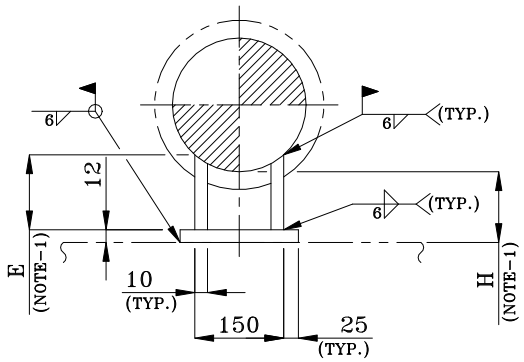
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

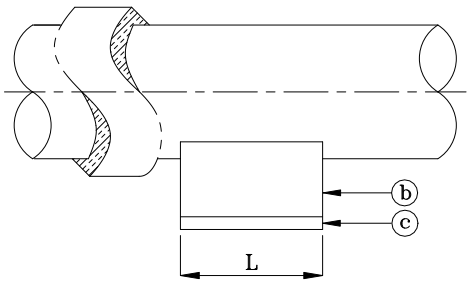


1/2"~2" : M=100, S=8
3"~6" : M=150, S=10



1/2"~6"





8"~14"

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E
0A	1/2"	–	–
0B	3/4"		
01	1"		
1A	1+1/2"		
02	2"		
03	3"		
04	4"		
06	6"		
08	8"	100	118
		150	168
		200	218
10	10"	100	111
		150	161
		200	211
12	12"	100	107
		150	157
		200	207
14	14"	100	105
		150	155
		200	205

MATERIAL MARK:(1)

DES. TEMP	MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL
0°C TO 350°C	MARK	A
	ⓐ	–
	ⓑ	A283 Gr.C
	ⓒ	A283 Gr.C
350°C TO 400°C	MARK	B
	ⓐ	–
	ⓑ	A285 Gr.C
	ⓒ	A285 Gr.C

HEIGHT MARK:(3)

MARK	H	INSULATION THK.
1	100	UP TO 75mm
2	150	76mm TO 125mm
3	200	126mm TO 175mm
4	250	–
5	300	–

ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED

LENGTH MARK:(4)

MARK	L
1	100
2	200
3	300
4	400
5	500

INDICATION:

SB-09-□□□-□-□
(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

2- THIS TYPE OF WELDING IS USED FOR PIPES WITH NPS 1/2"~2", FOR NPS 3"~6" CONTINUOUS WELDING SHALL BE PERFORMED.

3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

SUPPORT DESCRIPTION:	SHEET
FIXED SHOE (CS-WITHOUT PWHT) 1/2" ~ 14"	1
SB-09	1

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

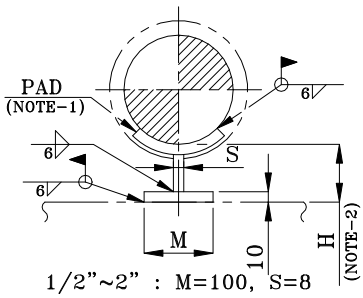
PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

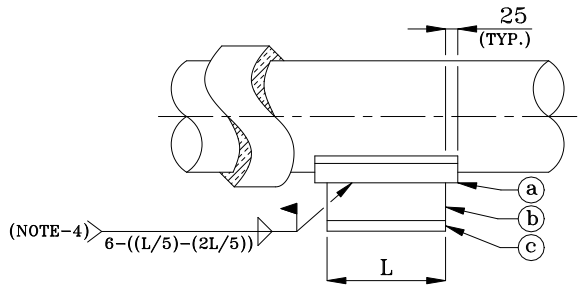
STANDARD PIPE SUPPORT DRAWINGS

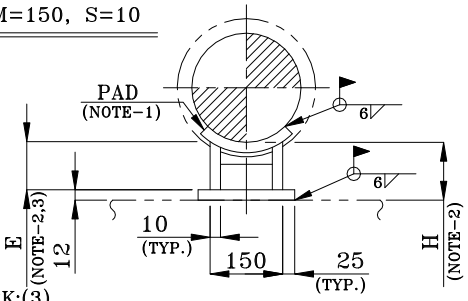
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 116 از 394

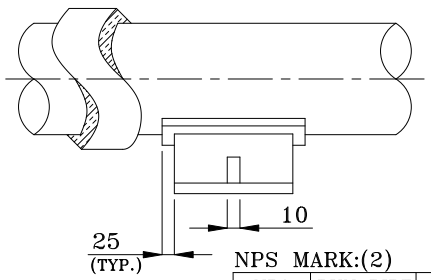


1/2"~2" : M=100, S=8
3"~6" : M=150, S=10

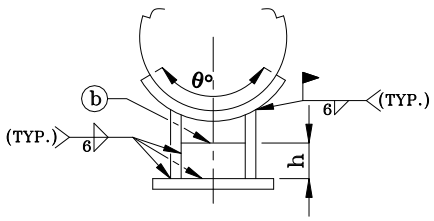




1/2"~6"



8"~14"



DETAIL OF PAD

HEIGHT MARK:(3)

MARK	H	INSULATION THK.	h
1	100	UP TO 75mm	50
2	150	76mm TO 125mm	100
3	200	126mm TO 175mm	150
4	250	–	200
5	300	–	250
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED			

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	θ°
0A	1/2"	–	–	120°
0B	3/4"			
01	1"			
1A	1+1/2"			
02	2"			90°
03	3"			
04	4"			
06	6"			
08	8"	100	107	120°
		150	157	
		200	207	
10	10"	100	100	
		150	150	
		200	200	
12	12"	100	96	90°
		150	146	
		200	196	
14	14"	100	95	
		150	145	
		200	195	

MATERIAL MARK:(1)

DES. TEMP / MEMBER \ MATERIAL OF RUN PIPE		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ NOTE-1	–	–	–
	ⓑ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓒ	A283 Gr.C	A283 Gr.C	A283 Gr.C
350°C TO 400°C	MARK	B	E	H
	ⓐ NOTE-1	–	–	–
	ⓑ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓒ	A285 Gr.C	A285 Gr.C	A285 Gr.C
400°C TO 550°C	MARK	C	F	J
	ⓐ NOTE-1	–	–	–
	ⓑ	–	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	–	A285 Gr.C	A285 Gr.C

LENGTH MARK:(4)

MARK	L
1	100
2	200
3	300
4	400
5	500

INDICATION:

SB-10-□□□-□-□
(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

3- DIMENSION "E" HAS BEEN CALCULATED BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED IN RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.

4- THIS TYPE OF WELDING IS USED FOR PIPES WITH NPS 1/2"~2", FOR NPS 3"~6" CONTINUOUS WELDING SHALL BE PERFORMED.

5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

6- WEEP HOLE(ø=6mm) SHALL BE PROVIDED FOR PADS.

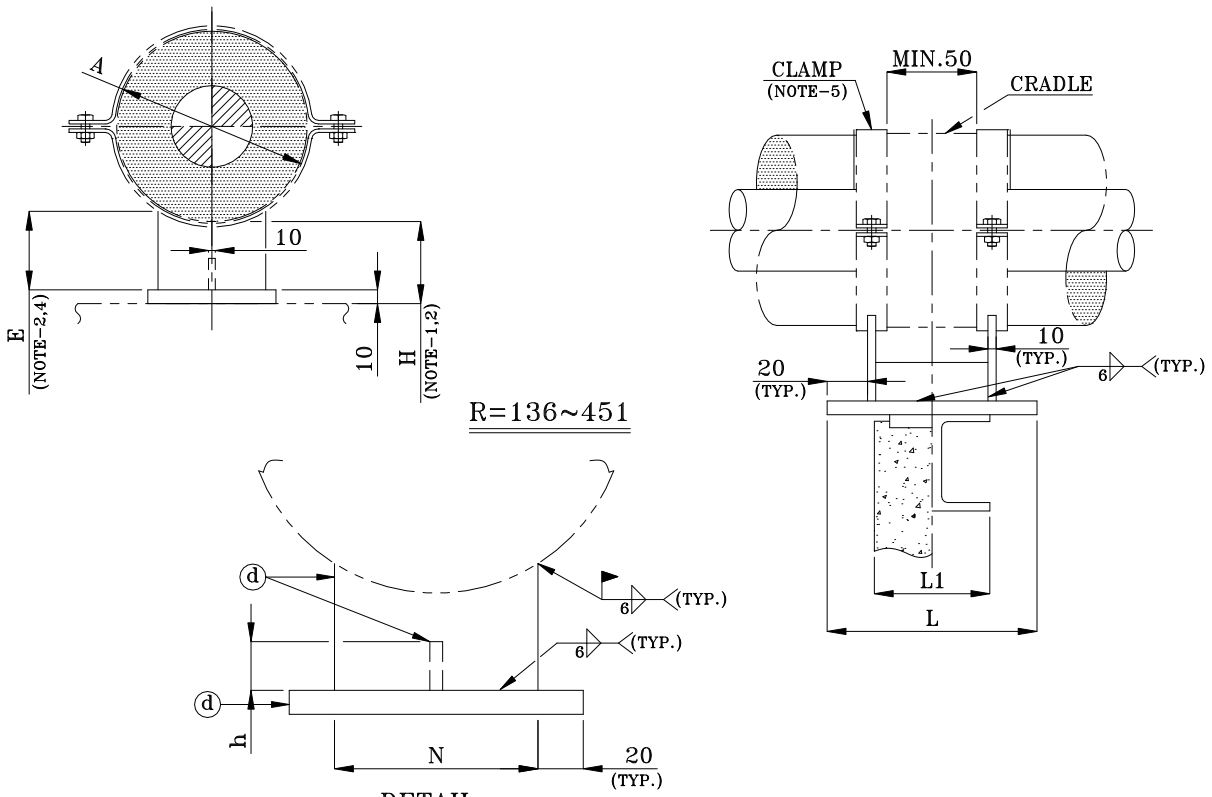
SUPPORT DESCRIPTION:	SHEET
FIXED SHOE (CS-WITH PWHT, AS, SS) 1/2" ~ 14"	1
SB-10	1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



DETAIL

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	C
ⓐ	ASTM A36	ASTM A36	ASTM A36
ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
ⓒ	A325	A325	A325
ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

A	E			N
	H=100	H=150	H=200	
136	115	165	215	100
163	111	161	211	
224	123	173	223	150
236	121	171	221	
251	119	169	219	
324	110	160	210	
336	109	159	209	
351	108	158	208	
451	105	175	205	

HEIGHT MARK:(4)

MARK	H	h
1	100	50
2	150	100
3	200	150

NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	1/2"	3/4"	1"	1 1/2"
			0A	0B	01	1A
			A (FOR EACH PIPE SIZE)			
1	25-50	T=50	136	136	136	163
2	51-100	T=100	224	236	236	251
3	101-150	T=150	324	336	336	351
4	151-200	T=200	–	–	–	451
5	201-250	T=250	–	–	–	–
6	251-300	T=300	–	–	–	–

LENGTH MARK:(5)

MARK	L
02	200
03	300
04	400
05	500
06	600
07	700
08	800

INDICATION:

SB-11-[ ][ ]-[ ][ ]-[ ][ ]
(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-INSULATION MARK
4-HEIGHT MARK
5-LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF CRADLE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD. 3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- DIMENSION "E" HAS BEEN CALCULATED BASED ON CRADLE & CLAMP THICKNESS THAT HAS BEEN SPECIFIED ABOVE TABLE, FOR OTHER CRADLE THICKNESS "E" SHALL BE CALCULATED.

5- FOR DETAIL OF CLAMP SEE (SK-03), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

6- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

SUPPORT DESCRIPTION:	SHEET
SLIDE SHOE (COLD INSULATION) 1/2" ~ 1 1/2"	1
SB-11	4

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

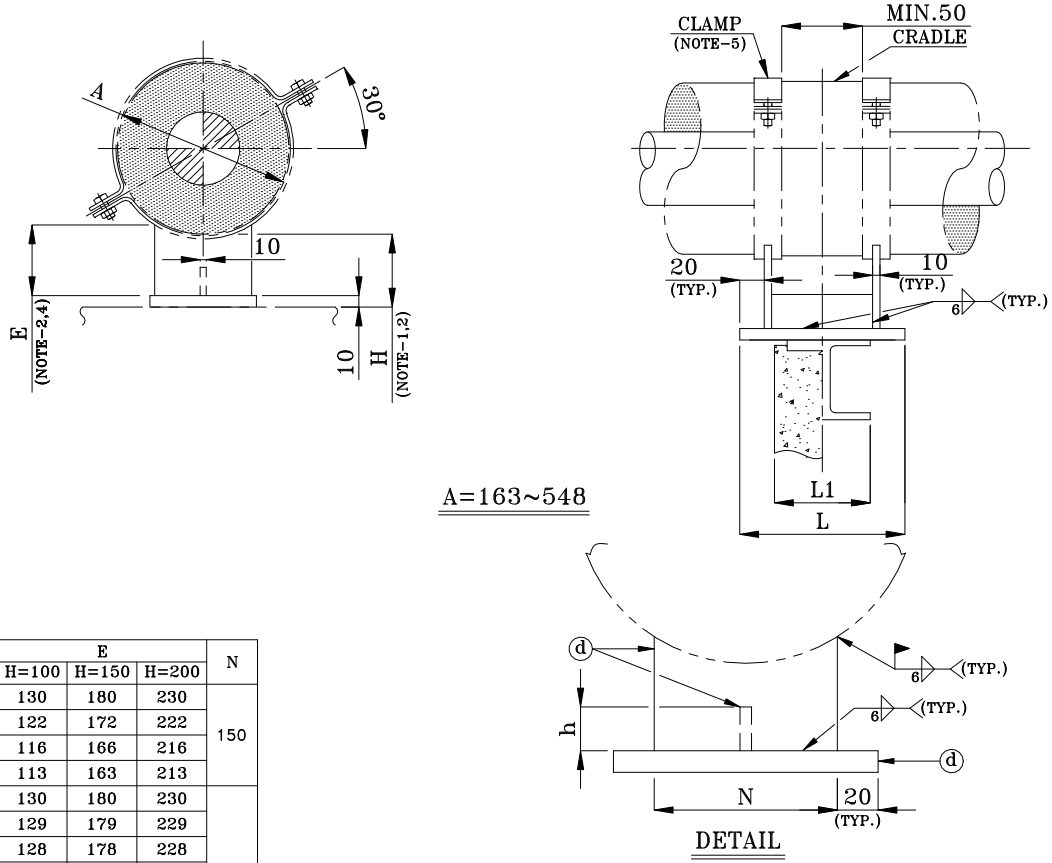
HIRGAN ENERGY

شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



DETAIL

A	E			N
	H=100	H=150	H=200	
163	130	180	230	150
192	122	172	222	
224	116	166	216	
251	113	163	213	
274	130	180	230	200
279	129	179	229	
292	128	178	228	
324	123	173	223	
351	117	167	217	
374	115	165	215	
392	114	164	214	
430	126	176	226	250
451	124	174	224	
474	122	172	222	
492	121	171	221	
530	118	168	218	
548	117	167	217	

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	C
ⓐ	ASTM A36	ASTM A36	ASTM A36
ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
ⓒ	A325	A325	A325
ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

HEIGHT MARK:(4)

MARK	H	h
1	100	50
2	150	100
3	200	150

LENGTH MARK:(5)

MARK	L
03	300
04	400
05	500
06	600
07	700
08	800
09	900

NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	2"	2 1/2"	3"	4"	5"
			02	2A	03	04	05
			A (FOR EACH PIPE SIZE)				
1	25-50	T=50	163	192	192	224	251
2	51-100	T=100	274	279	292	324	351
3	101-150	T=150	374	392	392	430	451
4	151-200	T=200	474	492	492	530	548
5	201-250	T=250	–	–	–	–	–
6	251-300	T=300	–	–	–	–	–

INDICATION:

SB-11-[ ][ ]-[ ][ ]-[ ][ ]

(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-INSULATION MARK
4-HEIGHT MARK
5-LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF CRADLE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD. 3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- DIMENSION "E" HAS BEEN CALCULATED BASED ON CRADLE & CLAMP THICKNESS THAT HAS BEEN SPECIFIED ABOVE TABLE, FOR OTHER CRADLE THICKNESS "E" SHALL BE CALCULATED.

5- FOR DETAIL OF CLAMP SEE (SK-03), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

6- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

SUPPORT DESCRIPTION:	SHEET
SLIDE SHOE (COLD INSULATION) 2" ~ 5"	2
SB-11	4

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

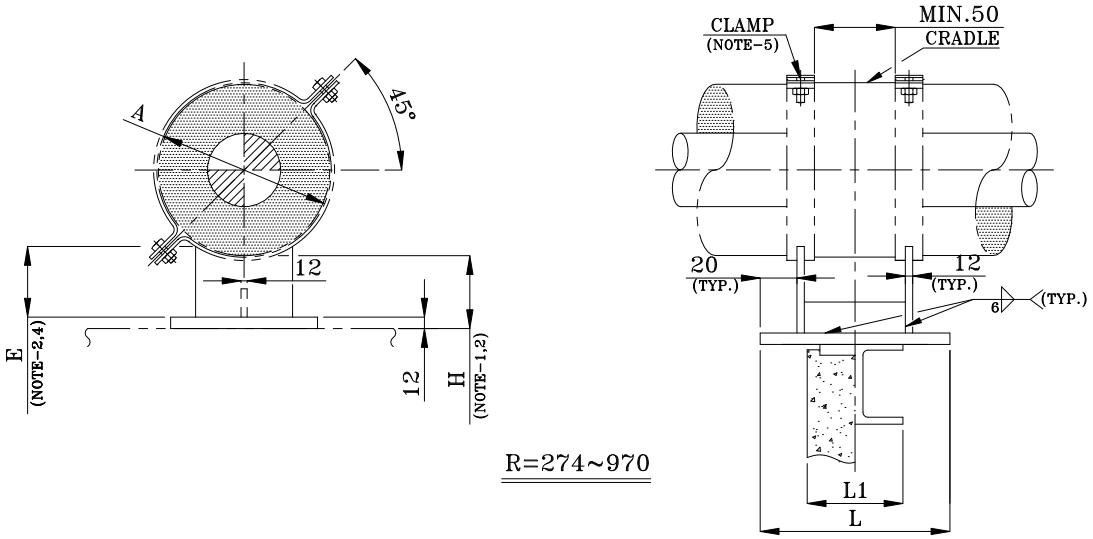
HIRGAN ENERGY

شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

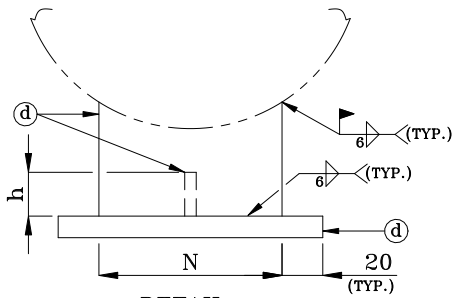
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



R=274~970

NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	6"	8"	10"	12"	14"	16"	18"
			06	08	10	12	14	16	18
			A (FOR EACH PIPE SIZE)						
1	25-50	T=50	274	324	392	430	474	530	578
2	51-100	T=100	374	430	492	530	578	630	678
3	101-150	T=150	474	530	578	630	678	730	778
4	151-200	T=200	578	630	678	730	778	830	870
5	201-250	T=250	-	730	778	830	870	920	970
6	251-300	T=300	-	-	-	-	-	-	-



DETAIL

A	E			N
	H=100	H=150	H=200	
274	123	173	223	200
324	116	166	216	
374	112	162	212	
392	111	161	211	
430	122	172	222	250
474	119	169	219	
492	117	167	217	
530	115	165	215	
578	112	162	212	
630	116	168	216	300
678	113	163	213	
730	111	161	211	
778	109	159	209	
830	117	167	217	350
870	115	165	215	
920	114	164	214	
970	112	162	212	

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	C
ⓐ	ASTM A36	ASTM A36	ASTM A36
ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
ⓒ	A325	A325	A325
ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

HEIGHT MARK:(4)

MARK	H	h
1	100	50
2	150	100
3	200	150

LENGTH MARK:(5)

MARK	L
03	300
04	400
05	500
06	600
07	700
08	800
09	900
10	1000

INDICATION:

SB-11-□□□-□□-□□

(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-INSULATION MARK
4-HEIGHT MARK
5-LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF CRADLE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD. 3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- DIMENSION "E" HAS BEEN CALCULATED BASED ON CRADLE & CLAMP THICKNESS THAT HAS BEEN SPECIFIED ABOVE TABLE, FOR OTHER CRADLE THICKNESS "E" SHALL BE CALCULATED.

5- FOR DETAIL OF CLAMP SEE (SK-03), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

6- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

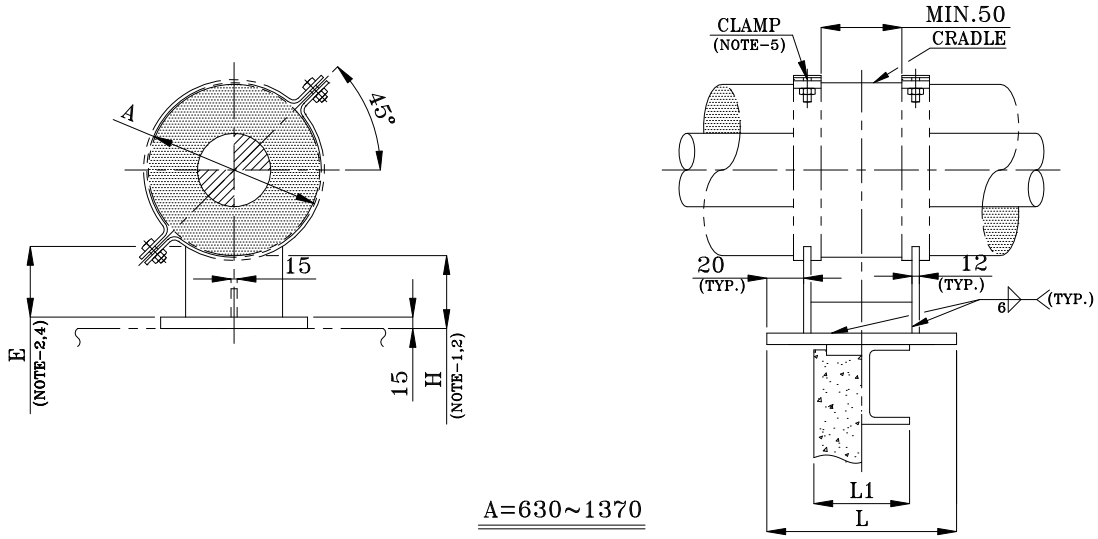
SUPPORT DESCRIPTION:	SHEET
SLIDE SHOE (COLD INSULATION) 6" ~ 18"	3
SB-11	4

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 120 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

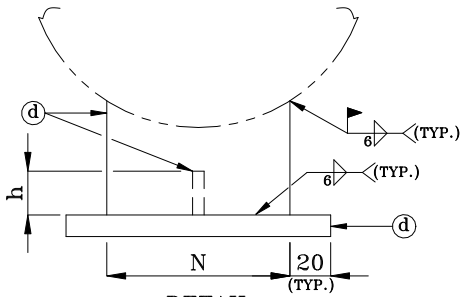
053-073-9184



A=630~1370

NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	20"	22"	24"	26"	28"	30"
			20	22	24	26	28	30
			A (FOR EACH PIPE SIZE)					
1	25-50	T=50	630	678	730	778	830	870
2	51-100	T=100	730	778	830	870	920	970
3	101-150	T=150	830	870	920	970	1020	1070
4	151-200	T=200	920	970	1020	1070	1120	1170
5	201-250	T=250	1020	1070	1120	1170	1220	1270
6	251-300	T=300	1120	1170	1220	1270	1320	1370



DETAIL

A	E			N
	H=100	H=150	H=200	
630	116	166	216	300
678	113	163	213	
730	111	161	211	
778	109	159	209	
830	117	167	217	350
870	110	160	210	
920	108	158	208	
970	106	156	206	
1020	114	164	214	400
1070	112	162	212	
1120	111	161	211	
1170	109	159	209	
1220	117	167	217	450
1270	115	165	215	
1320	113	163	213	
1370	112	162	212	

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	C
ⓐ	ASTM A36	ASTM A36	ASTM A36
ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
ⓒ	A325	A325	A325
ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

HEIGHT MARK:(4)

MARK	H	h
1	100	50
2	150	100
3	200	150

LENGTH MARK:(5)

MARK	L
04	400
05	500
06	600
07	700
08	800
09	900
10	1000
11	1100

INDICATION:

SB-11-□□□-□□-□□
(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-INSULATION MARK
4-HEIGHT MARK
5-LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF CRADLE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD. 3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- DIMENSION "E" HAS BEEN CALCULATED BASED ON CRADLE & CLAMP THICKNESS THAT HAS BEEN SPECIFIED ABOVE TABLE, FOR OTHER CRADLE THICKNESS "E" SHALL BE CALCULATED.

5- FOR DETAIL OF CLAMP SEE (SK-03), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

6- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

SUPPORT DESCRIPTION:	SHEET
SLIDE SHOE (COLD INSULATION) 20" ~ 30"	4
SB-11	4

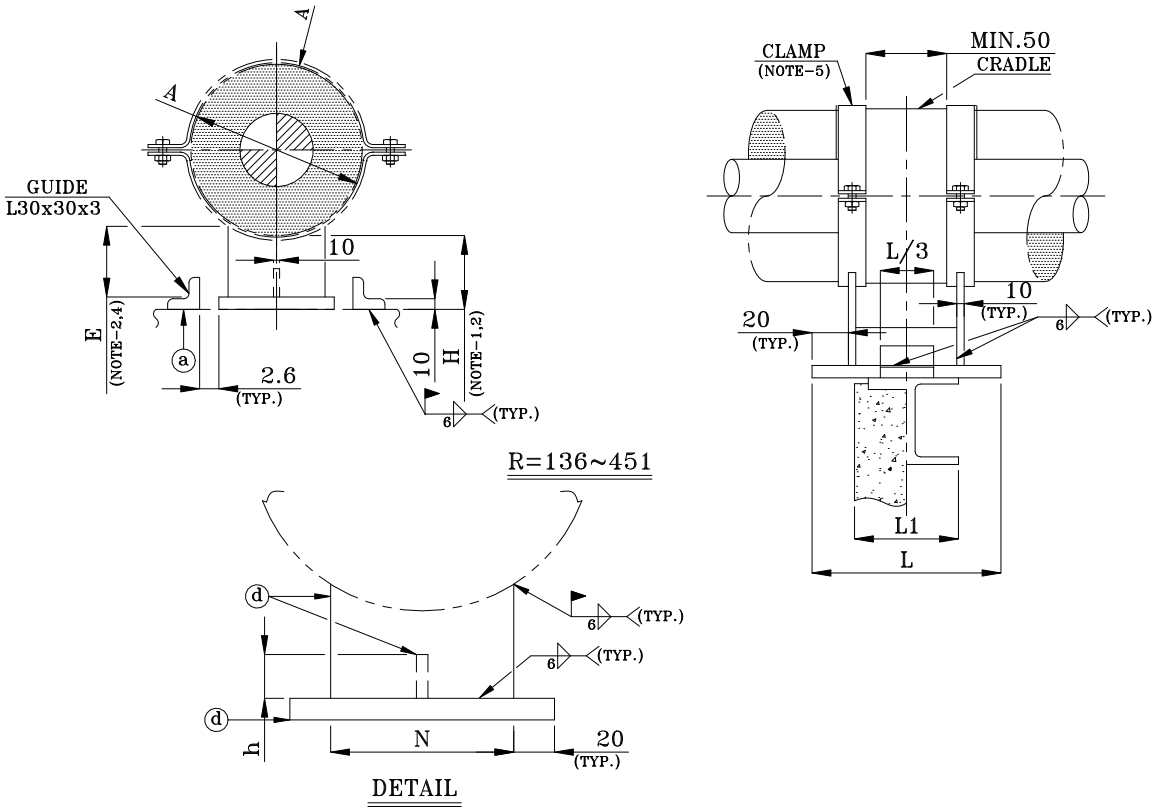
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 121 از 394



DETAIL

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	C
ⓐ	ASTM A36	ASTM A36	ASTM A36
ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
ⓒ	A325	A325	A325
ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	1/2"	3/4"	1"	1 1/2"
			0A	0B	01	1A
			A (FOR EACH PIPE SIZE)			
1	25-50	T=50	136	136	136	163
2	51-100	T=100	224	236	236	251
3	101-150	T=150	324	336	336	351
4	151-200	T=200	–	–	–	451
5	201-250	T=250	–	–	–	–
6	251-300	T=300	–	–	–	–

LENGTH MARK:(5)

MARK	L
02	200
03	300
04	400
05	500
06	600
07	700
08	800

A	E			N
	H=100	H=150	H=200	
136	115	165	215	100
163	111	161	211	
224	123	173	223	150
236	121	171	221	
251	119	169	219	
324	110	160	210	
336	109	159	209	
351	108	158	208	
451	105	175	205	

HEIGHT MARK:(4)

MARK	H	h
1	100	50
2	150	100
3	200	150

INDICATION:

SB-12-□□□-□□-□□
(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-INSULATION MARK
4-HEIGHT MARK
5-LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF CRADLE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD. 3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- DIMENSION "E" HAS BEEN CALCULATED BASED ON CRADLE & CLAMP THICKNESS THAT HAS BEEN SPECIFIED ABOVE TABLE, FOR OTHER CRADLE THICKNESS "E" SHALL BE CALCULATED.

5- FOR DETAIL OF CLAMP SEE (SK-03), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

6- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

SUPPORT DESCRIPTION:	SHEET
GUIDE SHOE (COLD INSULATION) 1/2" ~ 1 1/2"	1
SB-12	4

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

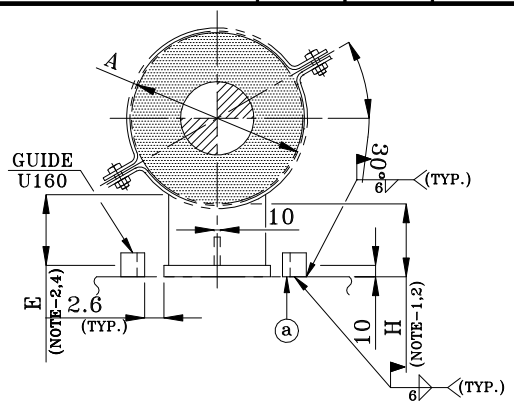
HIRGAN ENERGY

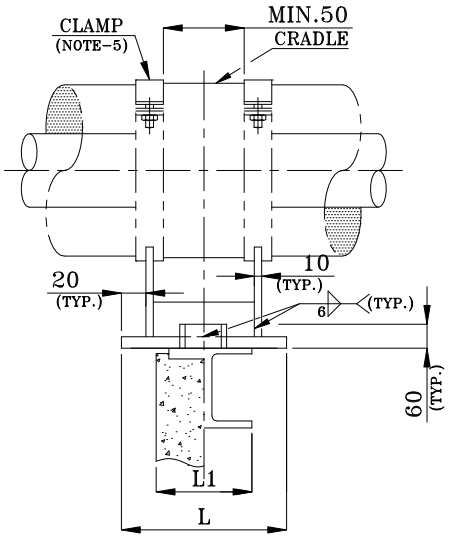
شماره پیمان:

053-073-9184

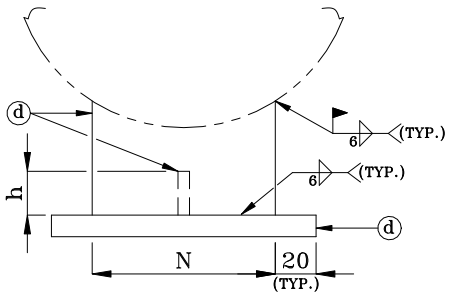
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02





A=163~548



NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	2"	2 1/2"	3"	4"	5"
			02	2A	03	04	05
			A (FOR EACH PIPE SIZE)				
1	25-50	T=50	163	192	192	224	251
2	51-100	T=100	274	279	292	324	351
3	101-150	T=150	374	392	392	430	451
4	151-200	T=200	474	492	492	530	548
5	201-250	T=250	–	–	–	–	–
6	251-300	T=300	–	–	–	–	–

A	E			N
	H=100	H=150	H=200	
163	130	180	230	150
192	122	172	222	
224	116	166	216	
251	113	163	213	
274	130	180	230	200
279	129	179	229	
292	128	178	228	
324	123	173	223	
351	117	167	217	
374	115	165	215	
392	114	164	214	
430	126	176	226	250
451	124	174	224	
474	122	172	222	
492	121	171	221	
530	118	168	218	
548	117	167	217	

DETAIL

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	C
ⓐ	ASTM A36	ASTM A36	ASTM A36
ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
ⓒ	A325	A325	A325
ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

HEIGHT MARK:(4)

MARK	H	h
1	100	50
2	150	100
3	200	150

LENGTH MARK:(5)

MARK	L
03	300
04	400
05	500
06	600
07	700
08	800
09	900

INDICATION:

SB-12-□□□-□□-□□

(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-INSULATION MARK
4-HEIGHT MARK
5-LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF CRADLE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD. 3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- DIMENSION "E" HAS BEEN CALCULATED BASED ON CRADLE & CLAMP THICKNESS THAT HAS BEEN SPECIFIED ABOVE TABLE, FOR OTHER CRADLE THICKNESS "E" SHALL BE CALCULATED.

5- FOR DETAIL OF CLAMP SEE (SK-03), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

6- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

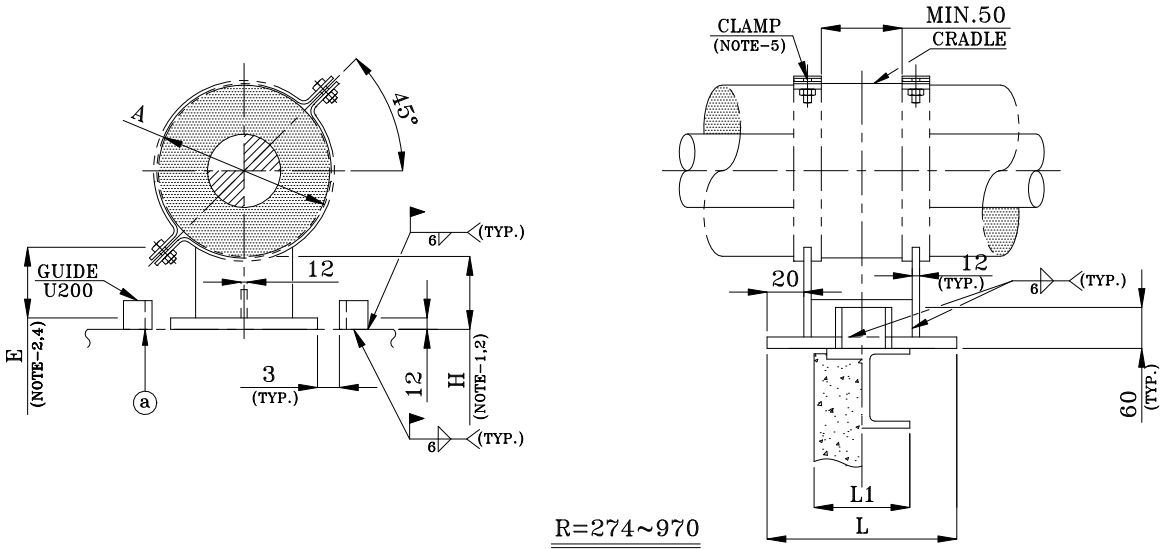
SUPPORT DESCRIPTION:	SHEET
GUIDE SHOE (COLD INSULATION) 2" ~ 5"	2
SB-12	4

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 123 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

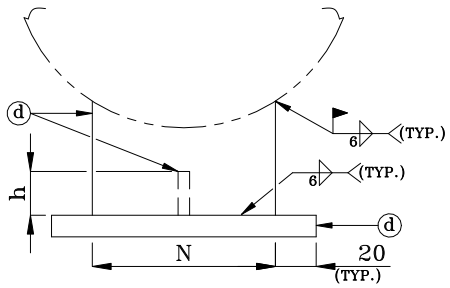
053-073-9184



R=274~970

NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	6" 06	8" 08	10" 10	12" 12	14" 14	16" 16	18" 18
			A (FOR EACH PIPE SIZE)						
1	25-50	T=50	274	324	392	430	474	530	578
2	51-100	T=100	374	430	492	530	578	630	678
3	101-150	T=150	474	530	578	630	678	730	778
4	151-200	T=200	578	630	678	730	778	830	870
5	201-250	T=250	-	730	778	830	870	920	970
6	251-300	T=300	-	-	-	-	-	-	-



DETAIL

A	E H=100	E H=150	E H=200	N
274	123	173	223	200
324	116	166	216	
374	112	162	212	
392	111	161	211	
430	122	172	222	250
474	119	169	219	
492	117	167	217	
530	115	165	215	
578	112	162	212	
630	116	168	216	300
678	113	163	213	
730	111	161	211	
778	109	159	209	
830	117	167	217	350
870	115	165	215	
920	114	164	214	
970	112	162	212	

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	C
ⓐ	ASTM A36	ASTM A36	ASTM A36
ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
ⓒ	A325	A325	A325
ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

HEIGHT MARK:(4)

MARK	H	h
1	100	50
2	150	100
3	200	150

LENGTH MARK:(5)

MARK	L
03	300
04	400
05	500
06	600
07	700
08	800
09	900
10	1000

INDICATION:

SB-12-□□□-□□-□□
(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-INSULATION MARK
4-HEIGHT MARK
5-LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF CRADLE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD. 3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- DIMENSION "E" HAS BEEN CALCULATED BASED ON CRADLE & CLAMP THICKNESS THAT HAS BEEN SPECIFIED ABOVE TABLE, FOR OTHER CRADLE THICKNESS "E" SHALL BE CALCULATED.

5- FOR DETAIL OF CLAMP SEE (SK-03), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

6- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

SUPPORT DESCRIPTION:	SHEET
GUIDE SHOE (COLD INSULATION) 6" ~ 18"	3
SB-12	4

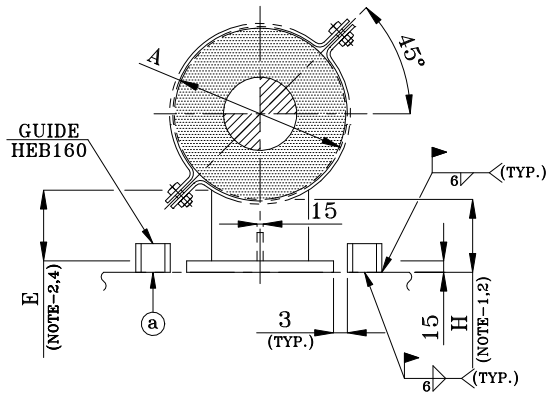
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

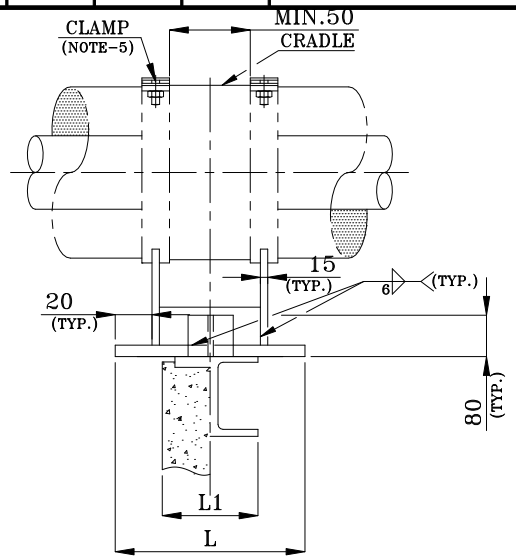
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 124 از 394

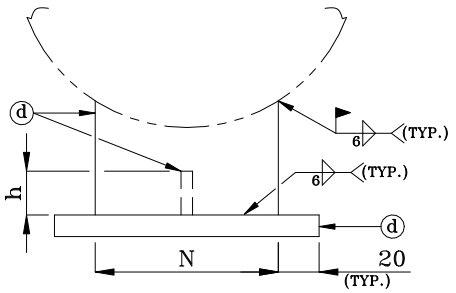


A=630~1370



NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	20"	22"	24"	26"	28"	30"
			20	22	24	26	28	30
			A (FOR EACH PIPE SIZE)					
1	25-50	T=50	630	678	730	778	830	870
2	51-100	T=100	730	778	830	870	920	970
3	101-150	T=150	830	870	920	970	1020	1070
4	151-200	T=200	920	970	1020	1070	1120	1170
5	201-250	T=250	1020	1070	1120	1170	1220	1270
6	251-300	T=300	1120	1170	1220	1270	1320	1370



DETAIL

A	E			N
	H=100	H=150	H=200	
630	116	166	216	300
678	113	163	213	
730	111	161	211	
778	109	159	209	
830	117	167	217	350
870	110	160	210	
920	108	158	208	
970	106	156	206	
1020	114	164	214	400
1070	112	162	212	
1120	111	161	211	
1170	109	159	209	
1220	117	167	217	450
1270	115	165	215	
1320	113	163	213	
1370	112	162	212	

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	C
ⓐ	ASTM A36	ASTM A36	ASTM A36
ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
ⓒ	A325	A325	A325
ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

HEIGHT MARK:(4)

MARK	H	h
1	100	50
2	150	100
3	200	150

LENGTH MARK:(5)

MARK	L
04	400
05	500
06	600
07	700
08	800
09	900
10	1000
11	1100

INDICATION:

SB-12-□□-□□-□□
(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-INSULATION MARK
4-HEIGHT MARK
5-LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF CRADLE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD. 3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- DIMENSION "E" HAS BEEN CALCULATED BASED ON CRADLE & CLAMP THICKNESS THAT HAS BEEN SPECIFIED ABOVE TABLE, FOR OTHER CRADLE THICKNESS "E" SHALL BE CALCULATED.

5- FOR DETAIL OF CLAMP SEE (SK-03), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

6- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

SUPPORT DESCRIPTION:	SHEET
GUIDE SHOE (COLD INSULATION) 20" ~ 30"	4
SB-12	4

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

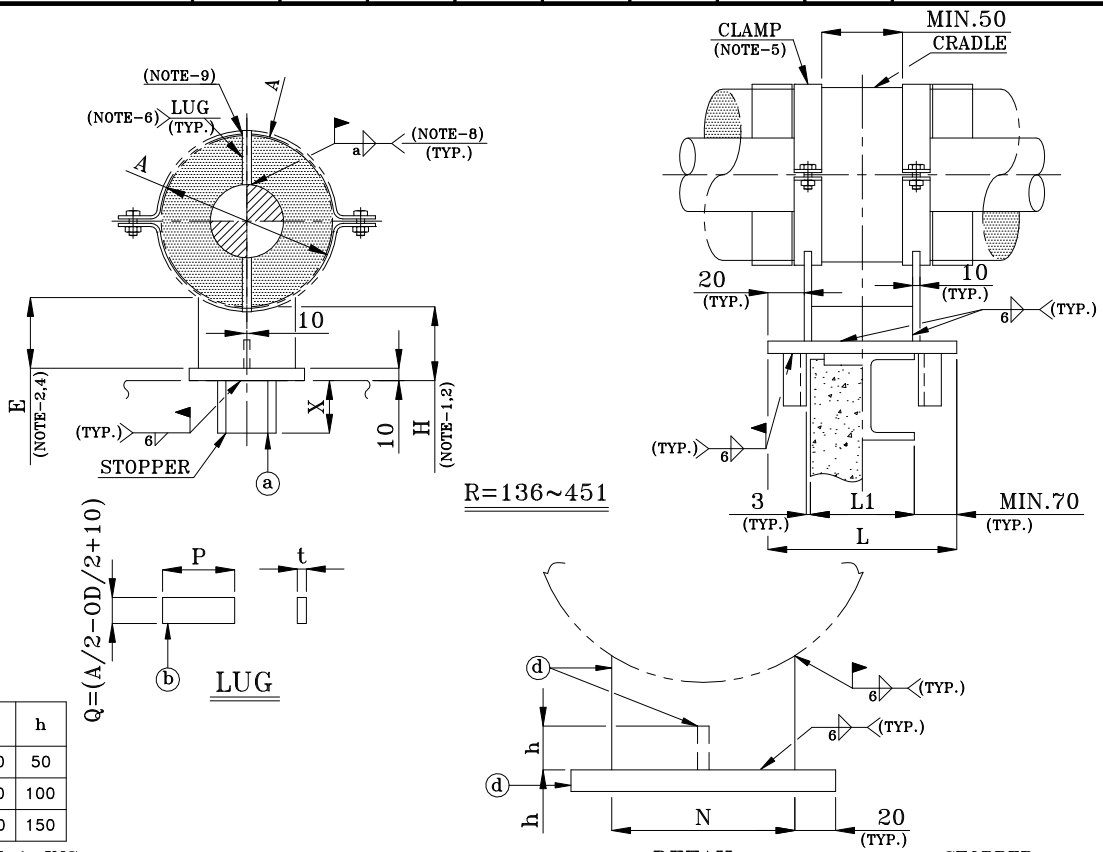
HIRGAN ENERGY

شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK



DETAIL

HEIGHT MARK:(4)

MARK	H	h
1	100	50
2	150	100
3	200	150

NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	1/2" 0A	3/4" 0B	1" 01	1 1/2" 1A
			A (FOR EACH PIPE SIZE)			
1	25-50	T=50	136	136	136	163
2	51-100	T=100	224	236	236	251
3	101-150	T=150	324	336	336	351
4	151-200	T=200	–	–	–	451
5	201-250	T=250	–	–	–	–
6	251-300	T=300	–	–	–	–

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	C
ⓐ	ASTM A36	ASTM A36	ASTM A36
ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
ⓒ	A325	A325	A325
ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

STOPPER MARK:(6)

MARK	X
1	100
2	200
3	300
4	400
5	500

A	E H=100	E H=150	E H=200	P	t	N	STOPPER
136	115	165	215	80	8	100	U80
163	111	161	211				
224	123	173	223			150	
236	121	171	221				
251	119	169	219	100			
324	110	160	210				
336	109	159	209				
351	108	158	208				
451	105	175	205				

LENGTH MARK:(5)

MARK	L
03	300
04	400
05	500
06	600
07	700
08	800

INDICATION:

SB-13-□□□-□□-□□□

(1) (2) (3) (4) (5) (6)

1-MATERIAL MARK
2-NPS MARK
3-INSULATION MARK
4-HEIGHT MARK
5-LENGTH MARK
6-STOPPER LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF CRADLE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD. 3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- DIMENSION "E" HAS BEEN CALCULATED BASED ON CRADLE & CLAMP THICKNESS THAT HAS BEEN SPECIFIED ABOVE TABLE, FOR OTHER CRADLE THICKNESS "E" SHALL BE CALCULATED.

5- FOR DETAIL OF CLAMP SEE (SK-03), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

6- FOR SIZE OF 1/2" UP TO 1 1/2", TWO LUGS AND FOR LARGER THAN 2", FOUR LUGS SHALL BE USED. 7- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1. 8- a=RUN PIPE WALL THICKNESS.

9- PROTRUSION SECTION SHALL BE COVERED BY COLD INSULATION MATERIAL.

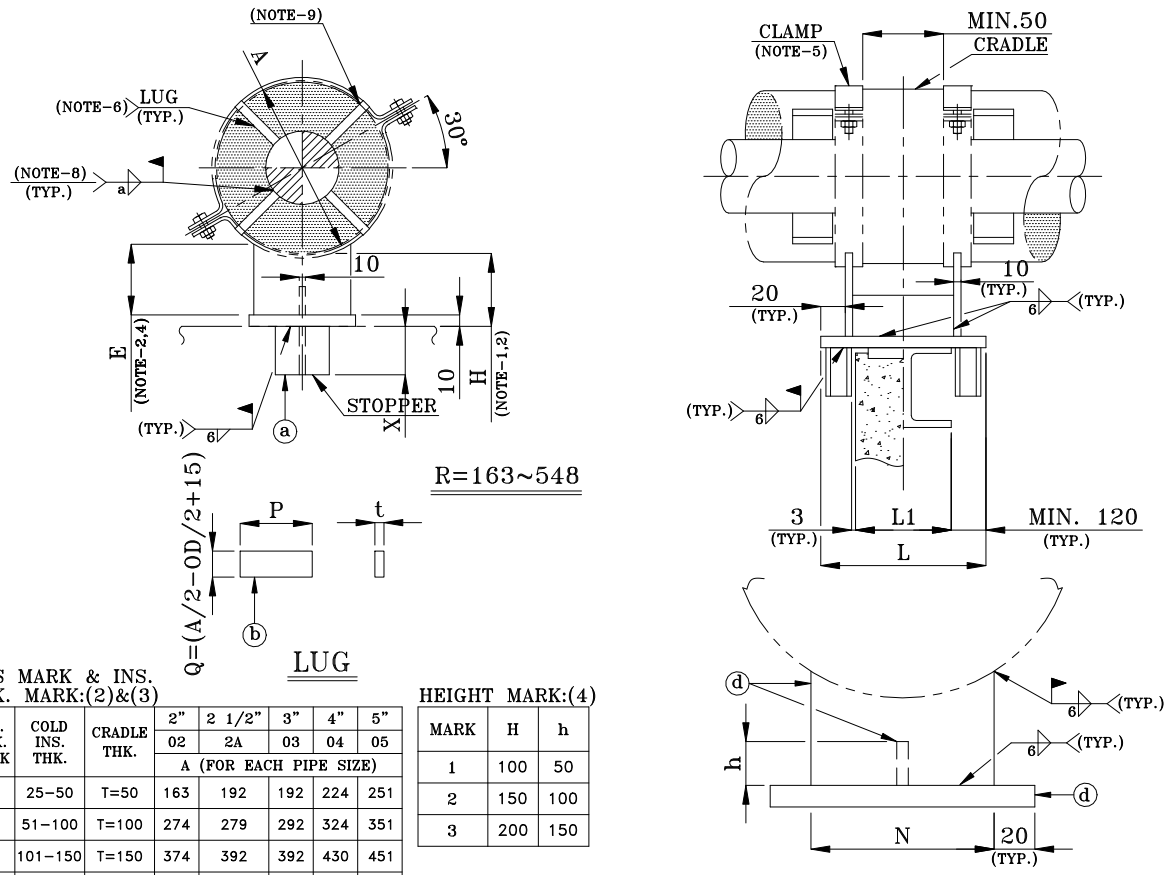
SUPPORT DESCRIPTION:	SHEET
STOP SHOE (COLD INSULATION) 1/2" ~ 1 1/2"	1
SB-13	4

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 126 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

053-073-9184



NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	2" 02	2 1/2" 2A	3" 03	4" 04	5" 05
			A (FOR EACH PIPE SIZE)				
1	25-50	T=50	163	192	192	224	251
2	51-100	T=100	274	279	292	324	351
3	101-150	T=150	374	392	392	430	451
4	151-200	T=200	474	492	492	530	548
5	201-250	T=250	-	-	-	-	-
6	251-300	T=300	-	-	-	-	-

HEIGHT MARK:(4)

MARK	H	h
1	100	50
2	150	100
3	200	150

A	E H=100	E H=150	E H=200	P	t	N	STOPPER
163	130	180	230	100	10	150	HEB100
192	122	172	222				
224	116	166	216				
251	113	163	213				
274	130	180	230			200	
279	129	179	229				
292	128	178	228				
324	123	173	223				
351	117	167	217	150			
374	115	165	215				
392	114	164	214				
430	126	176	226			250	
451	124	174	224				
474	122	172	222				
492	121	171	221				
530	118	168	218				
548	117	167	217				

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	C
ⓐ	ASTM A36	ASTM A36	ASTM A36
ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
ⓒ	A325	A325	A325
ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

LENGTH MARK:(5)

MARK	L
04	400
05	500
06	600
07	700
08	800
09	900

STOPPER MARK:(6)

MARK	X
1	100
2	200
3	300
4	400
5	500
6	600

INDICATION:

SB-13-□□□-□□-□□□

(1) (2) (3) (4) (5) (6)

1-MATERIAL MARK
2-NPS MARK
3-INSULATION MARK
4-HEIGHT MARK
5-LENGTH MARK
6-STOPPER LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF CRADLE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD. 3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- DIMENSION "E" HAS BEEN CALCULATED BASED ON CRADLE & CLAMP THICKNESS THAT HAS BEEN SPECIFIED ABOVE TABLE, FOR OTHER CRADLE THICKNESS "E" SHALL BE CALCULATED.

5- FOR DETAIL OF CLAMP SEE (SK-03), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

6- FOR SIZE OF 1/2" UP TO 1 1/2", TWO LUGS AND FOR LARGER THAN 2", FOUR LUGS SHALL BE USED. 7- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1. 8- a=RUN PIPE WALL THICKNESS FOR SIZE OF 2" AND a=6mm FOR LARGER THAN 2". 9- PROTRUSION SECTION SHALL BE COVERED BY COLD INSULATION MATERIAL.

SUPPORT DESCRIPTION:	SHEET
STOP SHOE (COLD INSULATION) 2" ~ 5"	2
SB-13	4

NISOC

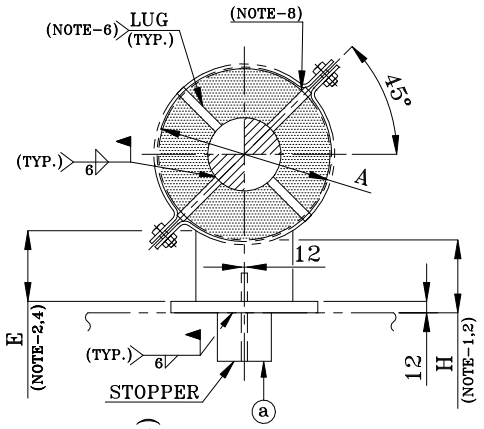
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

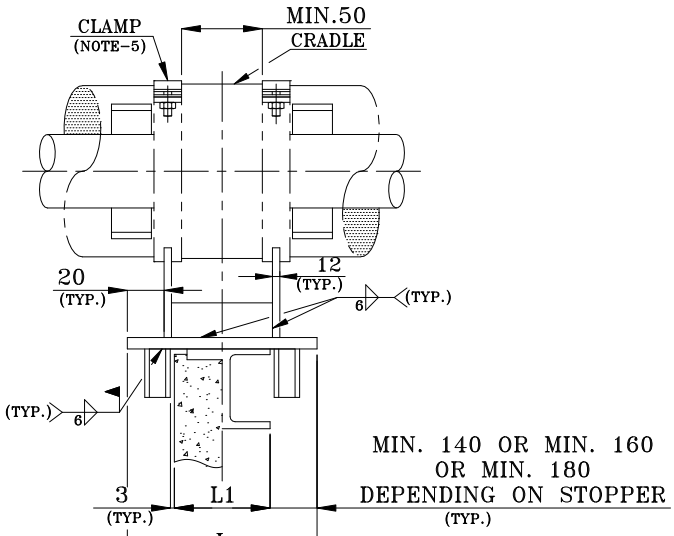
PEDCO
HIRGAN ENERGY

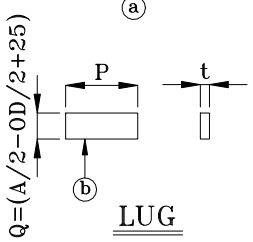
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

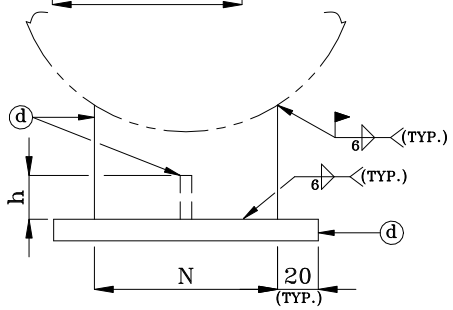






R=274~970

LUG



DETAIL

NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	6" 06	8" 08	10" 10	12" 12	14" 14	16" 16	18" 18
			A (FOR EACH PIPE SIZE)						
1	25-50	T=50	274	324	392	430	474	530	578
2	51-100	T=100	374	430	492	530	578	630	678
3	101-150	T=150	474	530	578	630	678	730	778
4	151-200	T=200	578	630	678	730	778	830	870
5	201-250	T=250	-	730	778	830	870	920	970
6	251-300	T=300	-	-	-	-	-	-	-

HEIGHT MARK:(4)

MARK	H	h
1	100	50
2	150	100
3	200	150

A	E H=100	E H=150	E H=200	P	t	N	STOPPER
274	123	173	223	200	10	200	HEB120
324	116	166	216				
374	112	162	212				
392	111	161	211				
430	122	172	222			250	HEB140
474	119	169	219				
492	117	167	217				
530	115	165	215				
578	112	162	212				
630	116	168	216	250		300	HEB160
678	113	163	213				
730	111	161	211				
778	109	159	209				
830	117	167	217			350	
870	115	165	215				
920	114	164	214				
970	112	162	212				

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	C
a	ASTM A36	ASTM A36	ASTM A36
b	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
c	A325	A325	A325
d	A283 Gr.C	A283 Gr.C	A283 Gr.C

LENGTH MARK:(5)

MARK	L
05	500
06	600
07	700
08	800
09	900
10	1000

STOPPER MARK:(6)

MARK	X
2	200
3	300
4	400
5	500
6	600

INDICATION:

SB-13-[ ][ ]-[ ][ ]-[ ][ ]
(1) (2) (3) (4) (5) (6)

1-MATERIAL MARK
2-NPS MARK
3-INSULATION MARK
4-HEIGHT MARK
5-LENGTH MARK
6-STOPPER LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF CRADLE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD. 3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- DIMENSION "E" HAS BEEN CALCULATED BASED ON CRADLE & CLAMP THICKNESS THAT HAS BEEN SPECIFIED ABOVE TABLE, FOR OTHER CRADLE THICKNESS "E" SHALL BE CALCULATED.

5- FOR DETAIL OF CLAMP SEE (SK-03), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

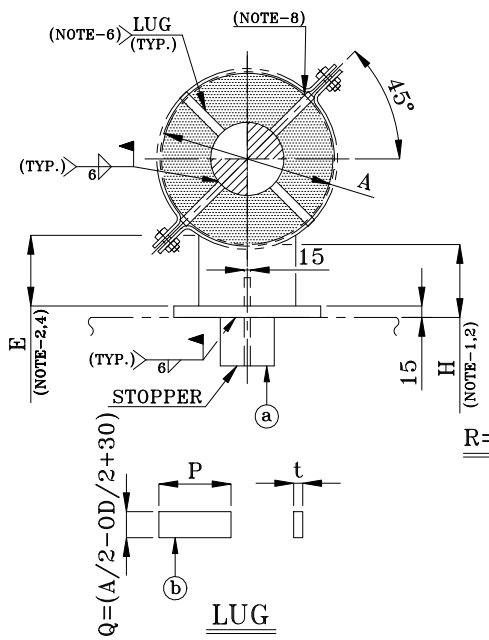
6- FOR SIZE OF 1/2" UP TO 1 1/2", TWO LUGS AND FOR LARGER THAN 2", FOUR LUGS SHALL BE USED. 7- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1. 8- PROTRUSION SECTION SHALL BE COVERED BY COLD INSULATION MATERIAL.

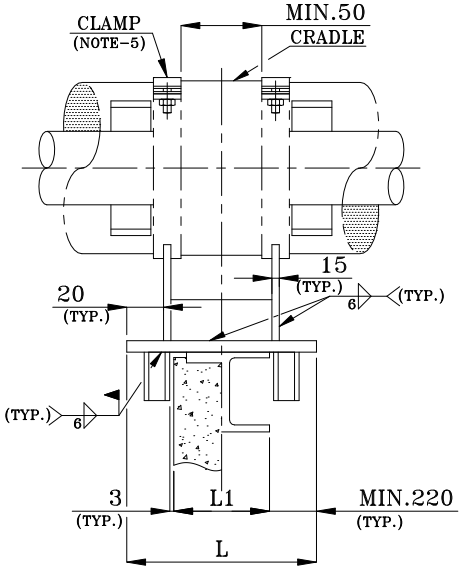
SUPPORT DESCRIPTION:	SHEET
STOP SHOE (COLD INSULATION) 6" ~ 18"	3
SB-13	4

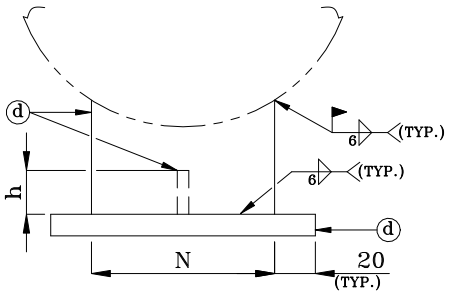
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 128 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02







NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	20"	22"	24"	26"	28"	30"
			20	22	24	26	28	30
			A (FOR EACH PIPE SIZE)					
1	25-50	T=50	630	678	730	778	830	870
2	51-100	T=100	730	778	830	870	920	970
3	101-150	T=150	830	870	920	970	1020	1070
4	151-200	T=200	920	970	1020	1070	1120	1170
5	201-250	T=250	1020	1070	1120	1170	1220	1270
6	251-300	T=300	1120	1170	1220	1270	1320	1370

HEIGHT MARK:(4)

MARK	H	h
1	100	50
2	150	100
3	200	150

A	E			P	t	N	STOPPER
	H=100	H=150	H=200				
630	116	166	216	300	12	300	HEB200
678	113	163	213				
730	111	161	211				
778	109	159	209			350	
830	117	167	217				
870	110	160	210				
920	108	158	208				
970	106	156	206				
1020	114	164	214			400	
1070	112	162	212				
1120	111	161	211				
1170	109	159	209			450	
1220	117	167	217				
1270	115	165	215				
1320	113	163	213				
1370	112	162	212				

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	C
ⓐ	ASTM A36	ASTM A36	ASTM A36
ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
ⓒ	A325	A325	A325
ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

LENGTH MARK:(5)

MARK	L
06	600
07	700
08	800
09	900
10	1000
11	1100

STOPPER MARK:(6)

MARK	X
2	200
3	300
4	400
5	500
6	600

INDICATION:

SB-13-□□□-□□-□□□
(1) (2) (3) (4) (5) (6)

1-MATERIAL MARK
2-NPS MARK
3-INSULATION MARK
4-HEIGHT MARK
5-LENGTH MARK
6-STOPPER LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF CRADLE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD. 3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- DIMENSION "E" HAS BEEN CALCULATED BASED ON CRADLE & CLAMP THICKNESS THAT HAS BEEN SPECIFIED ABOVE TABLE, FOR OTHER CRADLE THICKNESS "E" SHALL BE CALCULATED.

5- FOR DETAIL OF CLAMP SEE (SK-03), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

6- FOR SIZE OF 1/2" UP TO 1 1/2", TWO LUGS AND FOR LARGER THAN 2", FOUR LUGS SHALL BE USED.

7- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

8- PROTRUSION SECTION SHALL BE COVERED BY COLD INSULATION MATERIAL.

SUPPORT DESCRIPTION:	SHEET
STOP SHOE (COLD INSULATION) 20" ~ 30"	4
SB-13	4

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

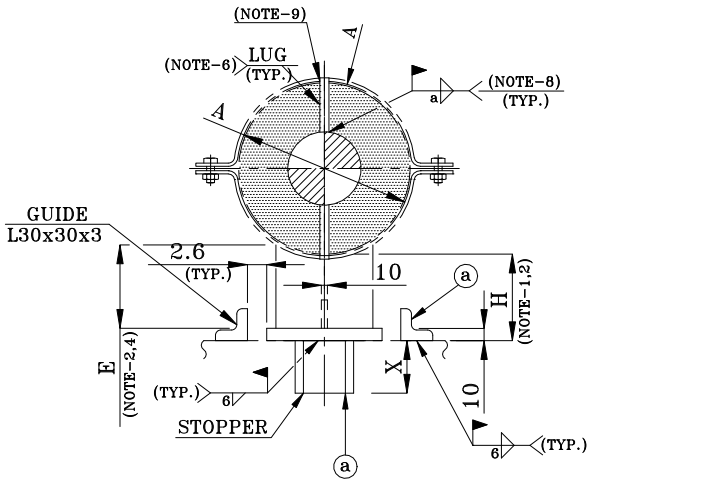
HIRGAN ENERGY

شماره پیمان:

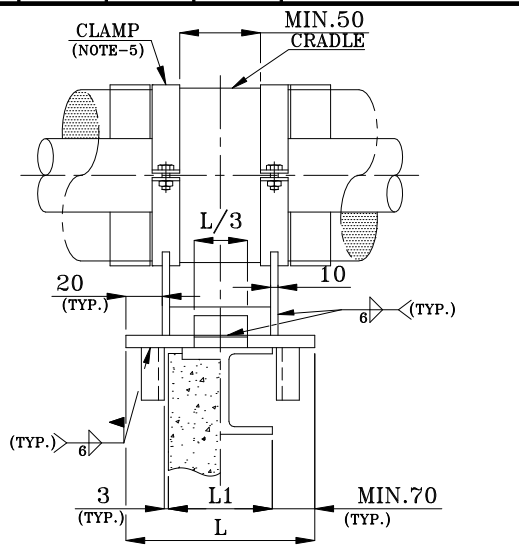
053-073-9184

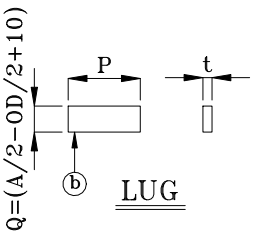
STANDARD PIPE SUPPORT DRAWINGS

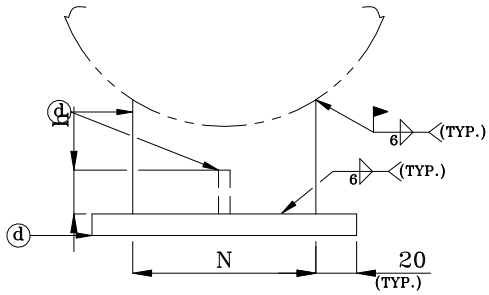
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



R=136~451







DETAIL

HEIGHT MARK:(4)

MARK	H	h
1	100	50
2	150	100
3	200	150

NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	1/2" 0A	3/4" 0B	1" 01	1 1/2" 1A
			A (FOR EACH PIPE SIZE)			
1	25-50	T=50	136	136	136	163
2	51-100	T=100	224	236	236	251
3	101-150	T=150	324	336	336	351
4	151-200	T=200	-	-	-	451
5	201-250	T=250	-	-	-	-
6	251-300	T=300	-	-	-	-

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	C
ⓐ	ASTM A36	ASTM A36	ASTM A36
ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
ⓒ	A325	A325	A325
ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

STOPPER MARK:(6)

MARK	X
1	100
2	200
3	300
4	400
5	500

A	E H=100	E H=150	E H=200	P	t	N	STOPPER
136	115	165	215	80	8	100	U80
163	111	161	211				
224	123	173	223			150	
236	121	171	221				
251	119	169	219	100			
324	110	160	210				
336	109	159	209				
351	108	158	208				
451	105	175	205				

LENGTH MARK:(5)

MARK	L
03	300
04	400
05	500
06	600
07	700
08	800

INDICATION:

SB-14-□□-□□-□□

(1) (2) (3) (4) (5) (6)

1-MATERIAL MARK
2-NPS MARK
3-INSULATION MARK
4-HEIGHT MARK
5-LENGTH MARK
6-STOPPER LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF CRADLE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD. 3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- DIMENSION "E" HAS BEEN CALCULATED BASED ON CRADLE & CLAMP THICKNESS THAT HAS BEEN SPECIFIED ABOVE TABLE, FOR OTHER CRADLE THICKNESS "E" SHALL BE CALCULATED.

5- FOR DETAIL OF CLAMP SEE (SK-03), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

6- FOR SIZE OF 1/2" UP TO 1 1/2", TWO LUGS AND FOR LARGER THAN 2", FOUR LUGS SHALL BE USED. 7- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1. 8- a=RUN PIPE WALL THICKNESS.

9- PROTRUSION SECTION SHALL BE COVERED BY COLD INSULATION MATERIAL.

SUPPORT DESCRIPTION:

SEMI ANCHOR SHOE (COLD INSULATION) 1/2" ~ 1 1/2"

SB-14

SHEET 1 / 4

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

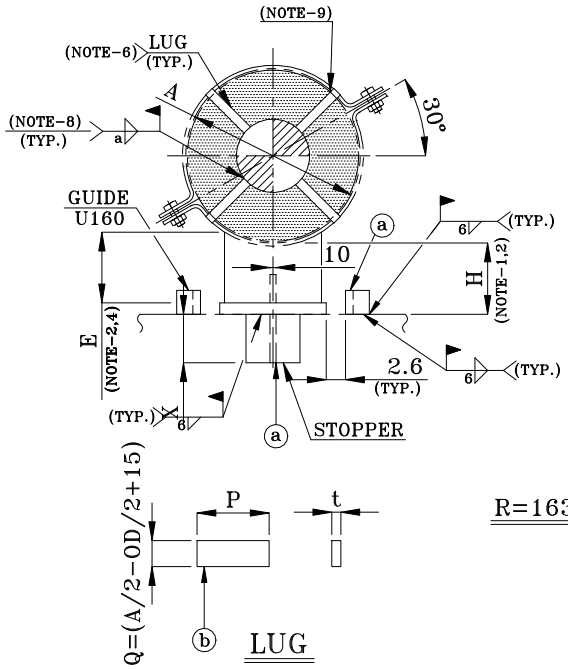
PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

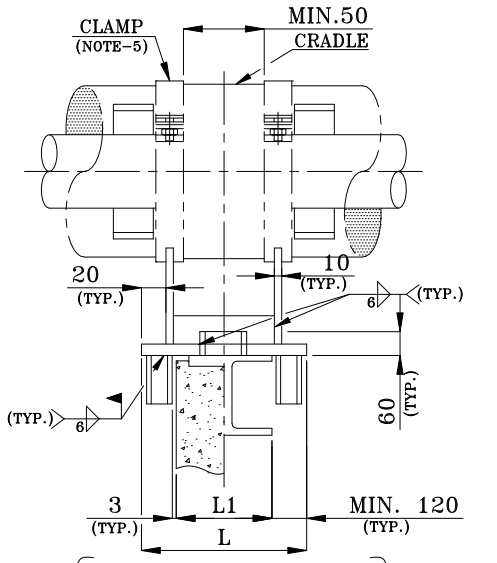
STANDARD PIPE SUPPORT DRAWINGS

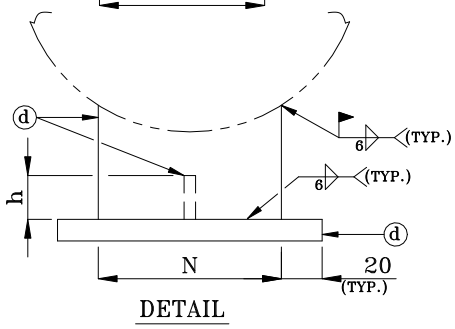
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 130 از 394



R=163~548





DETAIL

NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	2" 02	2 1/2" 2A	3" 03	4" 04	5" 05
			A (FOR EACH PIPE SIZE)				
1	25-50	T=50	163	192	192	224	251
2	51-100	T=100	274	279	292	324	351
3	101-150	T=150	374	392	392	430	451
4	151-200	T=200	474	492	492	530	548
5	201-250	T=250	-	-	-	-	-
6	251-300	T=300	-	-	-	-	-

STOPPER MARK:(6)

MARK	X
1	100
2	200
3	300
4	400
5	500
6	600

HEIGHT MARK:(4)

MARK	H	h
1	100	50
2	150	100
3	200	150

A	E H=100	E H=150	E H=200	P	t	N	STOPPER
163	130	180	230	100	10	150	HEB100
192	122	172	222				
224	116	166	216				
251	113	163	213				
274	130	180	230			200	
279	129	179	229				
292	128	178	228				
324	123	173	223				
351	117	167	217	150			
374	115	165	215				
392	114	164	214				
430	126	176	226			250	
451	124	174	224				
474	122	172	222				
492	121	171	221				
530	118	168	218				
548	117	167	217				

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	C
ⓐ	ASTM A36	ASTM A36	ASTM A36
ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
ⓒ	A325	A325	A325
ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

LENGTH MARK:(5)

MARK	L
04	400
05	500
06	600
07	700
08	800
09	900

INDICATION:

SB-14-□□-□□-□□-□□
(1) (2) (3) (4) (5) (6)

1-MATERIAL MARK
2-NPS MARK
3-INSULATION MARK
4-HEIGHT MARK
5-LENGTH MARK
6-STOPPER LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF CRADLE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD. 3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- DIMENSION "E" HAS BEEN CALCULATED BASED ON CRADLE & CLAMP THICKNESS THAT HAS BEEN SPECIFIED ABOVE TABLE, FOR OTHER CRADLE THICKNESS "E" SHALL BE CALCULATED.

5- FOR DETAIL OF CLAMP SEE (SK-03), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

6- FOR SIZE OF 1/2" UP TO 1 1/2", TWO LUGS AND FOR LARGER THAN 2", FOUR LUGS SHALL BE USED. 7- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1. 8- a=RUN PIPE WALL THICKNESS FOR SIZE OF 2" AND a=6mm FOR LARGER THAN 2". 9- PROTRUSION SECTION SHALL BE COVERED BY COLD INSULATION MATERIAL.

SUPPORT DESCRIPTION:	SHEET
SEMI ANCHOR SHOE (COLD INSULATION) 2" ~ 5"	2
SB-14	4

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

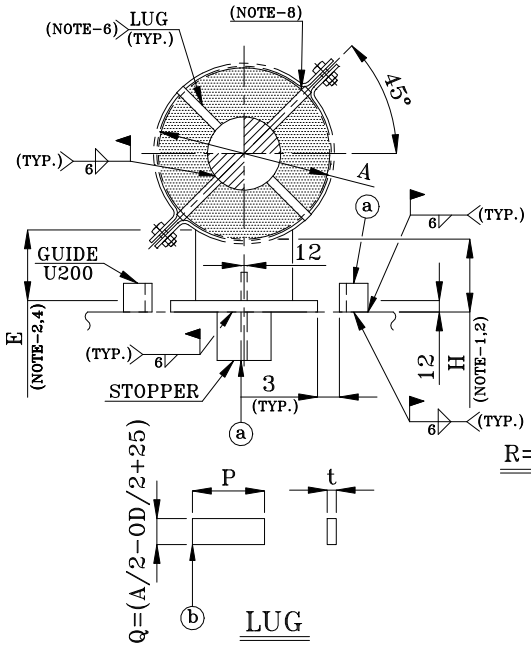
PEDCO

HIRGAN ENERGY

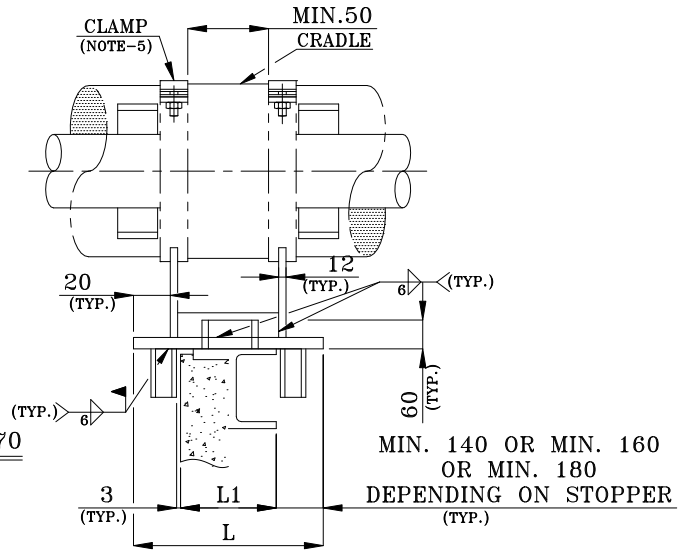
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK



LUG



R=274~970

NPS MARK & INS. THK. MARK:(2)&(3)

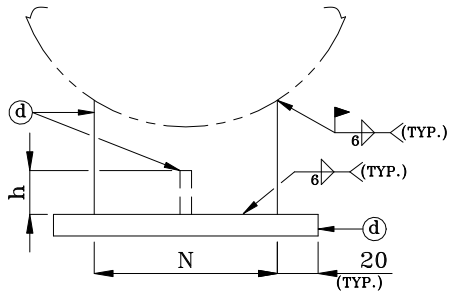
INS. THK. MARK	COLD INS. THK.	CRADLE THK.	6" 06	8" 08	10" 10	12" 12	14" 14	16" 16	18" 18
			A (FOR EACH PIPE SIZE)						
1	25-50	T=50	274	324	392	430	474	530	578
2	51-100	T=100	374	430	492	530	578	630	678
3	101-150	T=150	474	530	578	630	678	730	778
4	151-200	T=200	578	630	678	730	778	830	870
5	201-250	T=250	-	730	778	830	870	920	970
6	251-300	T=300	-	-	-	-	-	-	-

LENGTH MARK:(5)

MARK	L
05	500
06	600
07	700
08	800
09	900
10	1000

STOPPER MARK:(6)

MARK	X
2	200
3	300
4	400
5	500
6	600



DETAIL

A	E H=100	E H=150	E H=200	P	t	N	STOPPER
274	123	173	223	200	10	200	HEB120
324	116	166	216				
374	112	162	212				
392	111	161	211				
430	122	172	222			250	HEB140
474	119	169	219				
492	117	167	217				
530	115	165	215				
578	112	162	212				
630	116	168	216	250		300	HEB160
678	113	163	213				
730	111	161	211				
778	109	159	209				
830	117	167	217			350	
870	115	165	215				
920	114	164	214				
970	112	162	212				

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	C
ⓐ	ASTM A36	ASTM A36	ASTM A36
ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
ⓒ	A325	A325	A325
ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

HEIGHT MARK:(4)

MARK	H	h
1	100	50
2	150	100
3	200	150

INDICATION:

SB-14-□□□-□□-□□□
(1) (2) (3) (4) (5) (6)

1-MATERIAL MARK
2-NPS MARK
3-INSULATION MARK
4-HEIGHT MARK
5-LENGTH MARK
6-STOPPER LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF CRADLE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD. 3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- DIMENSION "E" HAS BEEN CALCULATED BASED ON CRADLE & CLAMP THICKNESS THAT HAS BEEN SPECIFIED ABOVE TABLE, FOR OTHER CRADLE THICKNESS "E" SHALL BE CALCULATED.

5- FOR DETAIL OF CLAMP SEE (SK-03), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

6- FOR SIZE OF 1/2" UP TO 1 1/2", TWO LUGS AND FOR LARGER THAN 2", FOUR LUGS SHALL BE USED. 7- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1. 8- PROTRUSION SECTION SHALL BE COVERED BY COLD INSULATION MATERIAL.

SUPPORT DESCRIPTION:	SHEET
SEMI ANCHOR SHOE (COLD INSULATION) 6" ~ 18"	3
SB-14	4

NISOC

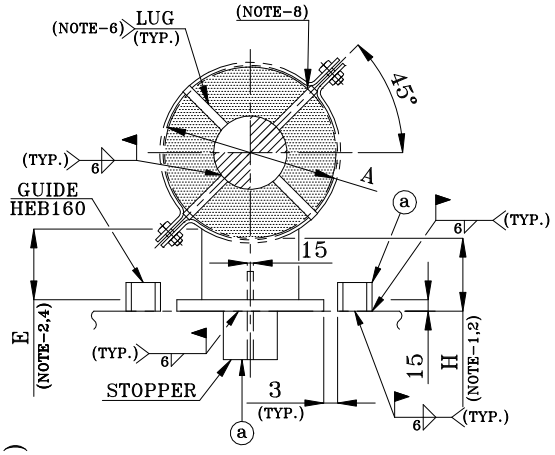
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

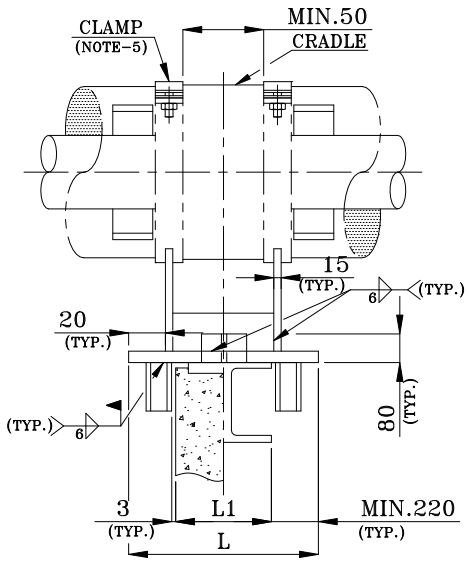
PEDCO
HIRGAN ENERGY

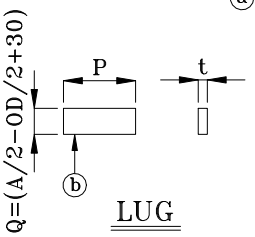
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

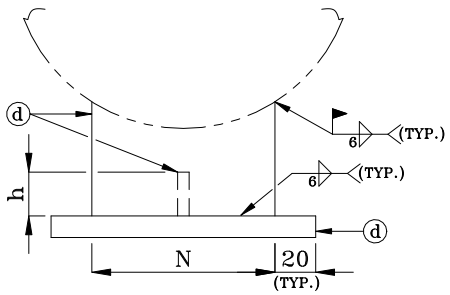






LUG

R=630~1370



DETAIL

NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	20"	22"	24"	26"	28"	30"
			20	22	24	26	28	30
			A (FOR EACH PIPE SIZE)					
1	25-50	T=50	630	678	730	778	830	870
2	51-100	T=100	730	778	830	870	920	970
3	101-150	T=150	830	870	920	970	1020	1070
4	151-200	T=200	920	970	1020	1070	1120	1170
5	201-250	T=250	1020	1070	1120	1170	1220	1270
6	251-300	T=300	1120	1170	1220	1270	1320	1370

LENGTH MARK:(5)

MARK	L
06	600
07	700
08	800
09	900
10	1000
11	1100

STOPPER MARK:(6)

MARK	X
2	200
3	300
4	400
5	500
6	600

A	E			P	t	N	STOPPER
	H=100	H=150	H=200				
630	116	166	216	300	12	300	HEB200
678	113	163	213				
730	111	161	211				
778	109	159	209			350	
830	117	167	217				
870	110	160	210				
920	108	158	208				
970	106	156	206				
1020	114	164	214			400	
1070	112	162	212				
1120	111	161	211				
1170	109	159	209				
1220	117	167	217			450	
1270	115	165	215				
1320	113	163	213				
1370	112	162	212				

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	C
ⓐ	ASTM A36	ASTM A36	ASTM A36
ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
ⓒ	A325	A325	A325
ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

HEIGHT MARK:(4)

MARK	H	h
1	100	50
2	150	100
3	200	150

INDICATION:

SB-14-□□□-□□-□□□
(1) (2) (3) (4) (5) (6)

1-MATERIAL MARK
2-NPS MARK
3-INSULATION MARK
4-HEIGHT MARK
5-LENGTH MARK
6-STOPPER LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF CRADLE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD. 3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- DIMENSION "E" HAS BEEN CALCULATED BASED ON CRADLE & CLAMP THICKNESS THAT HAS BEEN SPECIFIED ABOVE TABLE, FOR OTHER CRADLE THICKNESS "E" SHALL BE CALCULATED.

5- FOR DETAIL OF CLAMP SEE (SK-03), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

6- FOR SIZE OF 1/2" UP TO 1 1/2", TWO LUGS AND FOR LARGER THAN 2", FOUR LUGS SHALL BE USED. 7- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1. 8- PROTRUSION SECTION SHALL BE COVERED BY COLD INSULATION MATERIAL.

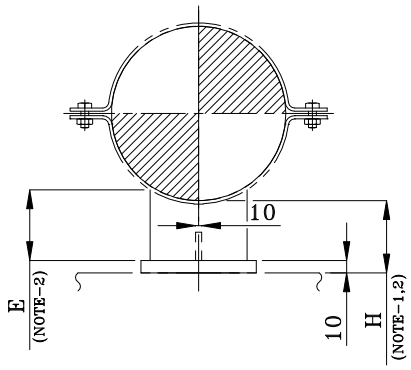
SUPPORT DESCRIPTION:	SHEET
SEMI ANCHOR SHOE (COLD INSULATION) 20" ~ 30"	4
SB-14	4

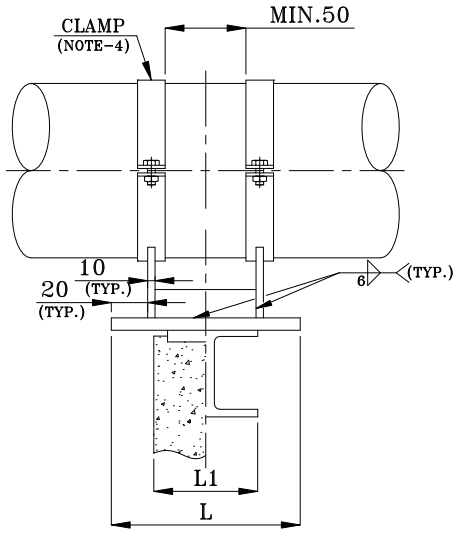
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 133 از 394

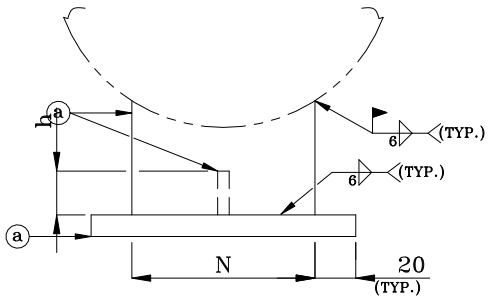
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

053-073-9184





1/2"~6"



DETAIL

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N
0A	1/2"	100	98	20
		150	148	
		200	198	
0B	3/4"	100	99	25
		150	149	
		200	199	
01	1"	100	99	
		150	149	
		200	199	
1A	1+1/2"	100	99	30
		150	149	
		200	199	
02	2"	100	96	35
		150	146	
		200	196	
03	3"	100	96	40
		150	146	
		200	196	
04	4"	100	94	45
		150	144	
		200	194	
06	6"	100	94	50
		150	144	
		200	194	

MATERIAL MARK:(1)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓑ	A283 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
350°C TO 400°C	MARK	B	E	H
	ⓐ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓑ	A285 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
400°C TO 550°C	MARK	C	F	J
	ⓐ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓑ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	–	ASTM A36	ASTM A36

LENGTH MARK:(4)

MARK	L
02	200
03	300
04	400
05	500
06	600
07	700
08	800

HEIGHT MARK:(3)

MARK	H	h
1	100	50
2	150	100
3	200	150

INDICATION:

SB-15-□□□-□-□□□

(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF PIPE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- FOR DETAIL OF CLAMP SEE (SK-01/05), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

5- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

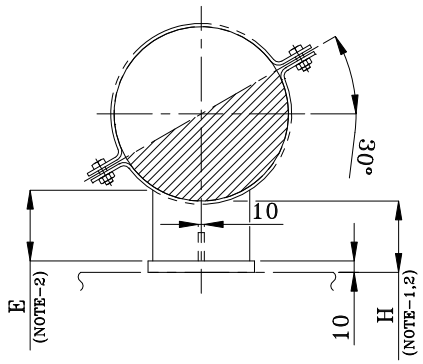
SUPPORT DESCRIPTION:	SHEET
SLIDE CLAMPED SHOE 1/2" ~ 6"	1
SB-15	4

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

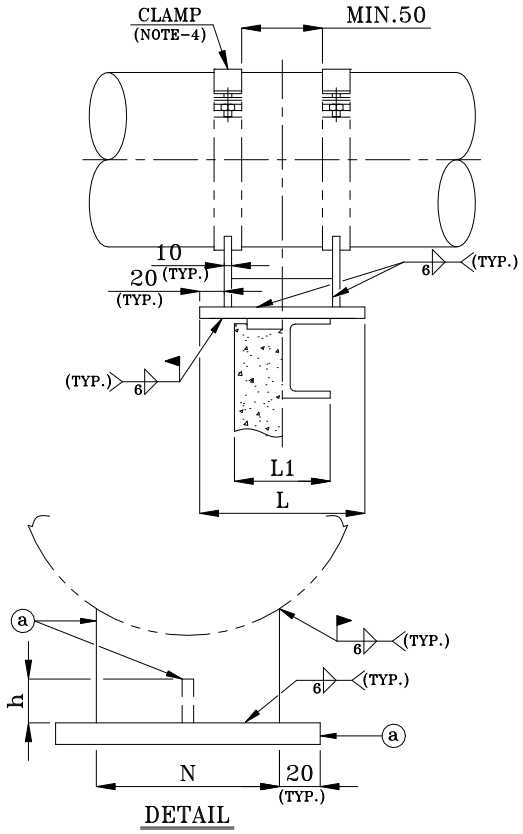
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 134 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

053-073-9184



8"~20



NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N
08	8"	100	113	150
		150	163	
		200	213	
10	10"	100	105	
		150	155	
		200	205	
12	12"	100	115	200
		150	165	
		200	215	
14	14"	100	113	
		150	163	
		200	213	
16	16"	100	124	250
		150	174	
		200	224	
18	18"	100	119	
		150	169	
		200	219	
20	20"	100	110	
		150	160	
		200	210	

LENGTH MARK:(4)

MARK	L
03	300
04	400
05	500
06	600
07	700
08	800
09	900

MATERIAL MARK:(1)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓑ	A283 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
350°C TO 400°C	MARK	B	E	H
	ⓐ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓑ	A285 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
400°C TO 550°C	MARK	C	F	J
	ⓐ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓑ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	–	ASTM A36	ASTM A36

HEIGHT MARK:(3)

MARK	H	h
1	100	50
2	150	100
3	200	150

INDICATION:

SB-15-[ ][ ]-[ ]-[ ][ ]

(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF PIPE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- FOR DETAIL OF CLAMP SEE (SK-01), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

5- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

SUPPORT DESCRIPTION:	SHEET
SLIDE CLAMPED SHOE 8" ~ 20"	2
SB-15	4

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

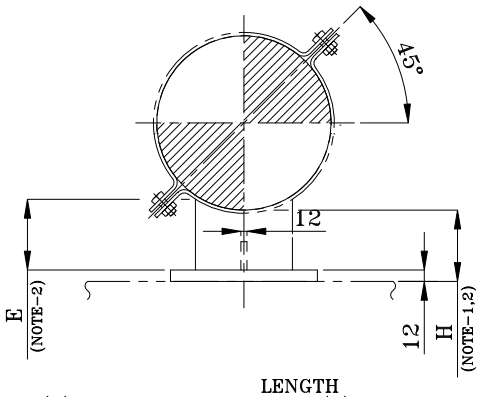
HIRGAN ENERGY

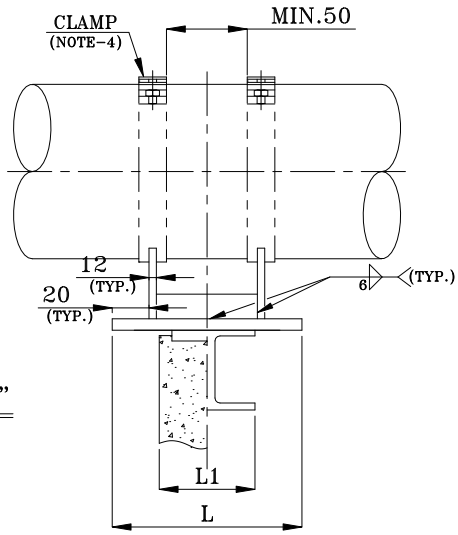
شماره پیمان:

053-073-9184

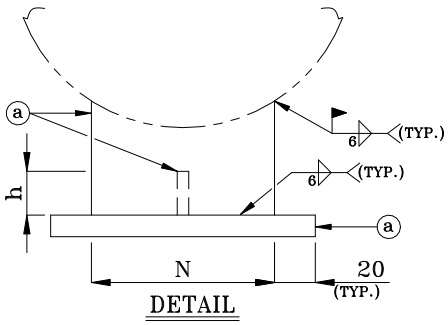
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02





22"~36"



DETAIL

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N
22	22"	100	120	300
		150	170	
		200	220	
24	24"	100	117	
		150	167	
		200	217	
26	26"	100	121	350
		150	171	
		200	221	
28	28"	100	117	
		150	167	
		200	217	
30	30"	100	127	400
		150	177	
		200	227	
32	32"	100	124	
		150	174	
		200	224	
34	34"	100	120	
		150	170	
		200	220	
36	36"	100	130	450
		150	180	
		200	230	

LENGTH MARK:(4)

MARK	L
03	300
04	400
05	500
06	600
07	700
08	800
09	900
10	1000

MATERIAL MARK:(1)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓑ	A283 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
350°C TO 400°C	MARK	B	E	H
	ⓐ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓑ	A285 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
400°C TO 550°C	MARK	C	F	J
	ⓐ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓑ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	–	ASTM A36	ASTM A36

HEIGHT MARK:(3)

MARK	H	h
1	100	50
2	150	100
3	200	150

INDICATION:

SB-15-□□□-□-□□

(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF PIPE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- FOR DETAIL OF CLAMP SEE (SK-01/05), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

5- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

SUPPORT DESCRIPTION:	SHEET
SLIDE CLAMPED SHOE 22" ~ 36"	3
SB-15	4

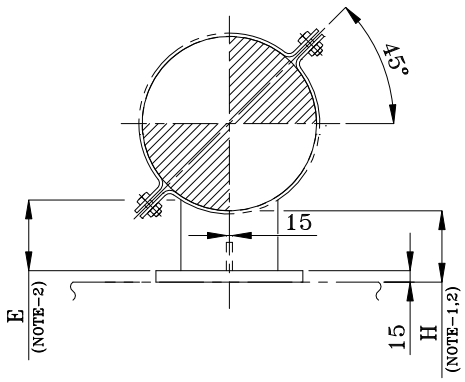
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

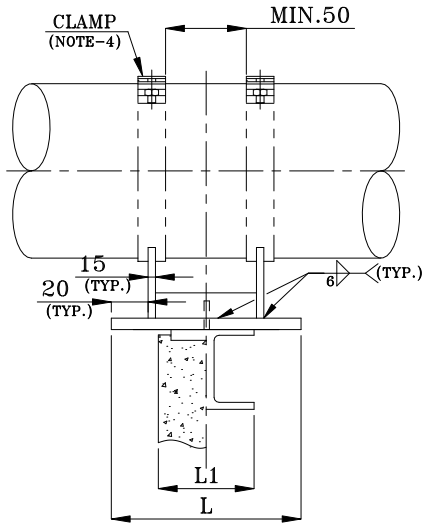
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

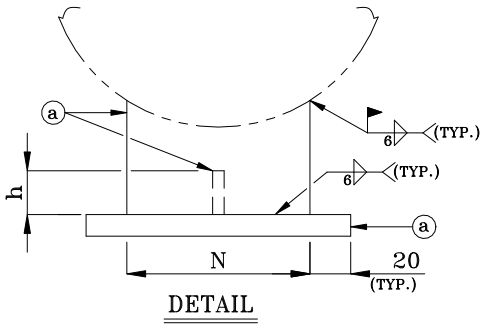
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 136 از 394





38"~42"



DETAIL

LENGTH MARK:(4)

MARK	L
03	300
04	400
05	500
06	600
07	700
08	800
09	900
10	1000
11	1100

MATERIAL MARK:(1)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓑ	A283 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
350°C TO 400°C	MARK	B	E	H
	ⓐ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓑ	A285 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
400°C TO 550°C	MARK	C	F	J
	ⓐ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓑ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	–	ASTM A36	ASTM A36

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N
38	38"	100	127	450
		150	177	
		200	227	
40	40"	100	136	500
		150	186	
		200	236	
42	42"	100	134	
		150	184	
		200	234	

HEIGHT MARK:(3)

MARK	H	h
1	100	50
2	150	100
3	200	150

INDICATION:

SB-15-□□□-□-□□ (1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF PIPE TO TOP OF STEEL.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
4- FOR DETAIL OF CLAMP SEE (SK-01/05), AND SEPARATED TAG IS REQUIRED FOR CLAMP.
5- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

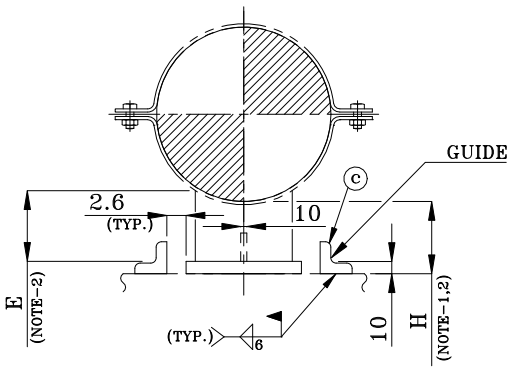
SUPPORT DESCRIPTION:	SHEET
SLIDE CLAMPED SHOE 38" ~ 42"	4
SB-15	4

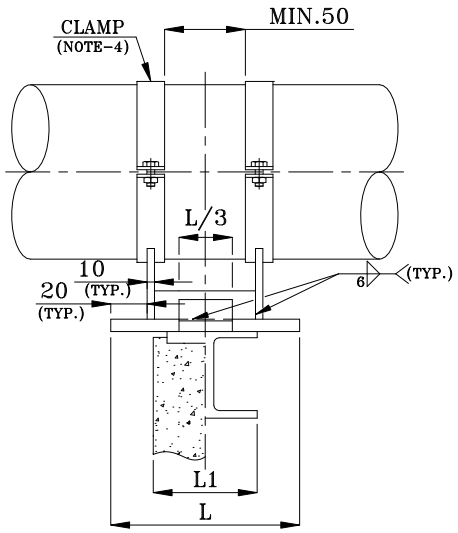
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 137 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

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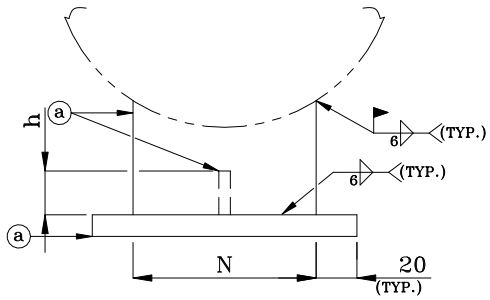




1/2"~6"

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	GUIDE
0A	1/2"	100	98	20	L 30x30x3
		150	148		
		200	198		
0B	3/4"	100	99	25	
		150	149		
		200	199		
01	1"	100	99		
		150	149		
		200	199		
1A	1+1/2"	100	99	30	
		150	149		
		200	199		
02	2"	100	96	35	
		150	146		
		200	196		
03	3"	100	96	40	
		150	146		
		200	196		
04	4"	100	94	45	
		150	144		
		200	194		
06	6"	100	94	50	
		150	144		
		200	194		



DETAIL

MATERIAL MARK:(1)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓑ	A283 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
350°C TO 400°C	MARK	B	E	H
	ⓐ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓑ	A285 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
400°C TO 550°C	MARK	C	F	J
	ⓐ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓑ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	–	ASTM A36	ASTM A36

LENGTH MARK:(4)

MARK	L
02	200
03	300
04	400
05	500
06	600
07	700
08	800

HEIGHT MARK:(3)

MARK	H	h
1	100	50
2	150	100
3	200	150

INDICATION:

SB-16-□□□-□-□□ (1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF PIPE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- FOR DETAIL OF CLAMP SEE (SK-01/05), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

5- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

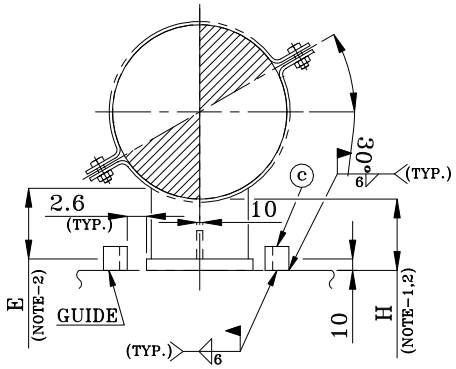
SUPPORT DESCRIPTION:	SHEET
GUIDE CLAMPED SHOE 1/2" ~ 6"	1
SB-16	4

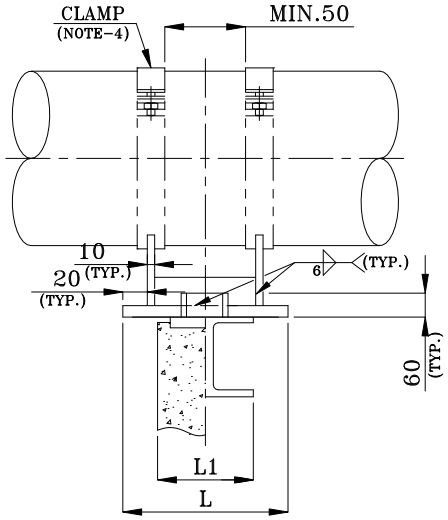
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 138 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

053-073-9184





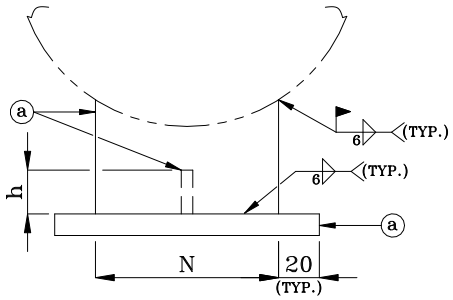
8"~20"

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	GUIDE
08	8"	100	113	150	U 80
		150	163		
		200	213		
10	10"	100	105		
		150	155		
		200	205		
12	12"	100	115	200	
		150	165		
		200	215		
14	14"	100	113		
		150	163		
		200	213		
16	16"	100	124	250	U 200
		150	174		
		200	224		
18	18"	100	119		
		150	169		
		200	219		
20	20"	100	110		
		150	160		
		200	210		

LENGTH MARK:(4)

MARK	L
03	300
04	400
05	500
06	600
07	700
08	800
09	900



DETAIL

MATERIAL MARK:(1)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓑ	A325	A325	A325
	ⓒ	–	–	–
350°C TO 400°C	MARK	B	E	H
	ⓐ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓑ	A325	A325	A325
	ⓒ	–	–	–
400°C TO 550°C	MARK	C	F	J
	ⓐ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓑ	–	A193 Gr.B16	A193 Gr.B8CL.1
	ⓒ	–	–	–

HEIGHT MARK:(3)

MARK	H	h
1	100	50
2	150	100
3	200	150

INDICATION:

SB-16-□□-□-□□

(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF PIPE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- FOR DETAIL OF CLAMP SEE (SK-01), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

5- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

SUPPORT DESCRIPTION:	SHEET
GUIDE CLAMPED SHOE 8" ~ 20"	2
SB-16	4

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

HIRGAN ENERGY

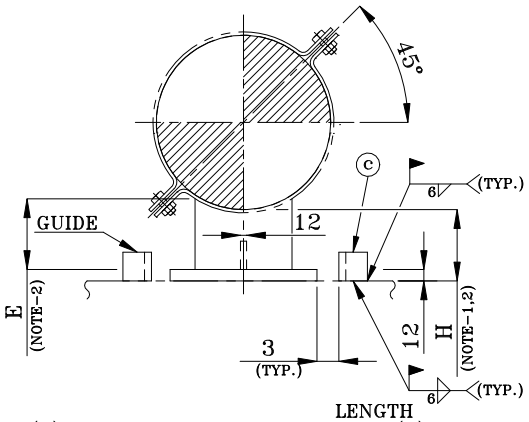
شماره پیمان:

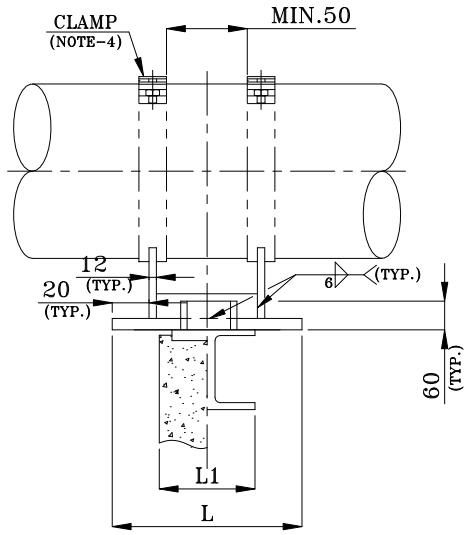
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

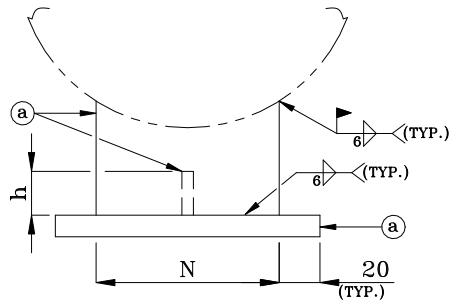
نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK

شماره صفحه: 139 از 394





22"~36"



DETAIL

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	GUIDE
22	22"	100	120	300	U 200
		150	170		
		200	220		
24	24"	100	117		
		150	167		
		200	217		
26	26"	100	121	350	
		150	171		
		200	221		
28	28"	100	117		
		150	167		
		200	217		
30	30"	100	127	400	
		150	177		
		200	227		
32	32"	100	124		
		150	174		
		200	224		
34	34"	100	120		
		150	170		
		200	220		
36	36"	100	130	450	
		150	180		
		200	230		

LENGTH MARK:(4)

MARK	L
03	300
04	400
05	500
06	600
07	700
08	800
09	900
10	1000

MATERIAL MARK:(1)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓑ	A325	A325	A325
	ⓒ	–	–	–
350°C TO 400°C	MARK	B	E	H
	ⓐ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓑ	A325	A325	A325
	ⓒ	–	–	–
400°C TO 550°C	MARK	C	F	J
	ⓐ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓑ	–	A193 Gr.B16	A193 Gr.B8CL.1
	ⓒ	–	–	–

HEIGHT MARK:(3)

MARK	H	h
1	100	50
2	150	100
3	200	150

INDICATION:

SB-16-□□□-□-□□□

(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF PIPE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- FOR DETAIL OF CLAMP SEE (SK-01/05), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

5- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

SUPPORT DESCRIPTION:	SHEET
GUIDE CLAMPED SHOE 22" ~ 36"	3
SB-16	4

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

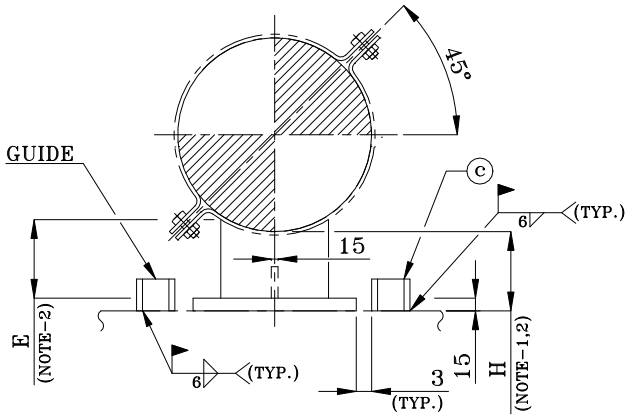
HIRGAN ENERGY

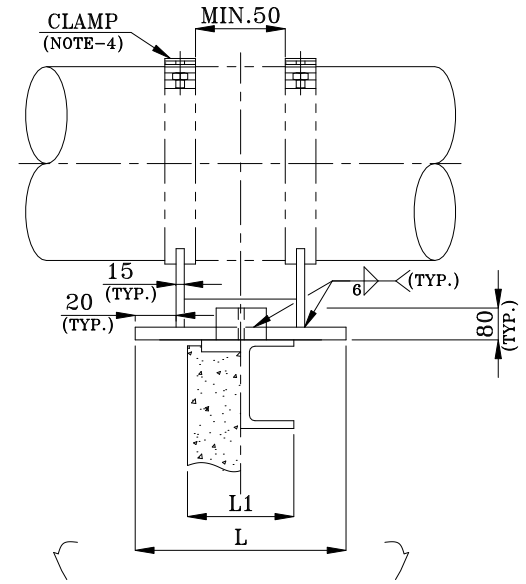
شماره پیمان:

053-073-9184

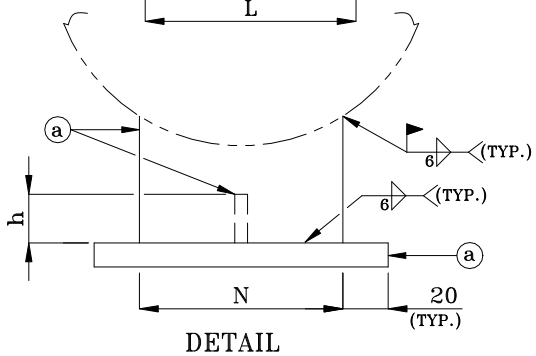
STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK





38"~42"



DETAIL

LENGTH MARK:(4)

MARK	L
03	300
04	400
05	500
06	600
07	700
08	800
09	900
10	1000
11	1100

HEIGHT MARK:(3)

MARK	H	h
1	100	50
2	150	100
3	200	150

MATERIAL MARK:(1)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓑ	A325	A325	A325
	ⓒ	–	–	–
350°C TO 400°C	MARK	B	E	H
	ⓐ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓑ	A325	A325	A325
	ⓒ	–	–	–
400°C TO 550°C	MARK	C	F	J
	ⓐ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓑ	–	A193 Gr.B16	A193 Gr.B8CL.1
	ⓒ	–	–	–

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	GUIDE
38	38"	100	127	450	HEB 160
		150	177		
		200	227		
40	40"	100	136	500	
		150	186		
		200	236		
42	42"	100	134		
		150	184		
		200	234		

INDICATION:

SB-16-[ ][ ][ ]-[ ]-[ ][ ]

(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF PIPE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- FOR DETAIL OF CLAMP SEE (SK-01/05), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

5- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

SUPPORT DESCRIPTION:	SHEET
GUIDE CLAMPED SHOE 38" ~ 42"	4
SB-16	4

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

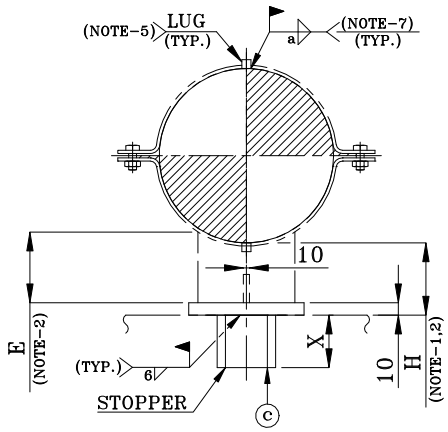
HIRGAN ENERGY

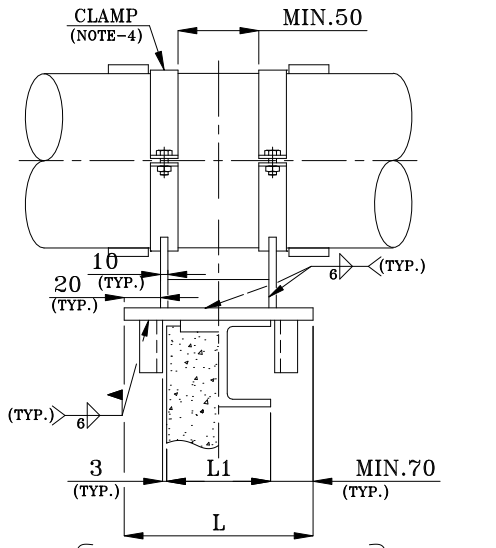
شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK

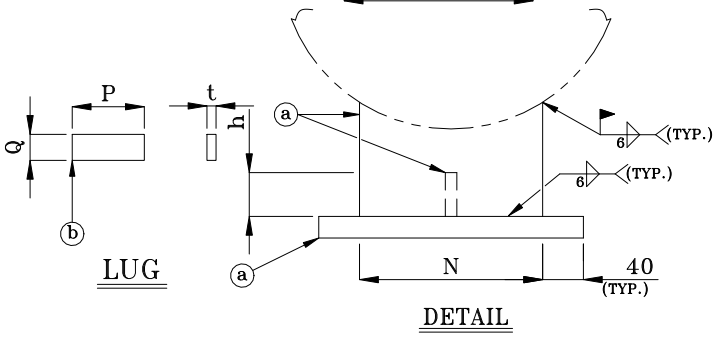




1/2"~6"

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	P	Q	t	N	STOPPER
0A	1/2"	100	98	80	15	8	20	U 80
		150	148					
		200	198					
0B	3/4"	100	99				25	
		150	149					
		200	199					
01	1"	100	99					
		150	149					
		200	199					
1A	1+1/2"	100	99				30	
		150	149					
		200	199					
02	2"	100	96	100	25		35	
		150	146					
		200	196					
03	3"	100	96				40	
		150	146					
		200	196					
04	4"	100	94				45	
		150	144					
		200	194					
06	6"	100	94				50	
		150	144					
		200	194					



LUG

DETAIL

MATERIAL MARK:(1)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓑ	A283 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
350°C TO 400°C	MARK	B	E	H
	ⓐ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓑ	A285 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
400°C TO 550°C	MARK	C	F	J
	ⓐ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓑ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	–	ASTM A36	ASTM A36

LENGTH MARK:(4)

MARK	L
03	300
04	400
05	500
06	600
07	700
08	800

STOPPER MARK:(5)

MARK	X
1	100
2	200
3	300
4	400
5	500

HEIGHT MARK:(3)

MARK	H	h
1	100	50
2	150	100
3	200	150

INDICATION:

SB-17-□□□-□-□□□

(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK
5-STOPPER LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF PIPE TO TOP OF STEEL.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
4- FOR DETAIL OF CLAMP SEE (SK-01/05), AND SEPARATED TAG IS REQUIRED FOR CLAMP.
5- FOR SIZE OF 1/2" UP TO 1 1/2", TWO LUGS AND FOR LARGER THAN 2", FOUR LUGS SHALL BE USED,FOR GRP LINES LAMINATED RINGS SHALL BE USED SEE(G-19).
6- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.
7- a=RUN PIPE WALL THICKNESS FOR SIZE OF 2" AND a=6mm FOR LAEGER THAN 2".

SUPPORT DESCRIPTION:	SHEET
STOPPER CLAMPED SHOE 1/2" ~ 6"	1
SB-17	4

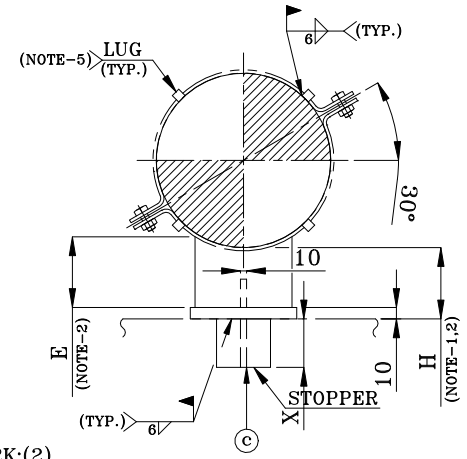
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

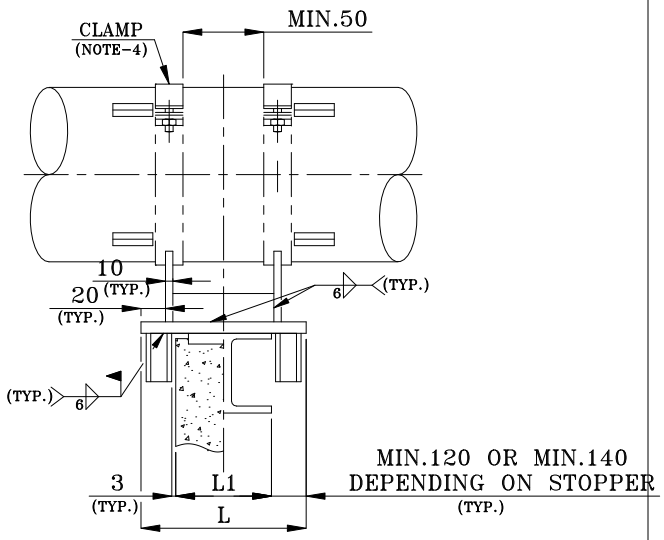
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 142 از 394

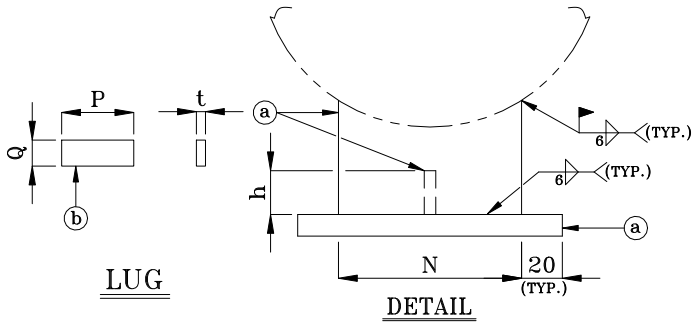




NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	P	Q	t	N	STOPPER
08	8"	100	113	100	30	10	150	HEB 100
		150	163					
		200	213					
10	10"	100	105					
		150	155					
		200	205					
12	12"	100	115	150			200	
		150	165					
		200	215					
14	14"	100	113					
		150	163					
		200	213					
16	16"	100	124	200			250	HEB 120
		150	174					
		200	224					
18	18"	100	119					
		150	169					
		200	219					
20	20"	100	110					
		150	160					
		200	210					

8"~20"



LUG DETAIL

MATERIAL MARK:(1)

DES TEMP / MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓑ	A283 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
350°C TO 400°C	MARK	B	E	H
	ⓐ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓑ	A285 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
400°C TO 550°C	MARK	C	F	J
	ⓐ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓑ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	–	ASTM A36	ASTM A36

LENGTH MARK:(4)

MARK	L
04	400
05	500
06	600
07	700
08	800
09	900

STOPPER MARK:(5)

MARK	X
1	100
2	200
3	300
4	400
5	500
6	600

HEIGHT MARK:(3)

MARK	H	h
1	100	50
2	150	100
3	200	150

INDICATION:

SB-17-[ ][ ][ ]-[ ]-[ ][ ][ ]
(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK
5-STOPPER LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF PIPE TO TOP OF STEEL.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
4- FOR DETAIL OF CLAMP SEE (SK-01/05), AND SEPARATED TAG IS REQUIRED FOR CLAMP.
5- FOR SIZE OF 1/2" UP TO 1 1/2", TWO LUGS AND FOR LARGER THAN 2", FOUR LUGS SHALL BE USED,FOR GRP LINES LAMINATED RINGS SHALL BE USED SEE(G-19).
6- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

SUPPORT DESCRIPTION:	SHEET
STOPPER CLAMPED SHOE 8" ~ 20"	2
SB-17	4

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

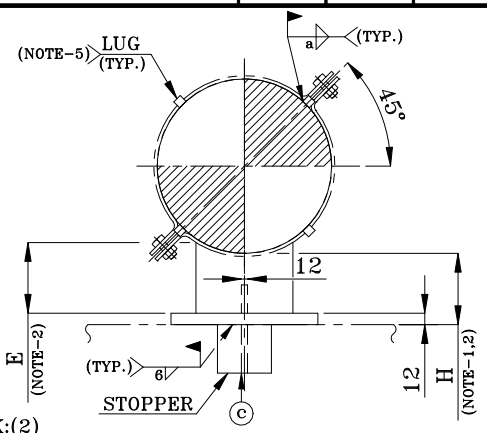
HIRGAN ENERGY

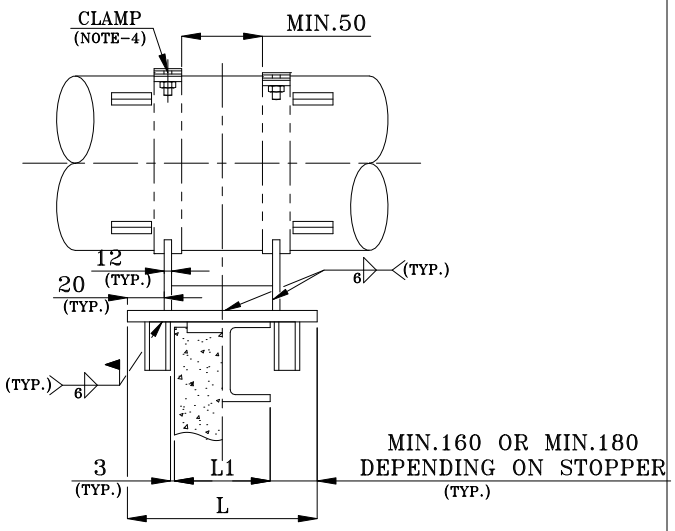
شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK

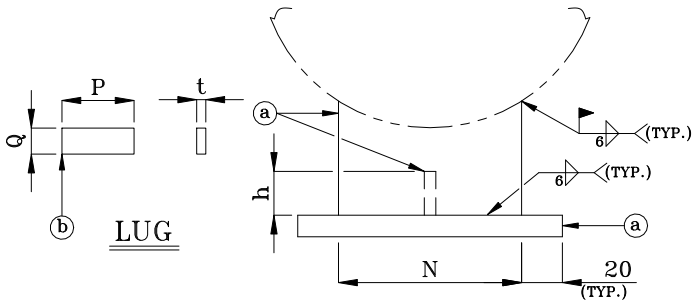




22"~36"

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	P	Q	t	N	STOPPER
22	22"	100	120	200	40	12	300	HEB 140
		150	170					
		200	220					
24	24"	100	117					
		150	167					
		200	217					
26	26"	100	121	250	50		350	
		150	171					
		200	221					
28	28"	100	117					
		150	167					
		200	217					
30	30"	100	127				400	HEB 160
		150	177					
		200	227					
32	32"	100	124	300				
		150	174					
		200	224					
34	34"	100	120					
		150	170					
		200	220					
36	36"	100	130				450	
		150	180					
		200	230					



DETAIL

MATERIAL MARK:(1)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓑ	A283 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
350°C TO 400°C	MARK	B	E	H
	ⓐ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓑ	A285 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
400°C TO 550°C	MARK	C	F	J
	ⓐ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓑ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	–	ASTM A36	ASTM A36

LENGTH MARK:(4)

MARK	L
05	500
06	600
07	700
08	800
09	900
10	1000

STOPPER MARK:(5)

MARK	X
2	200
3	300
4	400
5	500
6	600

HEIGHT MARK:(3)

MARK	H	h
1	100	50
2	150	100
3	200	150

INDICATION:

SB-17-□□□-□-□□□□

(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK
5-STOPPER LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF PIPE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- FOR DETAIL OF CLAMP SEE (SK-01/05), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

5- FOR SIZE OF 1/2" UP TO 1 1/2", TWO LUGS AND FOR LARGER THAN 2", FOUR LUGS SHALL BE USED,FOR GRP LINES LAMINATED RINGS SHALL BE USED SEE(G-19).

6- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

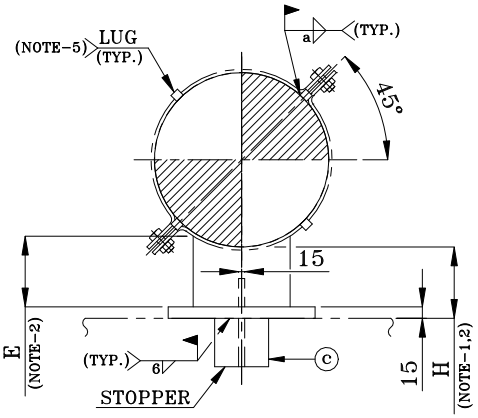
SUPPORT DESCRIPTION:	SHEET
STOPPER CLAMPED SHOE 22" ~ 36"	3
SB-17	4

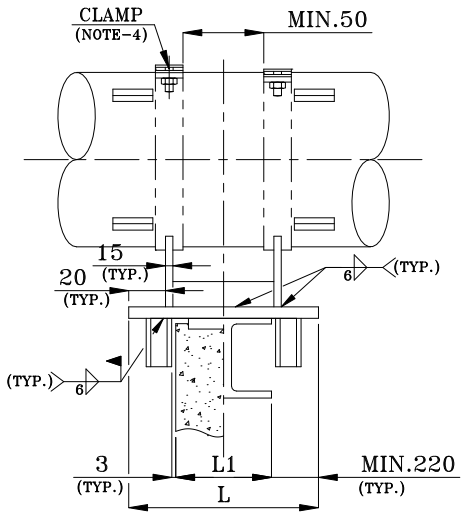
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

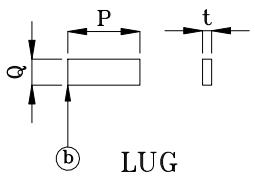
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 144 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

053-073-9184

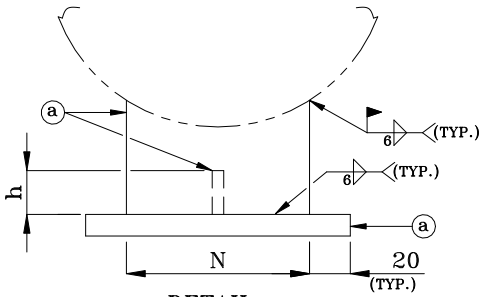






LUG

38"~42"



DETAIL

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	P	Q	t	N	STOPPER
38	38"	100	127	350	50	15	450	HEB 200
		150	177					
		200	227					
40	40"	100	136				500	
		150	186					
		200	236					
42	42"	100	134					
		150	184					
		200	234					

MATERIAL MARK:(1)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓑ	A283 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
350°C TO 400°C	MARK	B	E	H
	ⓐ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓑ	A285 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
400°C TO 550°C	MARK	C	F	J
	ⓐ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓑ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	–	ASTM A36	ASTM A36

LENGTH MARK:(4)

MARK	L
06	600
07	700
08	800
09	900
10	1000
11	1100

STOPPER MARK:(5)

MARK	X
2	200
3	300
4	400
5	500
6	600

HEIGHT MARK:(3)

MARK	H	h
1	100	50
2	150	100
3	200	150

INDICATION:

SB-17-□□-□-□□-□□

(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK
5-STOPPER LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF PIPE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- FOR DETAIL OF CLAMP SEE (SK-01/05), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

5- FOR SIZE OF 1/2" UP TO 1 1/2", TWO LUGS AND FOR LARGER THAN 2", FOUR LUGS SHALL BE USED,FOR GRP LINES LAMINATED RINGS SHALL BE USED SEE(G-19).

6- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

SUPPORT DESCRIPTION:	SHEET
STOPPER CLAMPED SHOE 38" ~ 42"	4
SB-17	4

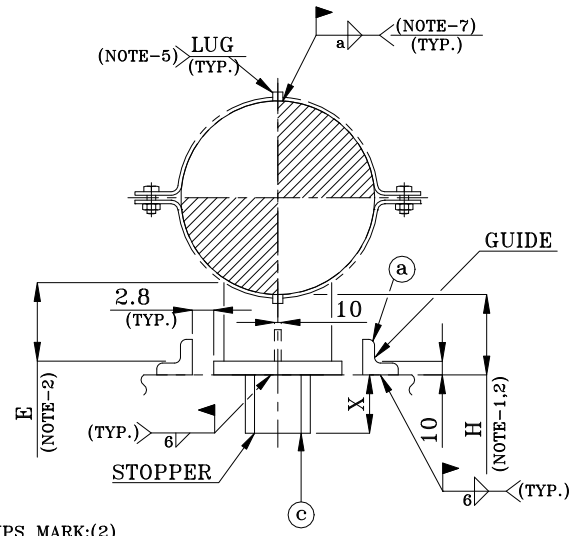
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

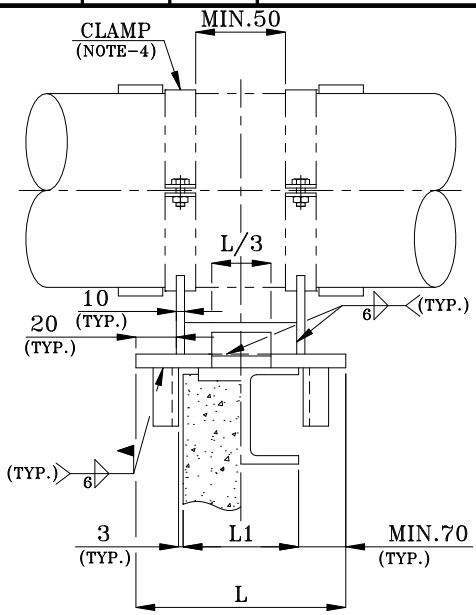
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 145 از 394

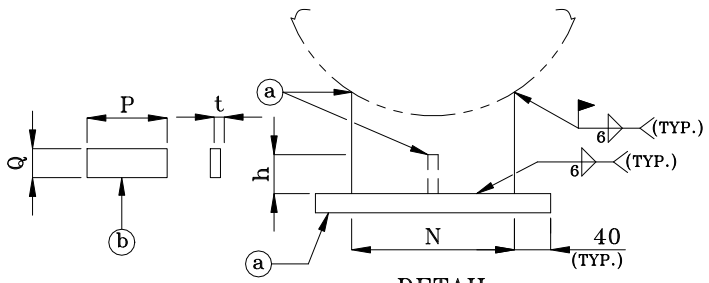




1/2"~6"

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	P	Q	t	N	STOPPER	GUIDE
0A	1/2"	100	98	80	15	8	20	U 80	L 30x30x3
		150	148						
		200	198						
0B	3/4"	100	99				25		
		150	149						
		200	199						
01	1"	100	99						
		150	149						
		200	199						
1A	1+1/2"	100	99				30		
		150	149						
		200	199						
02	2"	100	96	100	25		35		
		150	146						
		200	196						
03	3"	100	96				40		
		150	146						
		200	196						
04	4"	100	94				45		
		150	144						
		200	194						
06	6"	100	94				50		
		150	144						
		200	194						



LUG DETAIL

MATERIAL MARK:(1)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓑ	A283 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
350°C TO 400°C	MARK	B	E	H
	ⓐ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓑ	A285 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
400°C TO 550°C	MARK	C	F	J
	ⓐ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓑ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	–	ASTM A36	ASTM A36

LENGTH MARK:(4)

MARK	L
03	300
04	400
05	500
06	600
07	700
08	800

STOPPER MARK:(5)

MARK	X
1	100
2	200
3	300
4	400
5	500

HEIGHT MARK:(3)

MARK	H	h
1	100	50
2	150	100
3	200	150

INDICATION:

SB-18-[ ][ ][ ]-[ ]-[ ][ ][ ]
(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK
5-STOPPER LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF PIPE TO TOP OF STEEL.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
4- FOR DETAIL OF CLAMP SEE (SK-01/05), AND SEPARATED TAG IS REQUIRED FOR CLAMP.
5- FOR SIZE OF 1/2" UP TO 1 1/2", TWO LUGS AND FOR LARGER THAN 2", FOUR LUGS SHALL BE USED,FOR GRP LINES LAMINATED RINGS SHALL BE USED SEE(G-19).
6- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.
7- a=RUN PIPE WALL THICKNESS FOR SIZE OF 2" AND a=6mm FOR LARGER THAN 2".

SUPPORT DESCRIPTION:	SHEET
SEMI ANCHOR CLAMPED SHOE 1/2" ~ 6"	1
SB-18	4

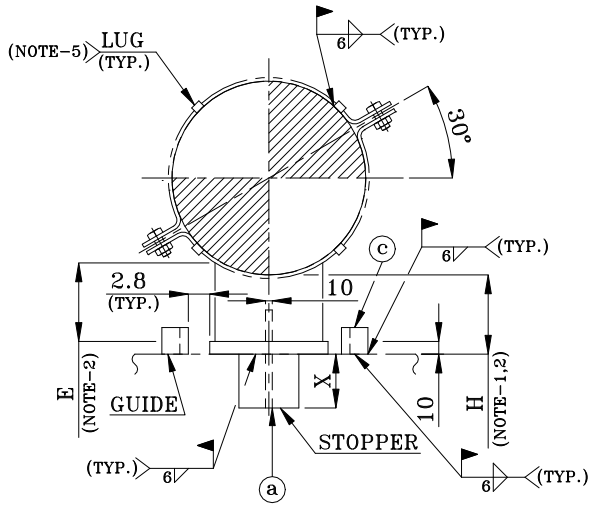
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

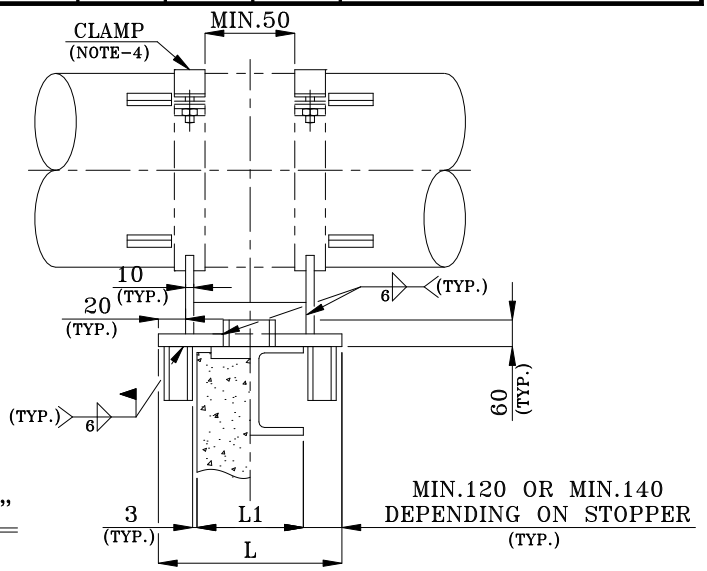
STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK

شماره صفحه: 146 از 394

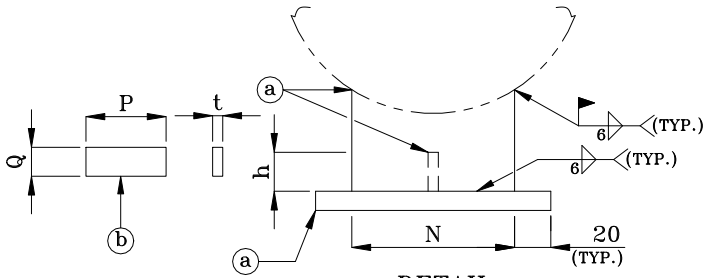


8"~20"



NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	P	Q	t	N	STOPPER	GUIDE
08	8"	100	113	100	30	10	150	HEB 100	U 80
		150	163						
		200	213						
10	10"	100	105						
		150	155						
		200	205						
12	12"	100	115	150			200		
		150	165						
		200	215						
14	14"	100	113						
		150	163						
		200	213						
16	16"	100	124	200			250	HEB 120	U 200
		150	174						
		200	224						
18	18"	100	119						
		150	169						
		200	219						
20	20"	100	110						
		150	160						
		200	210						



LUG DETAIL

LENGTH MARK:(4)

MARK	L
04	400
05	500
06	600
07	700
08	800
09	900

STOPPER MARK:(5)

MARK	X
1	100
2	200
3	300
4	400
5	500
6	600

HEIGHT MARK:(3)

MARK	H	h
1	100	50
2	150	100
3	200	150

MATERIAL MARK:(1)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓑ	A283 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
350°C TO 400°C	MARK	B	E	H
	ⓐ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓑ	A285 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
400°C TO 550°C	MARK	C	F	J
	ⓐ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓑ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	–	ASTM A36	ASTM A36

INDICATION:

SB-18-□□□-□-□□□□
(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK
5-STOPPER LENGTH MARK

NOTE:
1- DIMENSION "H" INDICATES BOTTOM OF PIPE TO TOP OF STEEL.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
4- FOR DETAIL OF CLAMP SEE (SK-01/05), AND SEPARATED TAG IS REQUIRED FOR CLAMP.
5- FOR SIZE OF 1/2" UP TO 1 1/2", TWO LUGS AND FOR LARGER THAN 2", FOUR LUGS SHALL BE USED,FOR GRP LINES LAMINATED RINGS SHALL BE USED SEE(G-19).
6- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

SUPPORT DESCRIPTION:	SHEET
SEMI ANCHOR CLAMPED SHOE 8" ~ 20"	2
SB-18	4

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

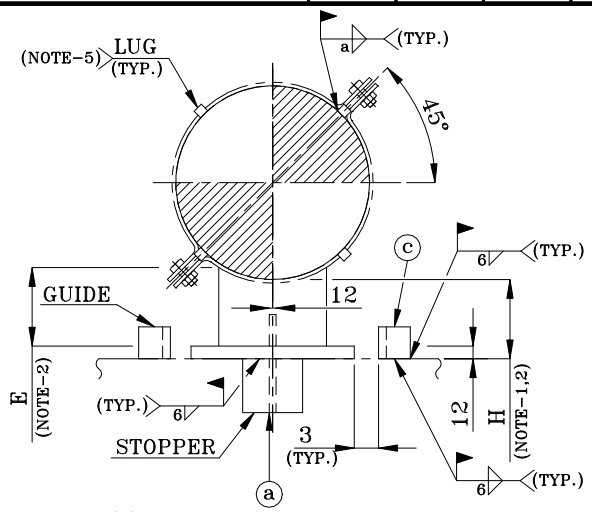
HIRGAN ENERGY

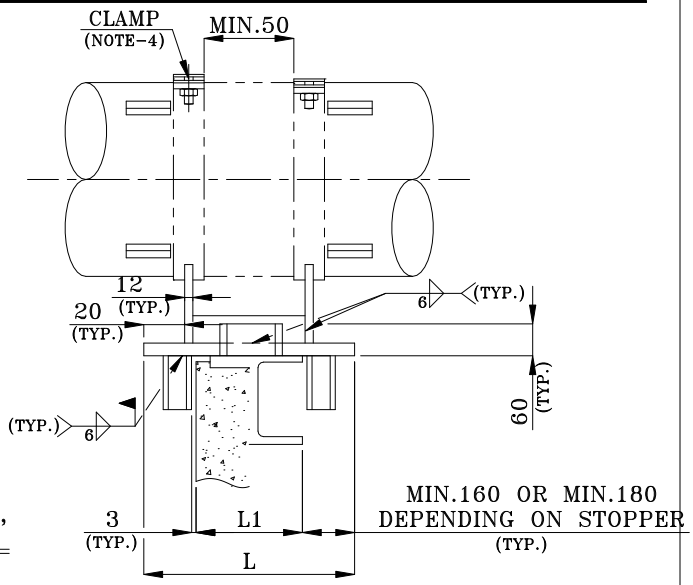
شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK

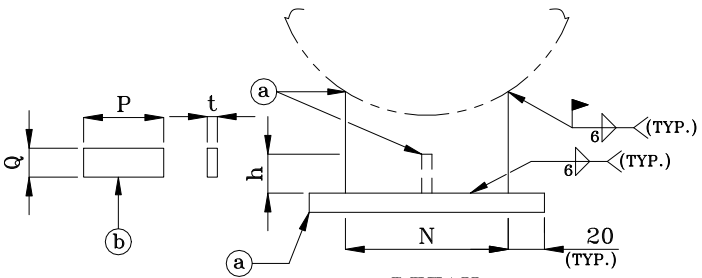




22"~36"

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	P	Q	t	N	STOPPER	GUIDE
22	22"	100	120	200	40	12	300	HEB 140	U 200
		150	170						
		200	220						
24	24"	100	117						
		150	167						
		200	217						
26	26"	100	121	250	50		350		
		150	171						
		200	221						
28	28"	100	117						
		150	167						
		200	217						
30	30"	100	127				400	HEB 160	
		150	177						
		200	227						
32	32"	100	124	300					
		150	174						
		200	224						
34	34"	100	120						
		150	170						
		200	220						
36	36"	100	130				450		
		150	180						
		200	230						



LUG

DETAIL

MATERIAL MARK:(1)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓑ	A283 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
350°C TO 400°C	MARK	B	E	H
	ⓐ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓑ	A285 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
400°C TO 550°C	MARK	C	F	J
	ⓐ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓑ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	–	ASTM A36	ASTM A36

LENGTH MARK:(4)

MARK	L
05	500
06	600
07	700
08	800
09	900
10	1000

STOPPER MARK:(5)

MARK	X
2	200
3	300
4	400
5	500
6	600

HEIGHT MARK:(3)

MARK	H	h
1	100	50
2	150	100
3	200	150

INDICATION:

SB-18-□□□-□-□□□

(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK
5-STOPPER LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF PIPE TO TOP OF STEEL.

2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

4- FOR DETAIL OF CLAMP SEE (SK-01/05), AND SEPARATED TAG IS REQUIRED FOR CLAMP.

5- FOR SIZE OF 1/2" UP TO 1 1/2", TWO LUGS AND FOR LARGER THAN 2", FOUR LUGS SHALL BE USED,FOR GRP LINES LAMINATED RINGS SHALL BE USED SEE(G-19).

6- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

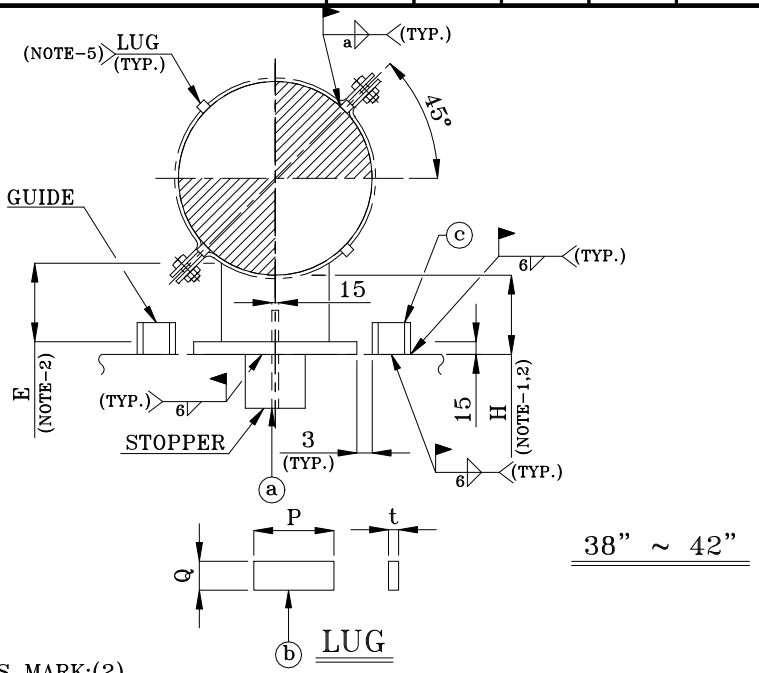
SUPPORT DESCRIPTION:	SHEET
SEMI ANCHOR CLAMPED SHOE 22" ~ 36"	3
SB-18	4

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

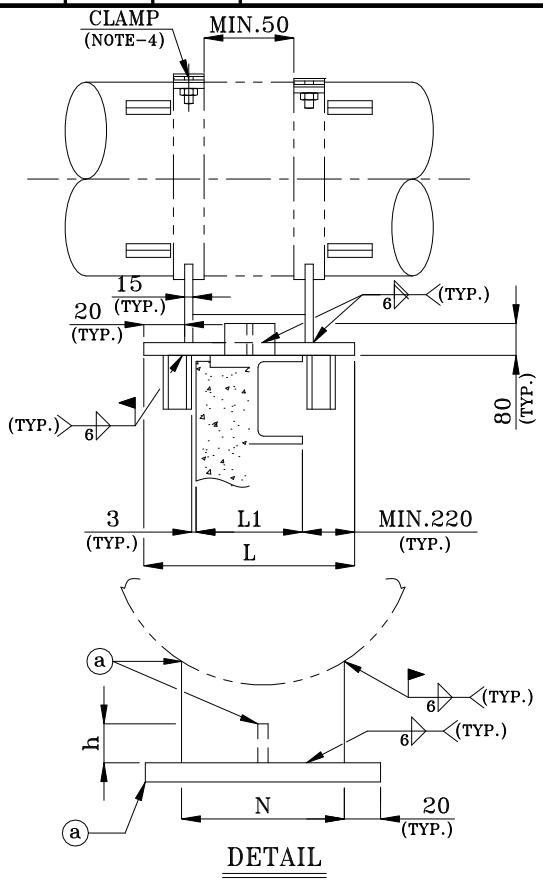
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK



38" ~ 42"



NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	P	Q	t	N	STOPPER	GUIDE
38	38"	100	127	350	50	15	450	HEB 200	HEB 160
		150	177						
		200	227						
40	40"	100	136				500		
		150	186						
		200	236						
42	42"	100	134						
		150	184						
		200	234						

MATERIAL MARK:(1)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓑ	A283 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
350°C TO 400°C	MARK	B	E	H
	ⓐ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓑ	A285 Gr.C	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	ASTM A36	ASTM A36	ASTM A36
400°C TO 550°C	MARK	C	F	J
	ⓐ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓑ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	–	ASTM A36	ASTM A36

LENGTH MARK:(4)

MARK	L
06	600
07	700
08	800
09	900
10	1000
11	1100

STOPPER MARK:(5)

MARK	X
2	200
3	300
4	400
5	500
6	600

HEIGHT MARK:(3)

MARK	H	h
1	100	50
2	150	100
3	200	150

INDICATION:

SB-18-□□□-□-□□□□

(1) (2) (3) (4) (5)

1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK
5-STOPPER LENGTH MARK

NOTE:

1- DIMENSION "H" INDICATES BOTTOM OF PIPE TO TOP OF STEEL.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
4- FOR DETAIL OF CLAMP SEE (SK-01/05), AND SEPARATED TAG IS REQUIRED FOR CLAMP.
5- FOR SIZE OF 1/2" UP TO 1 1/2", TWO LUGS AND FOR LARGER THAN 2", FOUR LUGS SHALL BE USED,FOR GRP LINES LAMINATED RINGS SHALL BE USED SEE(G-19).
6- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

SUPPORT DESCRIPTION:	SHEET
SEMI ANCHOR CLAMPED SHOE 38" ~ 42"	4
SB-18	4

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

HIRGAN ENERGY

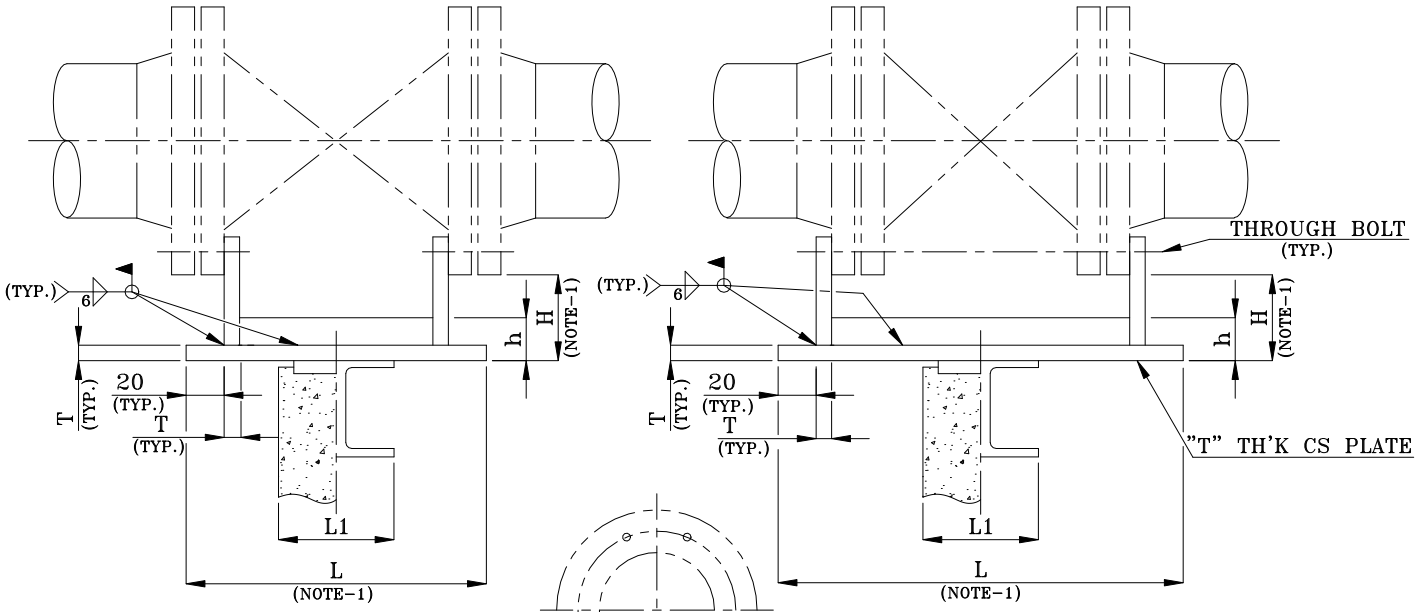
شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

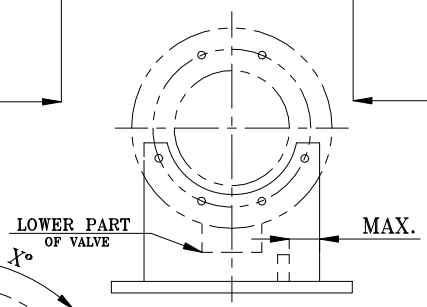
نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK

شماره صفحه: 149 از 394

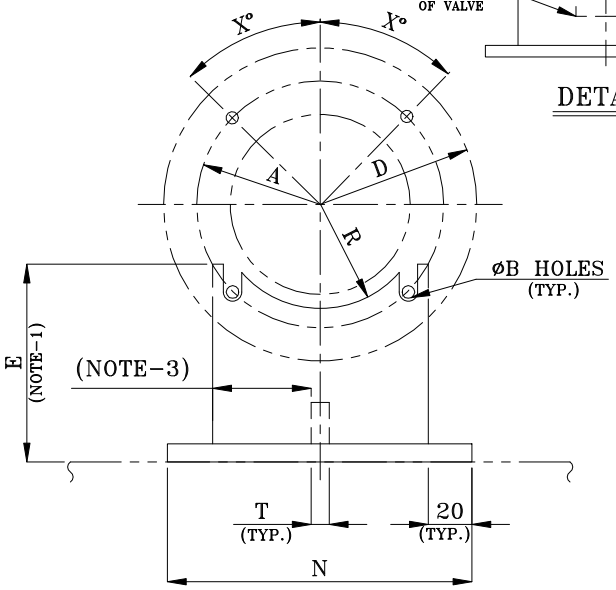


TYPE A

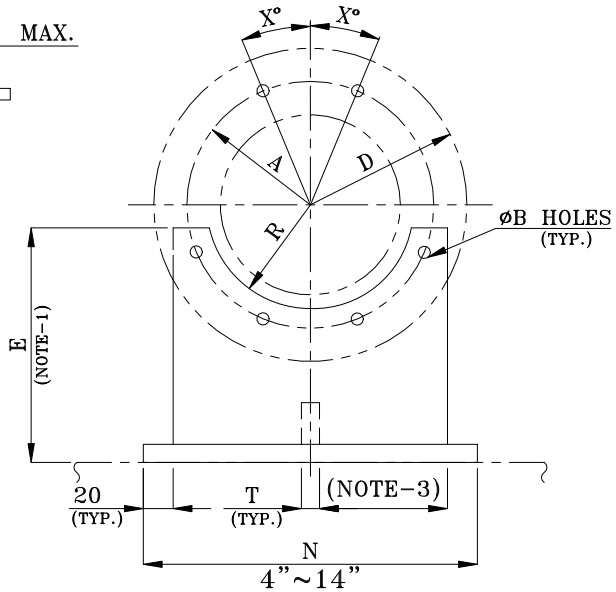
TYPE B



DETAIL



1"~3"



4"~14"

INDICATION:

SB-19-□□-□

(1) (2) (3)

1-NPS MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

2- THE DATA IS REFERENCE ONLY AND THE FINAL DATA SHOULD BE REFERRED THE VENDOR DWG. SO DIMENSIONS MAY BE REQUIRED TO BE ADJUSTED AT FIELD.

3- IN CASE OF INTERFERENCE BETWEEN VALVE AND CENTER PLATE, DISTANCE OF CENTER PLATE SHALL BE ADJUSTED AT FIELD ACCORDING TO DETAIL DRAWING.

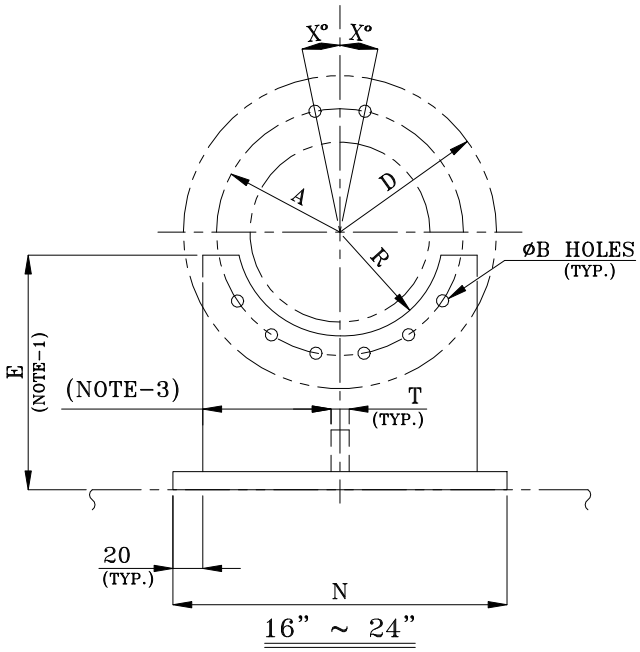
MATERIAL:

PLATE: A283 Gr.C, STANDARD PROFILE: ASTM A36

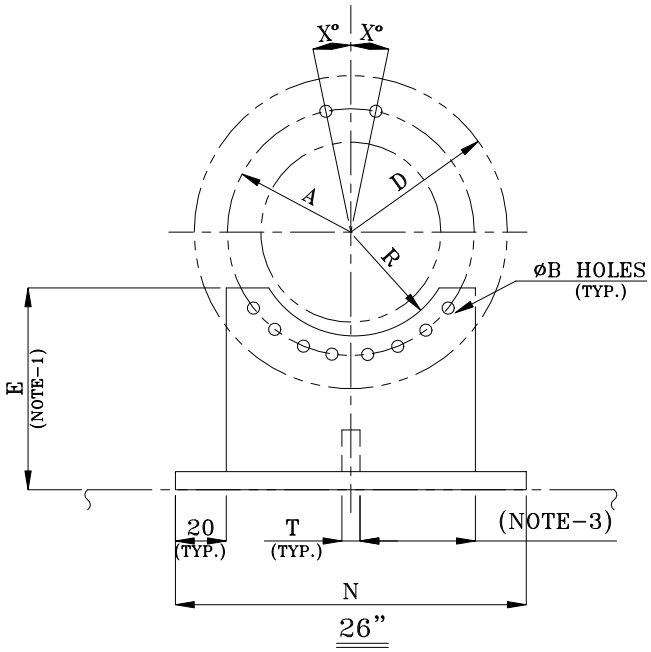
SUPPORT DESCRIPTION:	SHEET
SLIDE SHOE ON VALVE FOR GRE LINE 1" ~ 40"	1
SB-19	3

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

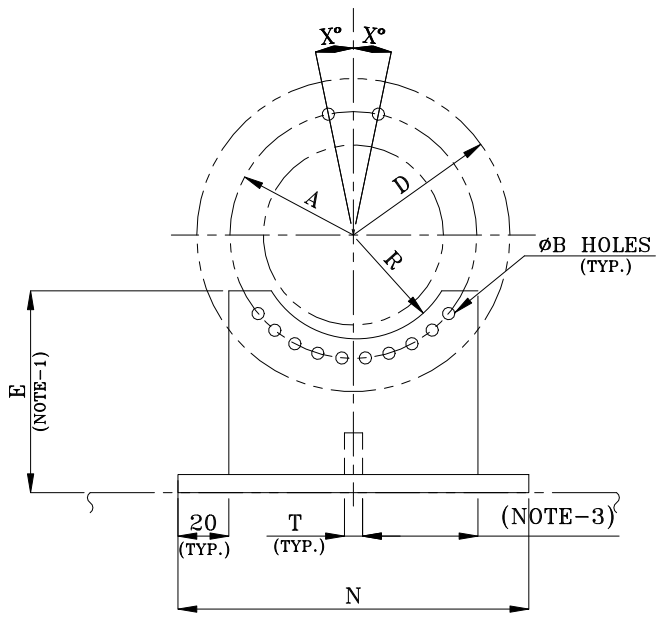
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 150 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02



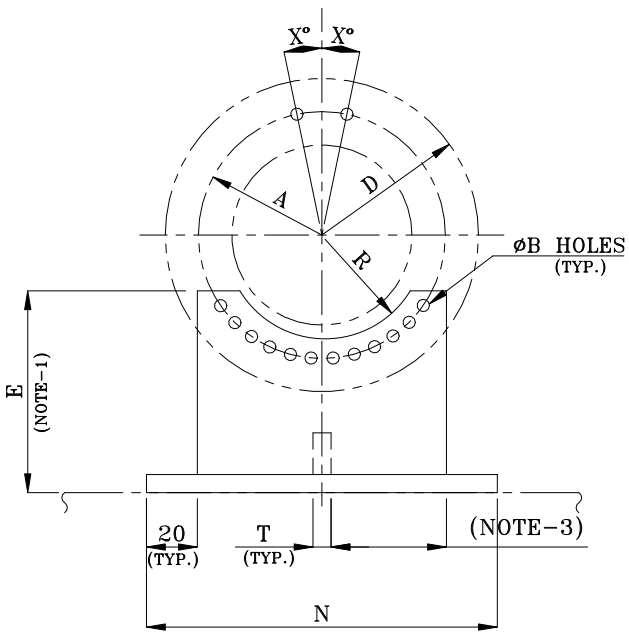
16" ~ 24"



26"



26" ~ 38"



40"

INDICATION:

SB-19- [ ][ ][ ] - [ ][ ]
(1) (2) (3)

1-NPS MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

2- THE DATA IS REFERENCE ONLY AND THE FINAL DATA SHOULD BE REFERRED THE VENDOR DWG. SO DIMENSIONS MAY BE REQUIRED TO BE ADJUSTED AT FIELD.

3- IN CASE OF INTERFERENCE BETWEEN VALVE AND CENTER PLATE, DISTANCE OF CENTER PLATE SHALL BE ADJUSTED AT FIELD ACCORDING TO DETAIL DRAWING.

MATERIAL:

PLATE: A283 Gr.C, STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
SLIDE SHOE ON VALVE FOR GRE LINE 1" ~ 40"	2
SB-19	3

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

LENGTH
MARK:(3)

MARK	L
01	150
02	200
03	250
04	300
05	350
06	400
07	450
08	500
09	550
10	600
11	650
12	700
13	750
14	800
15	850
16	900
17	950
18	1000
19	1050
20	1100
21	1150
22	1200

NPS MARK:(1)-(NOTE-2)

NPS MARK	RUN PIPE SIZE	D	A	R	X°	øB	E			N	T
							H=100	H=150	H=200		
01	1"	54	40	26	(360 / 8)°	16	142	192	242	112	10
1A	1-1/2"	54	49	35	(360 / 8)°	16	144	194	244	125	10
02	2"	76	60	45	(360 / 8)°	19	153	203	253	147	10
2A	2-1/2"	89	70	54	(360 / 8)°	19	159	209	259	161	10
03	3"	95	76	61	(360 / 8)°	19	160	210	260	170	10
04	4"	114	95	80	(360 / 16)°	19	197	247	297	238	10
06	6"	140	121	103	(360 / 16)°	22	216	266	316	292	10
08	8"	171	149	129	(360 / 16)°	22	237	287	337	344	10
10	10"	203	181	159	(360 / 24)°	25	201	251	301	331	10
12	12"	241	216	194	(360 / 24)°	25	214	264	314	380	10
14	14"	267	238	215	(360 / 24)°	28	227	277	327	418	10
16	16"	298	270	247	(360 / 32)°	28	277	327	377	530	10
18	18"	318	289	264	(360 / 32)°	32	289	339	389	568	10
20	20"	349	318	293	(360 / 40)°	32	256	306	356	537	10
24	24"	406	375	348	(360 / 40)°	35	277	327	377	624	12
26	26"	435	403	373	(360 / 48)°	35	325	375	425	734	12
28	28"	464	432	401	(360 / 56)°	35	369	419	469	825	12
30	30"	292	457	427	(360 / 56)°	35	384	434	484	868	12
32	32"	530	489	455	(360 / 56)°	41	411	461	511	934	12
34	34"	556	514	481	(360 / 64)°	41	370	420	470	901	12
36	36"	584	543	509	(360 / 64)°	41	381	431	481	946	12
38	38"	619	575	541	(360 / 64)°	41	396	446	496	995	15
40	40"	645	600	567	(360 / 72)°	41	441	491	541	1089	15

HEIGHT
MARK:(2)

MARK	H	h
1	100	50
2	150	100
3	200	150

INDICATION:

SB-19-[ ][ ][ ]-[ ][ ]
(1) (2) (3)

1-NPS MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
2- THE DATA IS REFERENCE ONLY AND THE FINAL DATA SHOULD BE REFERRED THE VENDOR DWG. SO DIMENSIONS MAY BE REQUIRED TO BE ADJUSTED AT FIELD.
3- IN CASE OF INTERFERENCE BETWEEN VALVE AND CENTER PLATE, DISTANCE OF CENTER PLATE SHALL BE ADJUSTED AT FIELD ACCORDING TO DETAIL DRAWING.

MATERIAL:
PLATE: A283 Gr.C, STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
SLIDE SHOE ON VALVE FOR GRE LINE 1" ~ 40"	3
SB-19	3

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

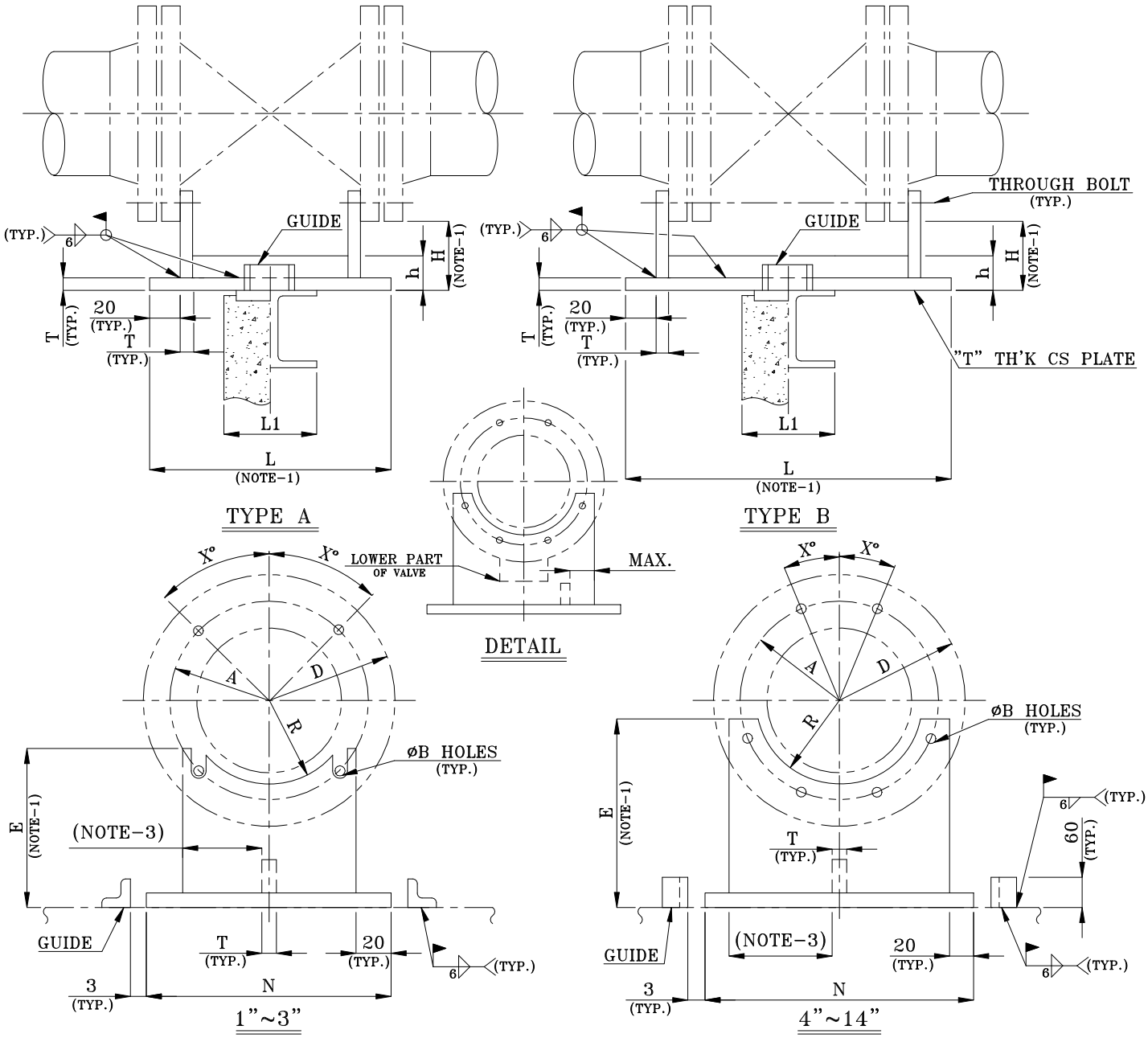
HIRGAN ENERGY

شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



INDICATION:

SB-20-□□□-□□

(1) (2) (3)

1-NPS MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

2- THE DATA IS REFERENCE ONLY AND THE FINAL DATA SHOULD BE REFERRED THE VENDOR DWG. SO DIMENSIONS MAY BE REQUIRED TO BE ADJUSTED AT FIELD.

3- IN CASE OF INTERFERENCE BETWEEN VALVE AND CENTER PLATE, DISTANCE OF CENTER PLATE SHALL BE ADJUSTED AT FIELD ACCORDING TO DETAIL DRAWING.

MATERIAL:

PLATE: A283 Gr.C, STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:

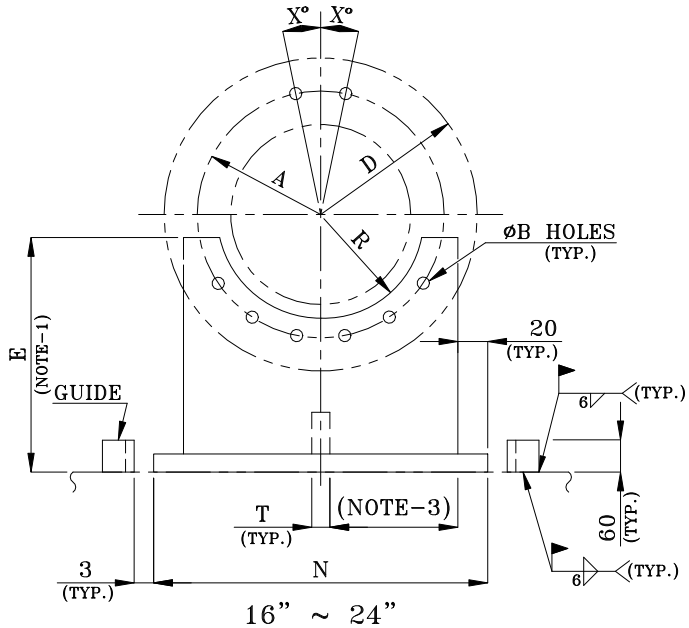
GUIDE SHOE
ON VALVE FOR GRE LINE
1" ~ 40"

SB-20

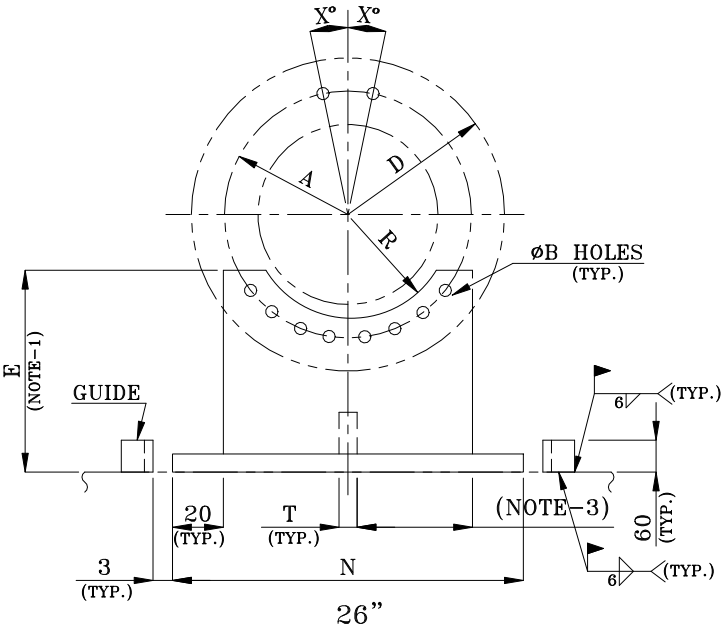
SHEET 1 3

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY
شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 153 از 394

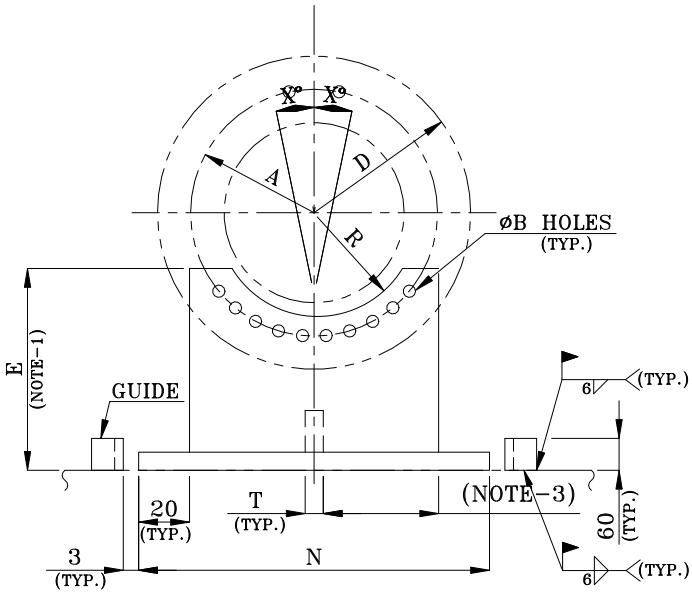
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



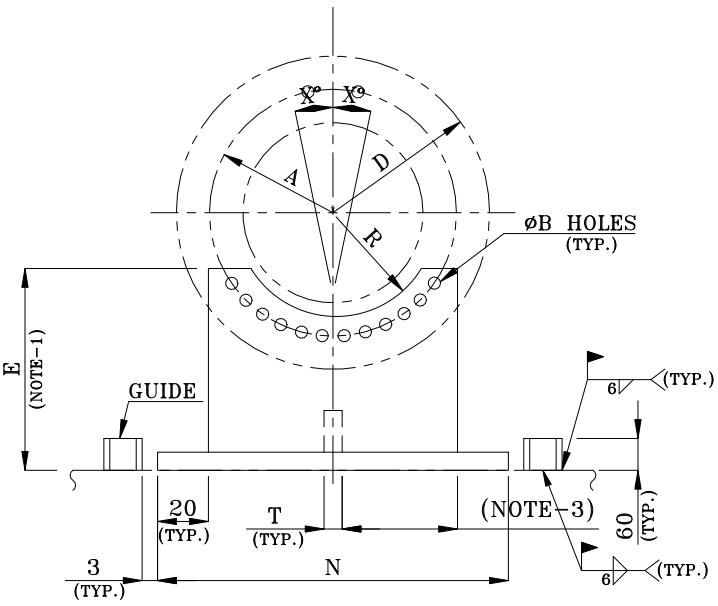
16" ~ 24"



26"



26" ~ 38"



40"

INDICATION:

SB-20- [ ][ ][ ] - [ ][ ]
(1) (2) (3)

1-NPS MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
2- THE DATA IS REFERENCE ONLY AND THE FINAL DATA SHOULD BE REFERRED THE VENDOR DWG. SO DIMENSIONS MAY BE REQUIRED TO BE ADJUSTED AT FIELD.
3- IN CASE OF INTERFERENCE BETWEEN VALVE AND CENTER PLATE, DISTANCE OF CENTER PLATE SHALL BE ADJUSTED AT FIELD ACCORDING TO DETAIL DRAWING.

MATERIAL:
PLATE: A283 Gr.C, STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
GUIDE SHOE ON VALVE FOR GRE LINE 1" ~ 40"	2
SB-20	3

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

HIRGAN ENERGY

شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

LENGTH
MARK:(3)

MARK	L
01	150
02	200
03	250
04	300
05	350
06	400
07	450
08	500
09	550
10	600
11	650
12	700
13	750
14	800
15	850
16	900
17	950
18	1000
19	1050
20	1100
21	1150
22	1200

NPS MARK:(1)-(NOTE-2)

NPS MARK	RUN PIPE SIZE	D	A	R	X°	øB	E			N	T	GUIDE
							H=100	H=150	H=200			
01	1"	54	40	26	(360 / 8)°	16	142	192	242	112	10	L 30x30x3
1A	1-1/2"	54	49	35	(360 / 8)°	16	144	194	244	125	10	
02	2"	76	60	45	(360 / 8)°	19	153	203	253	147	10	
2A	2-1/2"	89	70	54	(360 / 8)°	19	159	209	259	161	10	
03	3"	95	76	61	(360 / 8)°	19	160	210	260	170	10	
04	4"	114	95	80	(360 / 16)°	19	197	247	297	238	10	U 80
06	6"	140	121	103	(360 / 16)°	22	216	266	316	292	10	
08	8"	171	149	129	(360 / 16)°	22	237	287	337	344	10	
10	10"	203	181	159	(360 / 24)°	25	201	251	301	331	10	
12	12"	241	216	194	(360 / 24)°	25	214	264	314	380	10	
14	14"	267	238	215	(360 / 24)°	28	227	277	327	418	10	
16	16"	298	270	247	(360 / 32)°	28	277	327	377	530	10	U 200
18	18"	318	289	264	(360 / 32)°	32	289	339	389	568	10	
20	20"	349	318	293	(360 / 40)°	32	256	306	356	537	10	
24	24"	406	375	348	(360 / 40)°	35	277	327	377	624	12	
26	26"	435	403	373	(360 / 48)°	35	325	375	425	734	12	
28	28"	464	432	401	(360 / 56)°	35	369	419	469	825	12	
30	30"	292	457	427	(360 / 56)°	35	384	434	484	868	12	
32	32"	530	489	455	(360 / 56)°	41	411	461	511	934	12	
34	34"	556	514	481	(360 / 64)°	41	370	420	470	901	12	
36	36"	584	543	509	(360 / 64)°	41	381	431	481	946	12	
38	38"	619	575	541	(360 / 64)°	41	396	446	496	995	15	
40	40"	645	600	567	(360 / 72)°	41	441	491	541	1089	15	HEB 160

HEIGHT
MARK:(2)

MARK	H	h
1	100	50
2	150	100
3	200	150

INDICATION:

SB-20-[ ][ ]-[ ]

(1) (2) (3)

1-NPS MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

2- THE DATA IS REFERENCE ONLY AND THE FINAL DATA SHOULD BE REFERRED THE VENDOR DWG. SO DIMENSIONS MAY BE REQUIRED TO BE ADJUSTED AT FIELD.

3- IN CASE OF INTERFERENCE BETWEEN VALVE AND CENTER PLATE, DISTANCE OF CENTER PLATE SHALL BE ADJUSTED AT FIELD ACCORDING TO DETAIL DRAWING.

MATERIAL:

PLATE: A283 Gr.C, STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
GUIDE SHOE ON VALVE FOR GRE LINE 1" ~ 40"	3
SB-20	3

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

HIRGAN ENERGY

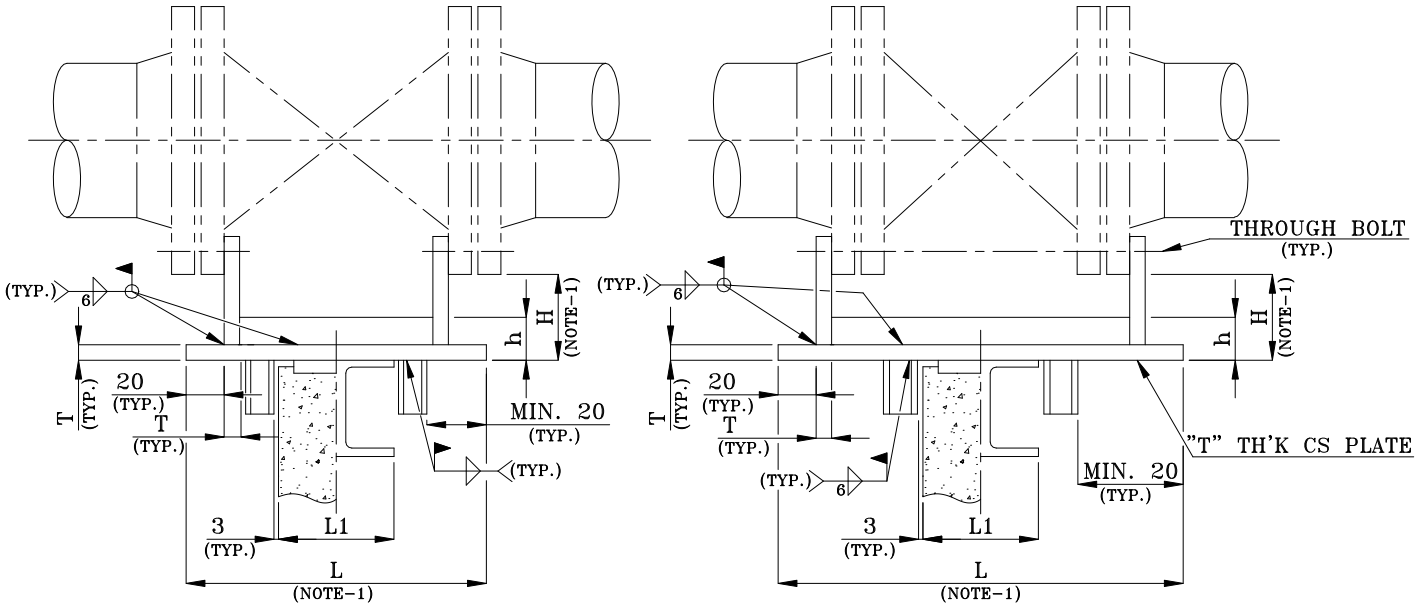
شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

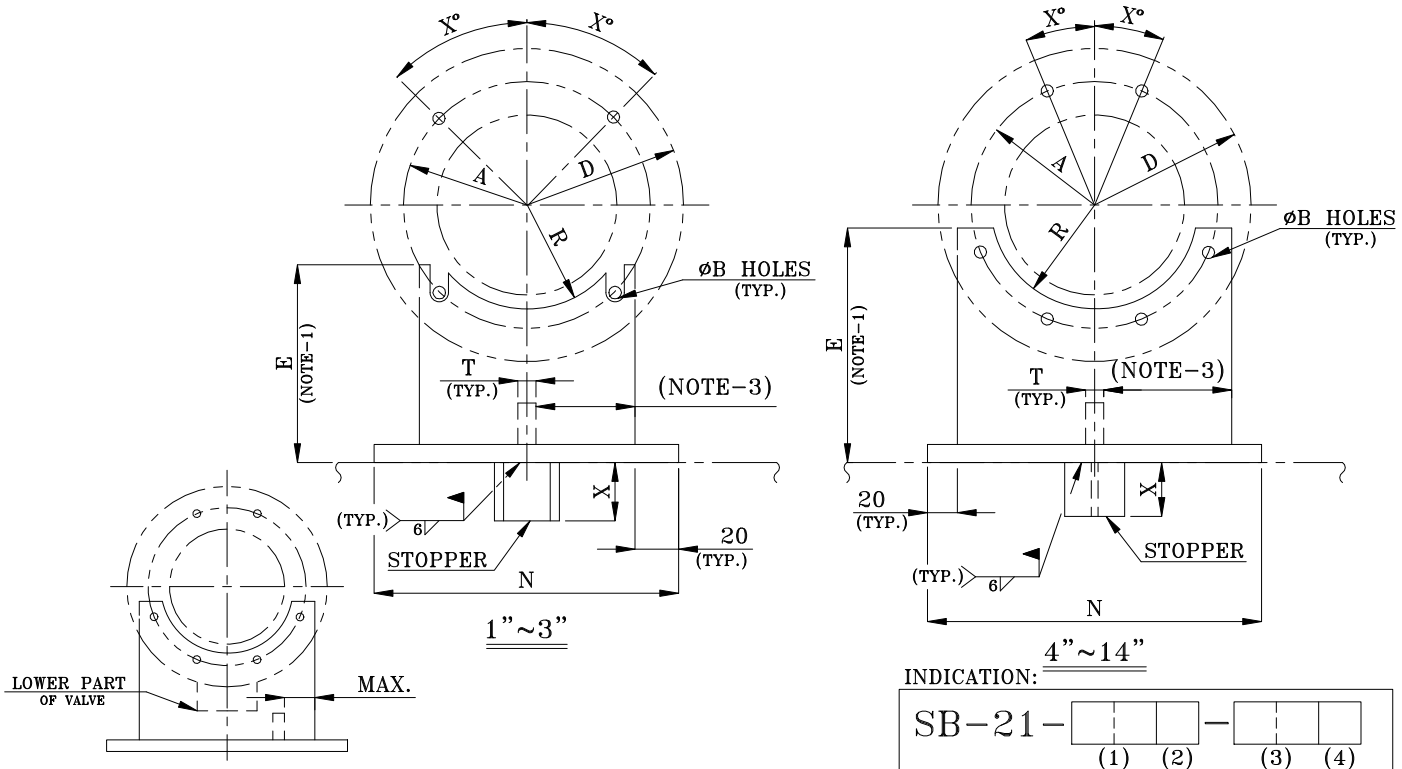
نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK

شماره صفحه: 155 از 394



TYPE A

TYPE B



1"~3"

4"~14"

DETAIL

INDICATION:

SB-21-□□□-□□□

(1) (2) (3) (4)

1-NPS MARK
2-HEIGHT MARK
3-LENGTH MARK
4-STOPPER LENGTH MARK

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

2- THE DATA IS REFERENCE ONLY AND THE FINAL DATA SHOULD BE REFERRED THE VENDOR DWG. SO DIMENSIONS MAY BE REQUIRED TO BE ADJUSTED AT FIELD.

3- IN CASE OF INTERFERENCE BETWEEN VALVE AND CENTER PLATE, DISTANCE OF CENTER PLATE SHALL BE ADJUSTED AT FIELD ACCORDING TO DETAIL DRAWING.

MATERIAL:

PLATE: A283 Gr.C, STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:

STOP SHOE
ON VALVE FOR GRE LINE
1" ~ 40"

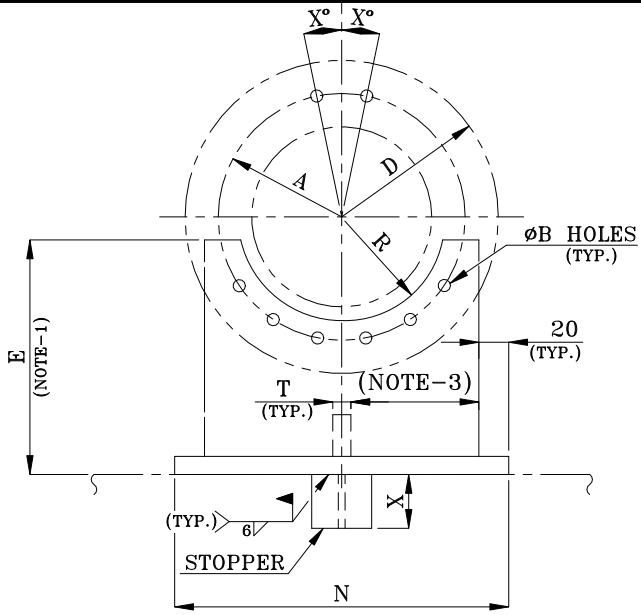
SB-21

SHEET 1 3

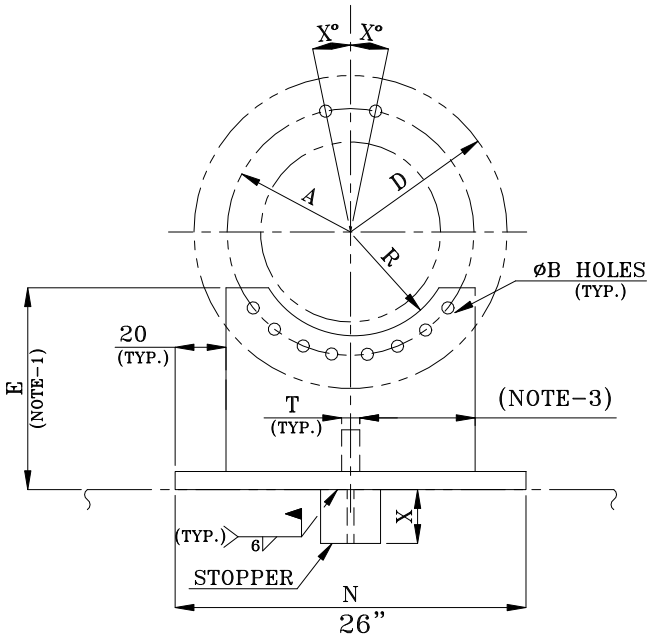
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02

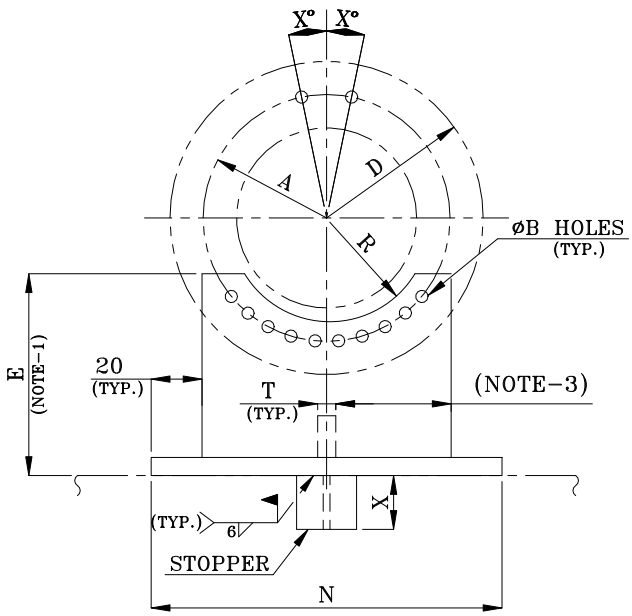
شماره صفحه: 156 از 394



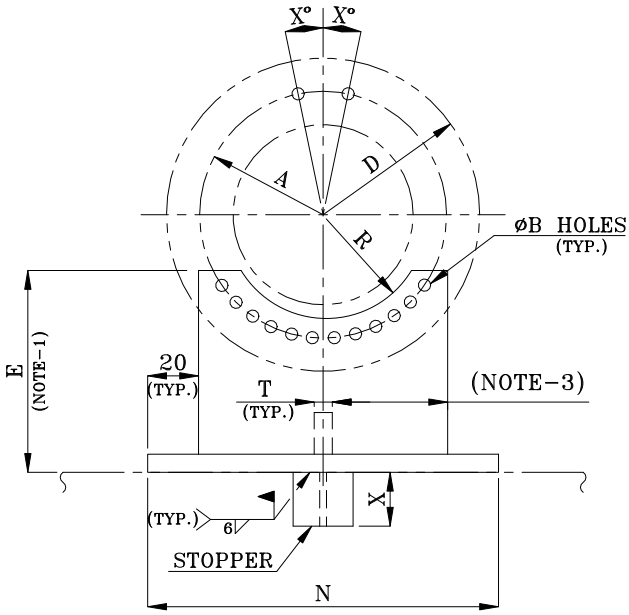
16" ~ 24"



26"



26" ~ 38"



40"

INDICATION:

SB-21- [ ][ ][ ] - [ ][ ][ ]
(1) (2) (3) (4)

1-NPS MARK
2-HEIGHT MARK
3-LENGTH MARK
4-STOPPER LENGTH MARK

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
2- THE DATA IS REFERENCE ONLY AND THE FINAL DATA SHOULD BE REFERRED THE VENDOR DWG. SO DIMENSIONS MAY BE REQUIRED TO BE ADJUSTED AT FIELD.
3- IN CASE OF INTERFERENCE BETWEEN VALVE AND CENTER PLATE, DISTANCE OF CENTER PLATE SHALL BE ADJUSTED AT FIELD ACCORDING TO DETAIL DRAWING.

MATERIAL:
PLATE: A283 Gr.C, STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
STOP SHOE ON VALVE FOR GRE LINE 1" ~ 40"	2
SB-21	3

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

LENGTH MARK:(3)

MARK	L
01	300
02	350
03	400
04	450
05	500
06	550
07	600
08	650
09	700
10	750
11	800
12	850
13	900
14	950
15	1000
16	1050
17	1100
18	1150
19	1200

NPS MARK:(1)-(NOTE-2)

NPS MARK	RUN PIPE SIZE	D	A	R	X°	øB	E			N	T	STOPPER
							H=100	H=150	H=200			
01	1"	54	40	26	(360 / 8)°	16	142	192	242	112	10	U 80
1A	1-1/2"	54	49	35	(360 / 8)°	16	144	194	244	125	10	
02	2"	76	60	45	(360 / 8)°	19	153	203	253	147	10	
2A	2-1/2"	89	70	54	(360 / 8)°	19	159	209	259	161	10	
03	3"	95	76	61	(360 / 8)°	19	160	210	260	170	10	
04	4"	114	95	80	(360 / 16)°	19	197	247	297	238	10	HEB 100
06	6"	140	121	103	(360 / 16)°	22	216	266	316	292	10	
08	8"	171	149	129	(360 / 16)°	22	237	287	337	344	10	
10	10"	203	181	159	(360 / 24)°	25	201	251	301	331	10	
12	12"	241	216	194	(360 / 24)°	25	214	264	314	380	10	
14	14"	267	238	215	(360 / 24)°	28	227	277	327	418	10	
16	16"	298	270	247	(360 / 32)°	28	277	327	377	530	10	HEB 120
18	18"	318	289	264	(360 / 32)°	32	289	339	389	568	10	
20	20"	349	318	293	(360 / 40)°	32	256	306	356	537	10	
24	24"	406	375	348	(360 / 40)°	35	277	327	377	624	12	HEB 140
26	26"	435	403	373	(360 / 48)°	35	325	375	425	734	12	
28	28"	464	432	401	(360 / 56)°	35	369	419	469	825	12	
30	30"	292	457	427	(360 / 56)°	35	384	434	484	868	12	HEB 160
32	32"	530	489	455	(360 / 56)°	41	411	461	511	934	12	
34	34"	556	514	481	(360 / 64)°	41	370	420	470	901	12	
36	36"	584	543	509	(360 / 64)°	41	381	431	481	946	12	
38	38"	619	575	541	(360 / 64)°	41	396	446	496	995	15	
40	40"	645	600	567	(360 / 72)°	41	441	491	541	1089	15	HEB 200

STOPPER MARK:(4)

MARK	X
1	100
2	200
3	300
4	400
5	500

HEIGHT MARK:(2)

MARK	H	h
1	100	50
2	150	100
3	200	150

INDICATION:

SB-21-[ ][ ][ ]-[ ][ ][ ]
(1) (2) (3) (4)

1-NPS MARK
2-HEIGHT MARK
3-LENGTH MARK
4-STOPPER LENGTH MARK

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
2- THE DATA IS REFERENCE ONLY AND THE FINAL DATA SHOULD BE REFERRED THE VENDOR DWG. SO DIMENSIONS MAY BE REQUIRED TO BE ADJUSTED AT FIELD.
3- IN CASE OF INTERFERENCE BETWEEN VALVE AND CENTER PLATE, DISTANCE OF CENTER PLATE SHALL BE ADJUSTED AT FIELD ACCORDING TO DETAIL DRAWING.

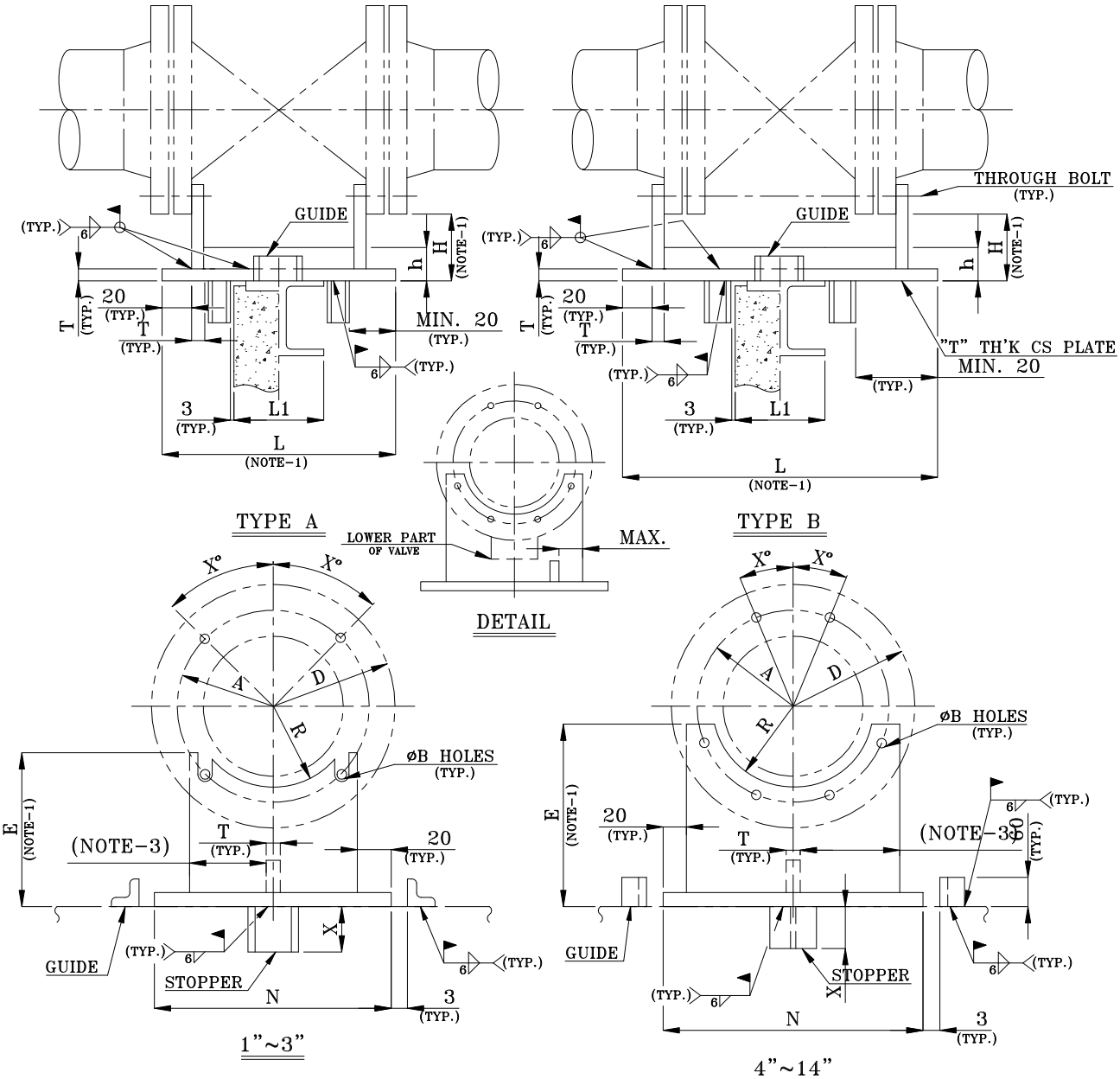
MATERIAL:
PLATE: A283 Gr.C, STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
STOP SHOE ON VALVE FOR GRE LINE 1" ~ 40"	3
SB-21	3

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 158 از 394



INDICATION:

SB-22- [ ][ ][ ] - [ ][ ][ ]
(1) (2) (3) (4)

1-NPS MARK
2-HEIGHT MARK
3-LENGTH MARK
4-STOPPER LENGTH MARK

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

2- THE DATA IS REFERENCE ONLY AND THE FINAL DATA SHOULD BE REFERRED THE VENDOR DWG. SO DIMENSIONS MAY BE REQUIRED TO BE ADJUSTED AT FIELD.

3- IN CASE OF INTERFERENCE BETWEEN VALVE AND CENTER PLATE, DISTANCE OF CENTER PLATE SHALL BE ADJUSTED AT FIELD ACCORDING TO DETAIL DRAWING.

MATERIAL:
PLATE: A283 Gr.C, STANDARD PROFILE: ASTM A36

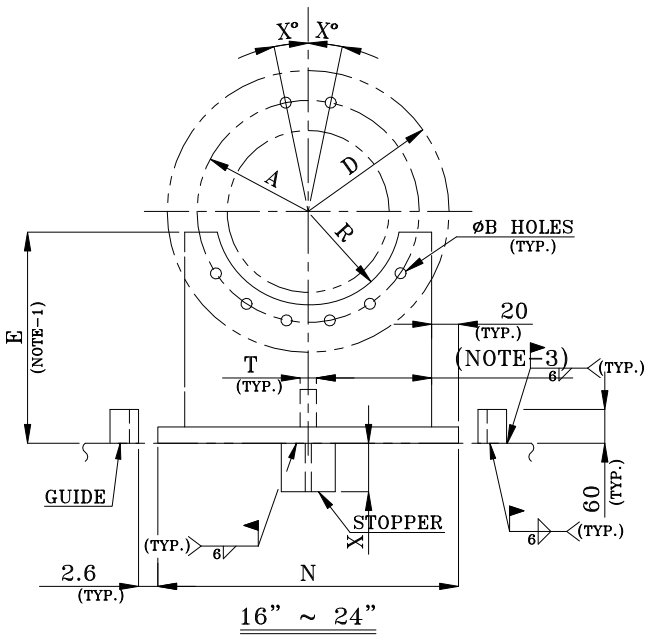
SUPPORT DESCRIPTION:	SHEET
SEMI ANCHOR SHOE ON VALVE FOR GRE LINE 1" ~ 40"	1
SB-22	3

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

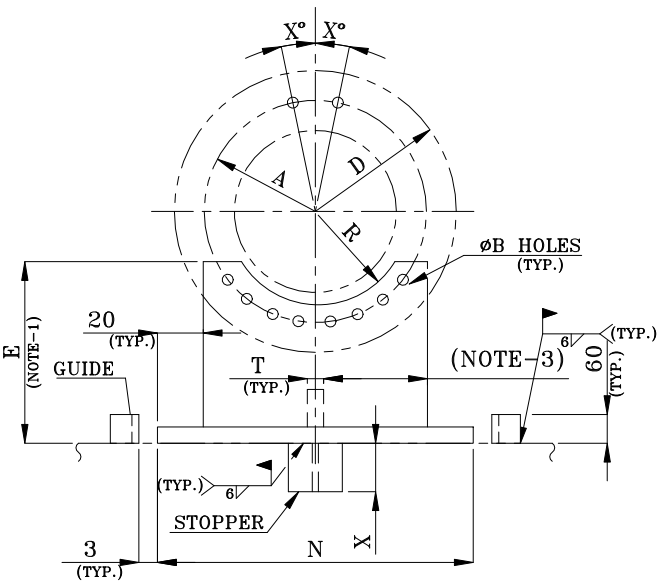
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 159 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

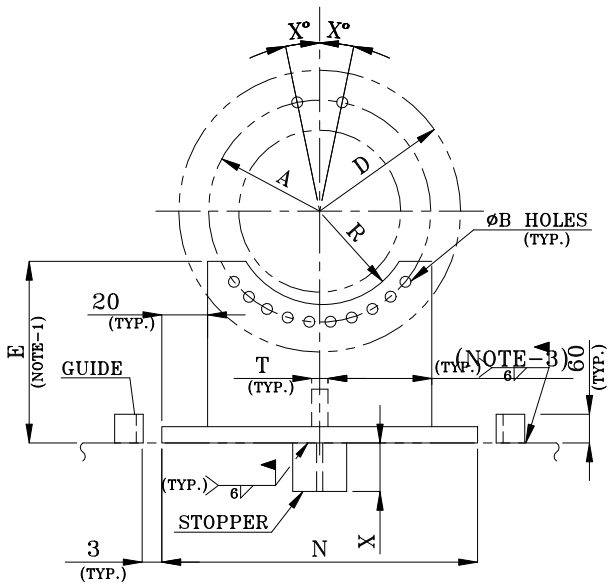
053-073-9184



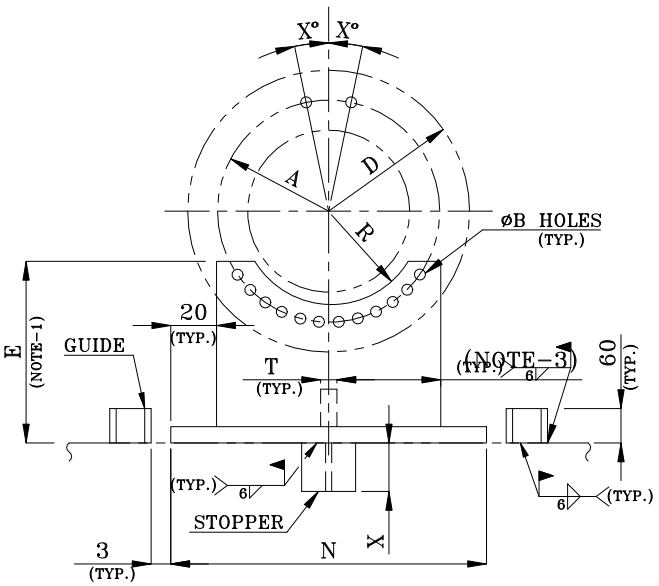
16" ~ 24"



26"



26" ~ 38"



40"

INDICATION:

SB-22-□□□-□□□

(1) (2) (3) (4)

1-NPS MARK
2-HEIGHT MARK
3-LENGTH MARK
4-STOPPER LENGTH MARK

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.

2- THE DATA IS REFERENCE ONLY AND THE FINAL DATA SHOULD BE REFERRED THE VENDOR DWG. SO DIMENSIONS MAY BE REQUIRED TO BE ADJUSTED AT FIELD.

3- IN CASE OF INTERFERENCE BETWEEN VALVE AND CENTER PLATE, DISTANCE OF CENTER PLATE SHALL BE ADJUSTED AT FIELD ACCORDING TO DETAIL DRAWING.

MATERIAL:

PLATE: A283 Gr.C, STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
SEMI ANCHOR SHOE ON VALVE FOR GRE LINE 1" ~ 40"	2
SB-22	3

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

LENGTH MARK:(3)

MARK	L
01	300
02	350
03	400
04	450
05	500
06	550
07	600
08	650
09	700
10	750
11	800
12	850
13	900
14	950
15	1000
16	1050
17	1100
18	1150
19	1200

NPS MARK:(1)-(NOTE-2)

NPS MARK	RUN PIPE SIZE	D	A	R	X°	øB	E			N	T	STOPPER	GUIDE
							H=100	H=150	H=200				
01	1"	54	40	26	(360 / 8)°	16	142	192	242	112	10	U 80	L 30x30x3
1A	1-1/2"	54	49	35	(360 / 8)°	16	144	194	244	125	10		
02	2"	76	60	45	(360 / 8)°	19	153	203	253	147	10		
2A	2-1/2"	89	70	54	(360 / 8)°	19	159	209	259	161	10		
03	3"	95	76	61	(360 / 8)°	19	160	210	260	170	10		
04	4"	114	95	80	(360 / 16)°	19	197	247	297	238	10	HEB 100	U 80
06	6"	140	121	103	(360 / 16)°	22	216	266	316	292	10		
08	8"	171	149	129	(360 / 16)°	22	237	287	337	344	10		
10	10"	203	181	159	(360 / 24)°	25	201	251	301	331	10		
12	12"	241	216	194	(360 / 24)°	25	214	264	314	380	10		
14	14"	267	238	215	(360 / 24)°	28	227	277	327	418	10		
16	16"	298	270	247	(360 / 32)°	28	277	327	377	530	10	HEB 120	U 200
18	18"	318	289	264	(360 / 32)°	32	289	339	389	568	10		
20	20"	349	318	293	(360 / 40)°	32	256	306	356	537	10		
24	24"	406	375	348	(360 / 40)°	35	277	327	377	624	12	HEB 140	
26	26"	435	403	373	(360 / 48)°	35	325	375	425	734	12		
28	28"	464	432	401	(360 / 56)°	35	369	419	469	825	12		
30	30"	292	457	427	(360 / 56)°	35	384	434	484	868	12	HEB 160	
32	32"	530	489	455	(360 / 56)°	41	411	461	511	934	12		
34	34"	556	514	481	(360 / 64)°	41	370	420	470	901	12		
36	36"	584	543	509	(360 / 64)°	41	381	431	481	946	12		
38	38"	619	575	541	(360 / 64)°	41	396	446	496	995	15		
40	40"	645	600	567	(360 / 72)°	41	441	491	541	1089	15	HEB 200	HEB 160

STOPPER MARK:(4)

MARK	X
1	100
2	200
3	300
4	400
5	500

HEIGHT MARK:(2)

MARK	H	h
1	100	50
2	150	100
3	200	150

INDICATION:

SB-22-[ ][ ][ ]-[ ][ ][ ]
(1) (2) (3) (4)

1-NPS MARK
2-HEIGHT MARK
3-LENGTH MARK
4-STOPPER LENGTH MARK

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
2- THE DATA IS REFERENCE ONLY AND THE FINAL DATA SHOULD BE REFERRED THE VENDOR DWG. SO DIMENSIONS MAY BE REQUIRED TO BE ADJUSTED AT FIELD.
3- IN CASE OF INTERFERENCE BETWEEN VALVE AND CENTER PLATE, DISTANCE OF CENTER PLATE SHALL BE ADJUSTED AT FIELD ACCORDING TO DETAIL DRAWING.

MATERIAL:
PLATE: A283 Gr.C, STANDARD PROFILE: ASTM A36

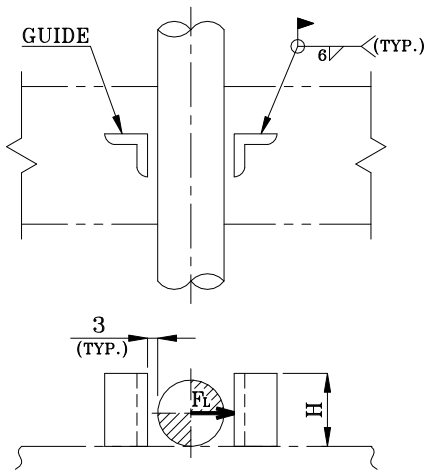
SUPPORT DESCRIPTION:	SHEET
SEMI ANCHOR SHOE ON VALVE FOR GRE LINE 1" ~ 40"	3
SB-22	3

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

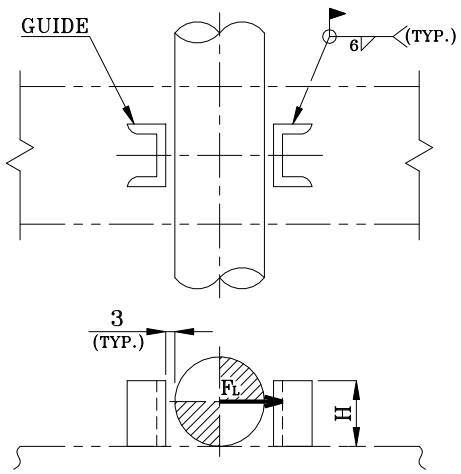
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



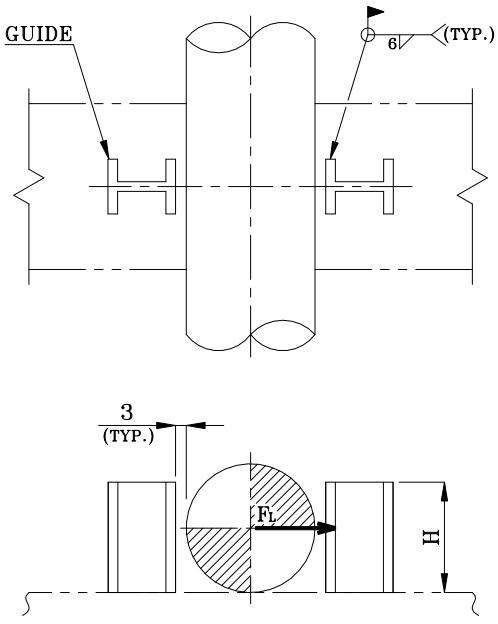
1/2"~4"



6"~14"

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE	GUIDE	H	ALLOWABLE LOAD (kg) FL
0A	1/2"	L50x50x5	40	330
0B	3/4"		40	
01	1"		40	
1A	1+1/2"		50	
02	2"	U100	50	650
03	3"		80	
04	4"		100	
06	6"	U120	150	1550
08	8"		150	1200
10	10"	U200	150	2250
12	12"		200	1900
14	14"		200	1750
16	16"	HEB120	250	5450
18	18"		250	4850
20	20"		300	4350
24	24"	HEB160	350	6600
26	26"		350	6100
28	28"		400	5700
30	30"	HEB200	400	8400
32	32"		450	7800
34	34"		450	7400
36	36"		500	7000
38	38"	HEB240	550	9600
40	40"		600	9100
42	42"		650	8700
44	44"		700	8300
48	48"		750	7600
50	50"		800	7400
52	52"		850	7000
56	56"		900	6500



16"~56"

INDICATION:

SC-01-□□
(1)

1-NPS MARK

NOTE:

MATERIAL:

STANDARD PROFILE: ASTM A36

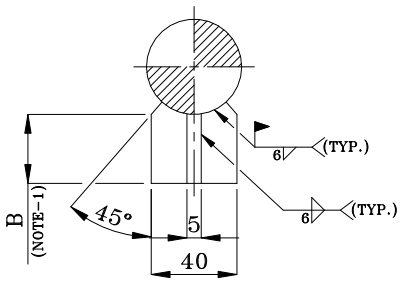
SUPPORT DESCRIPTION:	SHEET
GUIDE BARE PIPE 1/2" ~ 56"	1
SC-01	1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

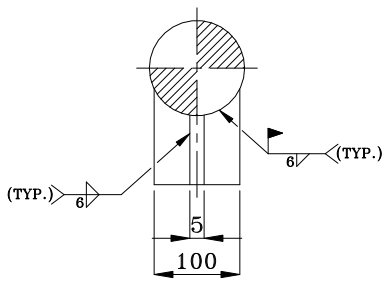
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 162 از 394

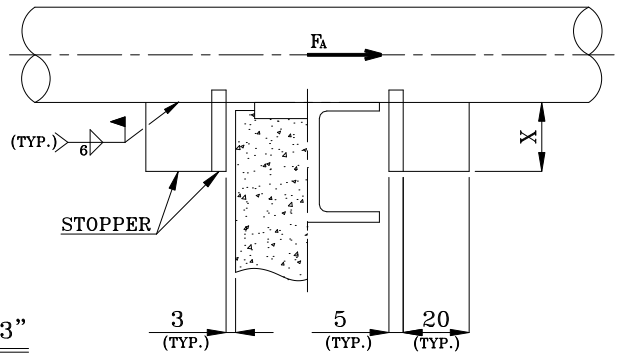
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

053-073-9184

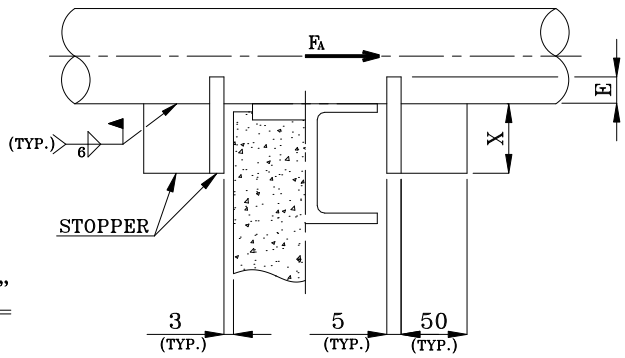


1/2"~1"
1+1/2"~3"

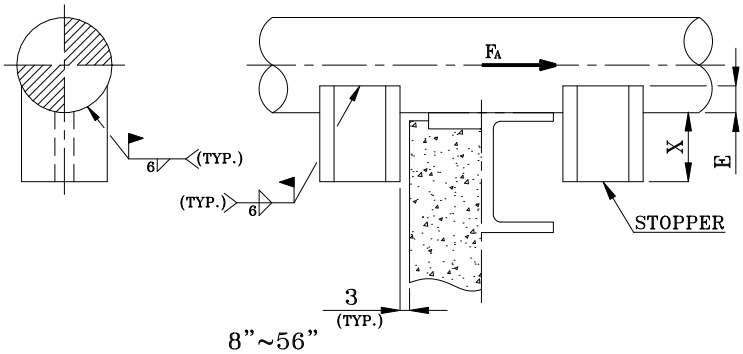




1/2"~3"



4"~6"



8"~56"

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE	STOPPER	E	ALLOW. LOAD (kg) FA
0A	1/2"	PLATE	–	65
0B	3/4"			
01	1"			
1A	1+1/2"			
02	2"			
03	3"			
04	4"		30	350
06	6"		17	
08	8"	HEB120	18	6500
10	10"		14	
12	12"		12	
14	14"	HEB140	15	9100
16	16"		13	
18	18"		11	
20	20"		10	
24	24"		9	
26	26"		8	
28	28"		7	
30	30"			
32	32"	HEB160	8	12000
34	34"			
36	36"		7	
40	40"			
42	42"	HEB200	10	19000
44	44"			
48	48"		9	
52	52"			
56	56"			

STOPPER MARK:(2)

MARK	X
1	50
2	100
3	150
4	200

INDICATION:

SC-02-□□-□
(1) (2)

1-NPS MARK
2-STOPPER LENGTH MARK

NOTE:

1- LENGHT "B" IS AS FOLLOW: FOR 1/2"~1": B=X-10, FOR 1+1/2"~3": B=X.

MATERIAL:

PLATE: A283 Gr.C, STANDARD PROFILE: ASTM A36

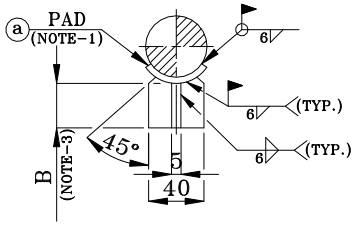
SUPPORT DESCRIPTION:	SHEET
STOPPER (CS-WITHOUT PWHT) 1/2" ~ 56"	1
SC-02	1

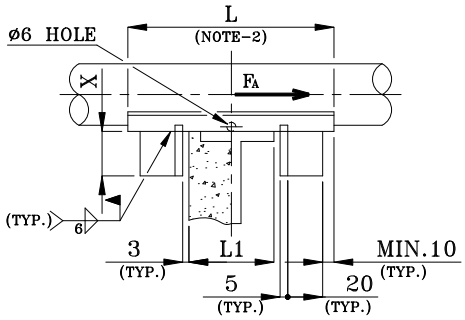
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 163 از 394

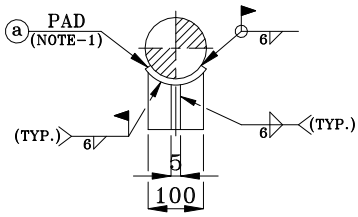
053-073-9184

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

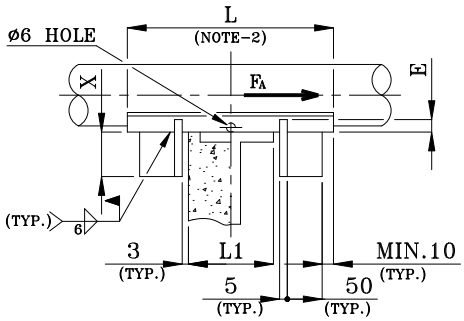




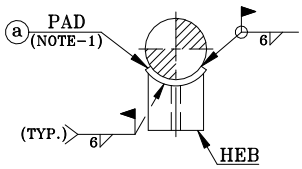
1/2"~1"
1+1/2"~3"

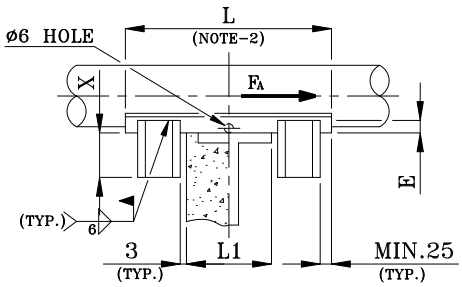


1/2"~3"

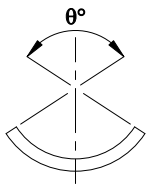


4"~6"





8"~56"



DETAIL OF PAD

STOPPER MARK:(3)

MARK	X
1	50
2	100
3	150
4	200

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE	θ°	E	STOPPER	ALLOW. LOAD (kg) FA
0A	1/2"	120°	–	PLATE	65
0B	3/4"				
01	1"				
1A	1+1/2"				
02	2"				
03	3"	90°			
04	4"	120°	25		350
06	6"	90°	15		
08	8"		17	HEB120	6500
10	10"		13		
12	12"		11		
14	14"		14	HEB140	9100
16	16"		12		
18	18"	60°	11		
20	20"		10		
24	24"		8		
26	26"				
28	28"		7		
30	30"				
32	32"		8	HEB160	12000
34	34"				
36	36"		7		
40	40"				
42	42"		10	HEB200	19000
44	44"		9		
48	48"				
52	52"		8		
56	56"				

PAD LENGTH MARK:(2)

MARK	L
1	300
2	400
3	500
4	600
5	700
6	800
7	900

INDICATION:

SC-03-□□-□□
(1) (2) (3)

1-NPS MARK
2-PAD LENGTH MARK
3-STOPPER LENGTH MARK

NOTE:

1- PAD (MATERIAL (a)) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE.

2- THE PAD LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM "L1".

3- LENGHT "B" IS AS FOLLOW: FOR 1/2"~1": B=X-10, FOR 1+1/2"~3": B=X.

MATERIAL:

PLATE: A283 Gr.C, STANDARD PROFILE: ASTM A36

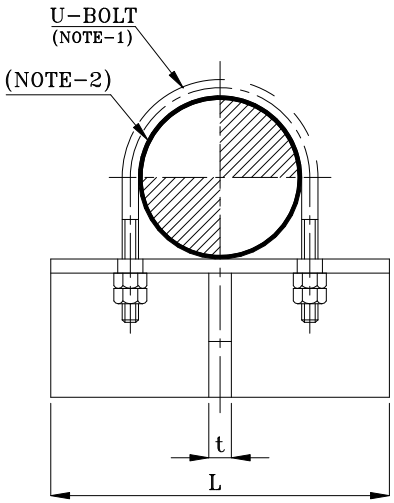
SUPPORT DESCRIPTION:	SHEET
STOPPER (CS-WITH PWHT, AS, SS) 1/2" ~ 56"	1
SC-03	1

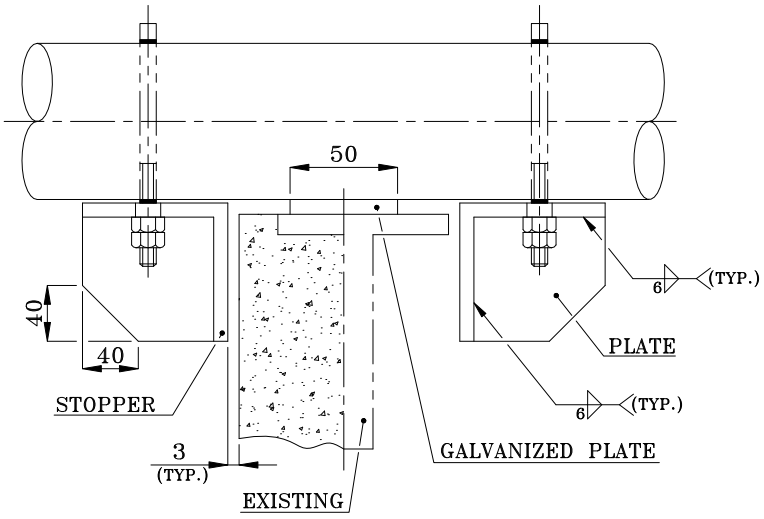
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

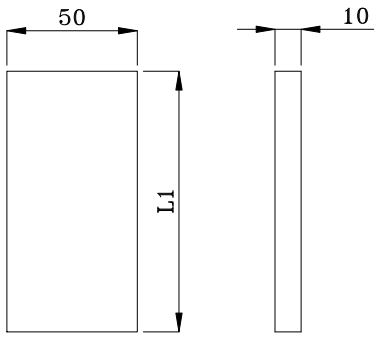
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02





1/2" ~ 8"



NPS MARK:(1)

NPS MARK	RUN PIPE SIZE	STOPPER	L	L1	t
0A	1/2"	L80x80x8	80	80	5
0B	3/4"		80	80	5
01	1"		100	80	5
1A	1+1/2"		100	80	5
02	2"	L150x150x15	120	100	10
03	3"		150	100	10
04	4"		200	150	10
06	6"		250	150	10
08	8"		300	200	10

GALVANIZED PLATE

INDICATION:

SC-04-[ ]
(1)

1-NPS MARK

NOTE:

1- SEPARATED TAG IS REQUIRED FOR U-BOLT SEE (SA-01).

2- ANTI CORROSION TAPE SHALL BE APPLIED BETWEEN PIPE AND U-BOLT.

MATERIAL:

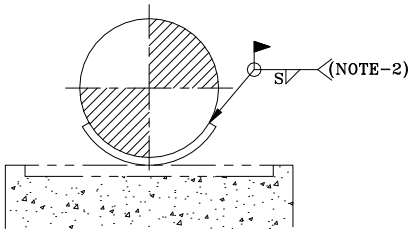
ANGLE: ASTM A36, PLATE: ASTM A283 Gr.C

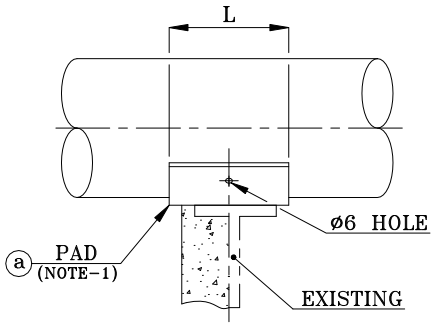
SUPPORT DESCRIPTION:	SHEET
STOPPER FOR GALVANIZED PIPE 1/2" ~ 8"	1
SC-04	1

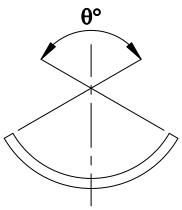
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 165 از 394







DETAIL OF PAD

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE	θ°
02	2"	120
03	3"	90
04	4"	
06	6"	
08	8"	
10	10"	
12	12"	
14	14"	
16	16"	
18	18"	60
20	20"	
24	24"	
26	26'	
28	28"	
30	30"	
32	32"	
34	34"	
36	36"	
38	38"	
40	40"	

LENGTH MARK:(2)

MARK	L
A	100
B	200
1	300
2	400
3	500
4	600
5	700
6	800
7	900

TABLE-1

PIPE SIZE INCH	PIPE OD/THK , PIPE THK mm	PAD THK mm
OD < 18"	REINFORCE PAD IS NOT REQUIRED UNLESS OTHERWISE SPECIFIED BY STRESS ENGINEER. IN THIS CASE PAD WILL BE SAME AS NOTE-4.	
18"≤ OD ≤40"	OD/t ≤ 90 , THK <10	SAME AS PIPE
18"≤ OD ≤40"	OD/t ≤ 90 , THK >10	PIPE SCH. STD
18"≤ OD ≤40"	OD/t > 90	PIPE SHOE SHALL BE USED
OD > 40"	ALL	PIPE SHOE SHALL BE USED
t : CORRODED THICKNESS OF PIPE.		

INDICATION:

SC-05-[ ][ ][ ]
(1) (2)

1-NPS MARK
2-LENGHT MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE SAME AS MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT (IF REQUIRED).

2- WELDING THICKNESS "S", SHOULD BE EQUAL TO PAD THICKNESS.

3- WHEN PADS FOR MATERIAL COMPATIBILITY PURPOSES IS NOT REQUIRED (e.g. CARBON STEEL PIPES), PAD FOR BEARING PROTECTION PURPOSES ONLY WILL BE USED FOR PIPES 18" AND LARGER (TABLE-1).

4- PAD THICKNESS FOR PIPE SIZE BELOW 18" DUE TO COMPATIBILITY PURPOSES IS STD AND IF THICKNESS OF RUN PIPE IS LESS THAN STD, IT SHALL BE MADE OF RUN PIPE.

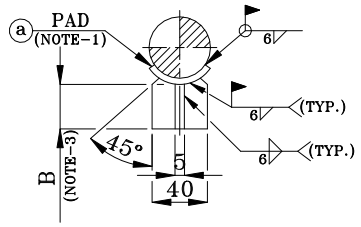
SUPPORT DESCRIPTION:	SHEET
REINFORCING PAD 2"~ 40"	1
SC-05	1

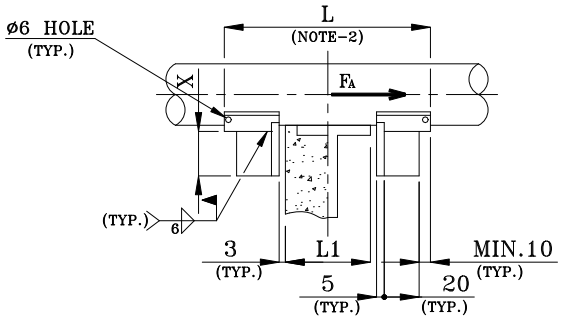
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 166 از 394

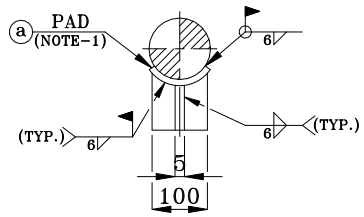
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

053-073-9184

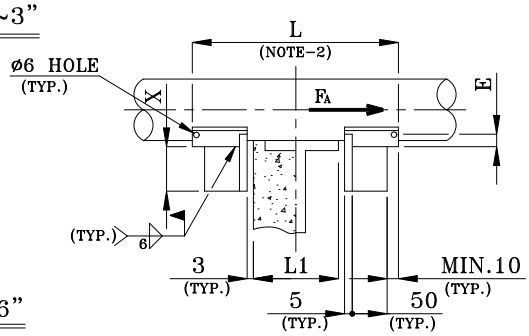




1/2"~1"
1+1/2"~3"



1/2"~3"



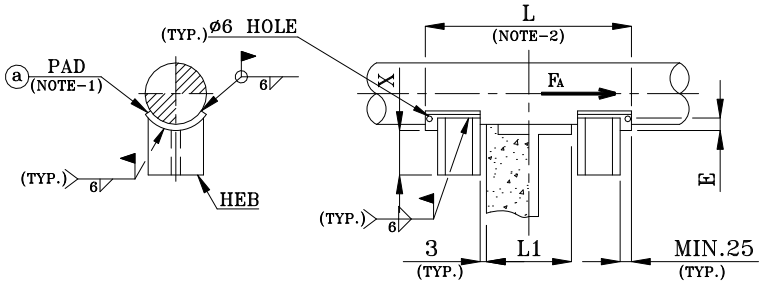
4"~6"

STOPPER MARK:(3)

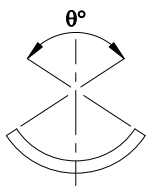
MARK	X
1	50
2	100
3	150
4	200

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE	θ°	E	STOPPER	ALLOW. LOAD (kg) FA
0A	1/2"	120°	–	PLATE	65
0B	3/4"				
01	1"				
1A	1+1/2"				
02	2"				
03	3"	90°			
04	4"	120°	25		350
06	6"	90°	15		
08	8"		17	HEB120	6500
10	10"		13		
12	12"		11		
14	14"		14	HEB140	9100
16	16"		12		
18	18"	60°	11		
20	20"		10		
24	24"		8		
26	26"				
28	28"		7		
30	30"				
32	32"		8	HEB160	12000
34	34"				
36	36"		7		
40	40"				
42	42"		10	HEB200	19000
44	44"		9		
48	48"				
52	52"		8		
56	56"				



8"~56"



DETAIL OF PAD

PAD LENGTH MARK:(2)

MARK	L
1	300
2	400
3	500
4	600
5	700
6	800
7	900

INDICATION:

SC-06-□□-□□
(1) (2) (3)

1-NPS MARK
2-PAD LENGTH MARK
3-STOPPER LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE.

2- THE PAD LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM "L1".

3- LENGHT "B" IS AS FOLLOW: FOR 1/2"~1": B=X-10, FOR 1+1/2"~3": B=X.

MATERIAL:

PLATE: A283 Gr.C, STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
STOPPER (CS-WITH PWHT, AS, SS) 1/2" ~ 56"	1
SC-06	1

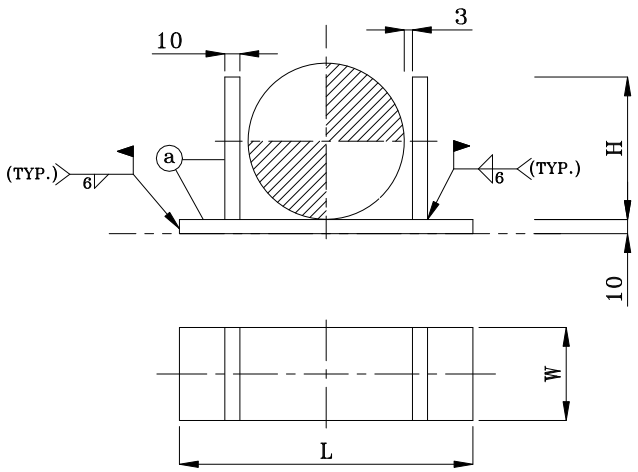
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 167 از 394



TYPE "A"
GUIDE

TYPE "B"
SIMPLE PLATE

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE	L	W	H
02	2"	120	50	60
03	3"	150	50	80
04	4"	175	50	100
06	6"	250	50	120
08	8"	300	50	150

INDICATION:

SC-07-□□-□□
(1) (2) (3)

1-TYPE MARK
2-SIZE MARK

MATERIAL:
PLATE: ASTM A283 Gr.C

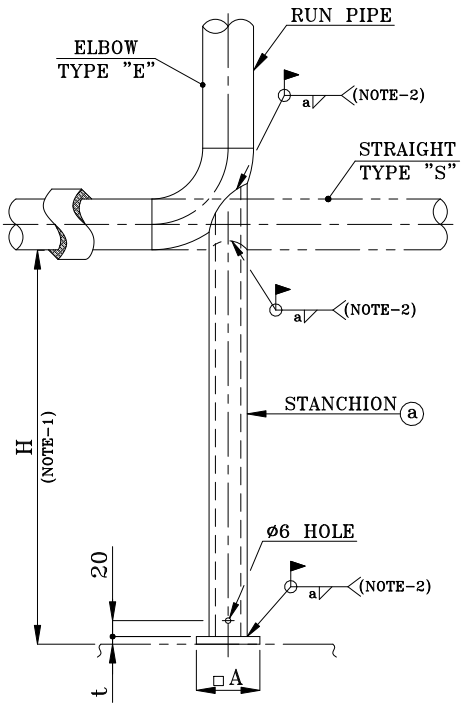
SUPPORT DESCRIPTION:	SHEET
UNINSULATED GALVANIZED PIPE REST-GUIDE 2" ~ 8"	1
SC-07	1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

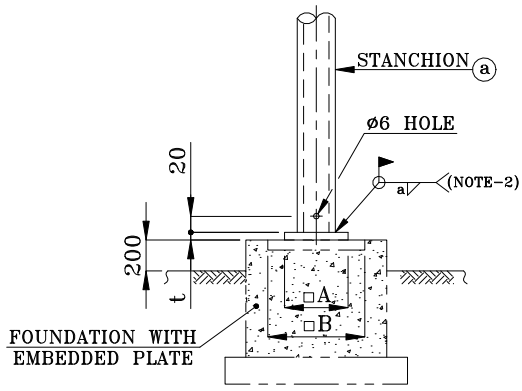
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

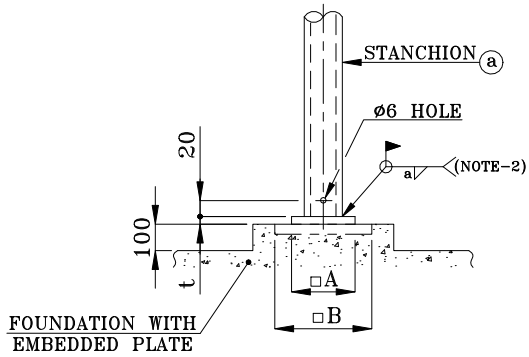
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



TYPE "A"
(STEEL SURFACE)



TYPE "B"
(UNPAVED AREA)



TYPE "C"
(PAVED AREA)

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	A	B	t
02	2"	1+1/2"	SCH80	120	170	10
03	3"	2"	STD			
04	4"	3"		140	190	
06	6"	4"		160	210	
08	8"	6"		220	270	
10	10"					
12	12"	8"		260	310	
14	14"					
16	16"	10"		320	370	12
18	18"					
20	20"	12"		350	400	
24	24"	14"		400	450	
26	26"					
28	28"	16"		450	500	15
30	30"					
32	32"	18"		500	550	
34	34"					
36	36"	20"		550	600	

HEIGHT MARK:(4)

MARK	H
1	600
2	700
3	800
4	900
5	1000
6	1100
7	1200
8	1300
9	1400

INDICATION:

SD-01-□□-□□□
(1) (2) (3) (4)

1-TYPE OF RUN PIPE
2-TYPE OF FOUNDATION
3-NPS MARK
4-HEIGHT MARK

NOTE:

1- TO BE ADJUSTED AT FIELD.

2- FOR STANCHION SIZE ≤4", a=STANCHION WALL THICKNESS, FOR STANCHION SIZE >4", a=6mm.

3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

4- MAX. DESIGN TEMP. FOR RUN PIPE SHALL NOT EXCEED 400°C.

MATERIAL:

STANCHION (a): A53 Gr.B, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
SLIDE STOOL (CS-WITHOUT PWHT) 2" ~ 36"	1
SD-01	1

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

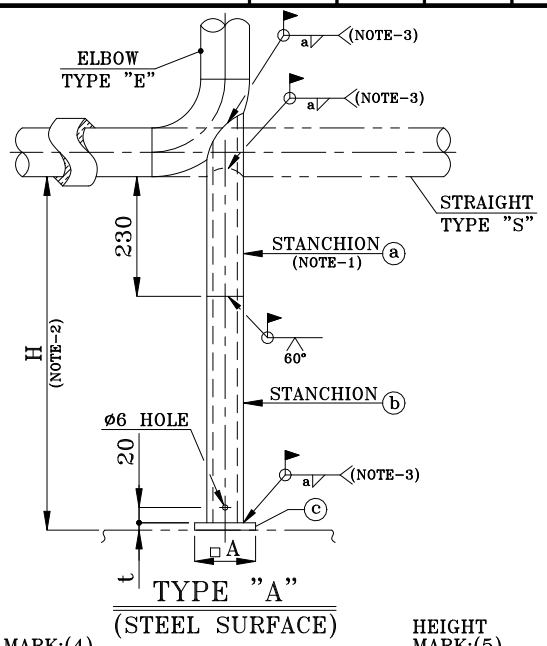
HIRGAN ENERGY

شماره پیمان:

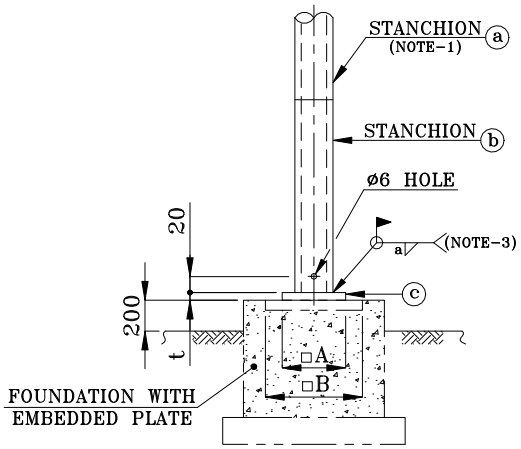
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

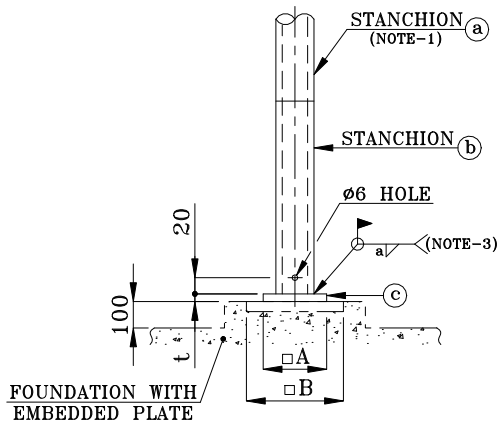
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



TYPE "A"
(STEEL SURFACE)



TYPE "B"
(UNPAVED AREA)



TYPE "C"
(PAVED AREA)

NPS MARK:(4)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	A	B	t
02	2"	1+1/2"	SCH80	120	170	10
03	3"	2"	STD			
04	4"	3"		140	190	
06	6"	4"		160	210	
08	8"	6"		220	270	
10	10"					
12	12"	8"		260	310	
14	14"					
16	16"	10"		320	370	12
18	18"					
20	20"	12"		350	400	
24	24"	14"		400	450	
26	26"					
28	28"	16"		450	500	15
30	30"					
32	32"	18"		500	550	
34	34"					
36	36"	20"		550	600	

HEIGHT MARK:(5)

MARK	H
1	600
2	700
3	800
4	900
5	1000
6	1100
7	1200
8	1300
9	1400

MATERIAL MARK:(3)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0 °C TO 400°C	MARK	A	C	E
	ⓐ NOTE-1	–	–	–
	ⓑ	A53 Gr.B	A53 Gr.B	A53 Gr.B
	ⓒ	A283 Gr.C	A283 Gr.C	A283 Gr.C
400 °C TO 550°C	MARK	B	D	F
	ⓐ NOTE-1	–	–	–
	ⓑ	–	A53 Gr.B	A53 Gr.B
	ⓒ	–	A283 Gr.C	A283 Gr.C

INDICATION:

SD-02-□□-□□□-□

(1) (2) (3) (4) (5)

1-TYPE OF RUN PIPE
2-TYPE OF FOUNDATION
3-MATERIAL MARK
4-NPS MARK
5-HEIGHT MARK

NOTE:

1- SAME MATERIAL OF RUN PIPE CAN BE APPLIED FOR MATERIAL ⓐ AND SHALL BE WELDED BEFORE PWHT.

2- TO BE ADJUSTED AT FIELD.

3- FOR STANCHION SIZE ≤4", a=STANCHION WALL THICKNESS, FOR STANCHION SIZE >4", a=6mm.

4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

SUPPORT DESCRIPTION:	SHEET
SLIDE STOOL (CS-WITH PWHT, AS, SS) 2" ~ 36"	1
SD-02	1

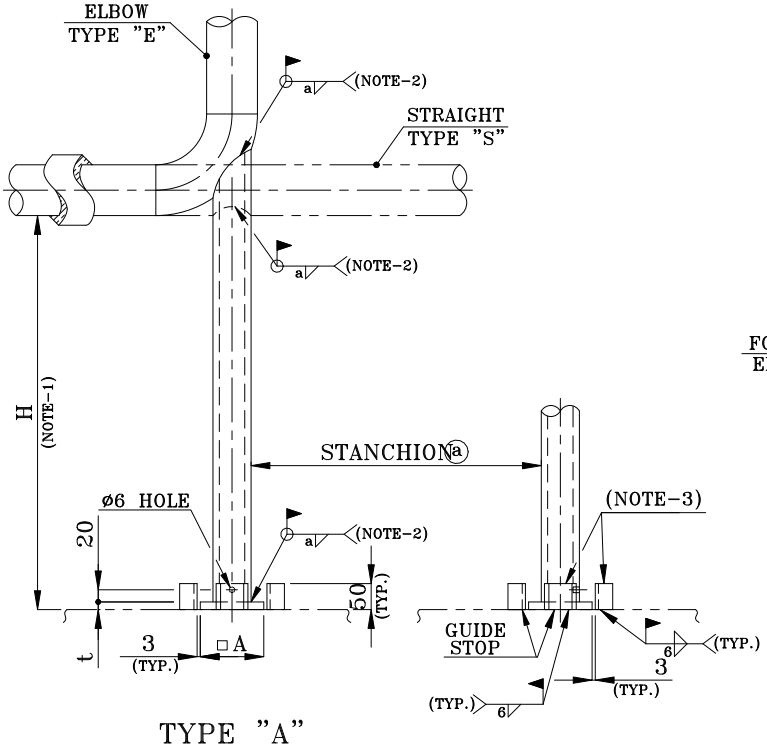
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

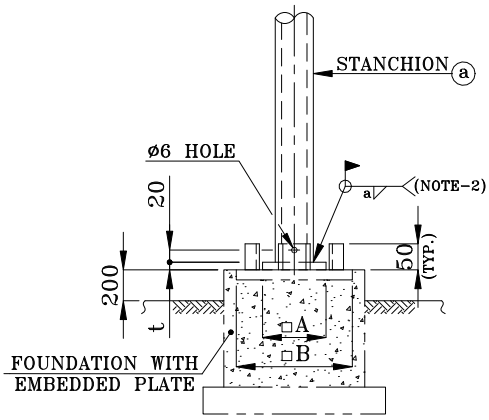
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

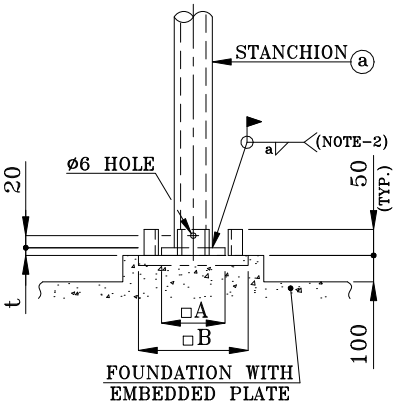
شماره صفحه: 170 از 394



TYPE "A"
(STEEL SURFACE)



TYPE "B"
(UNPAVED AREA)



TYPE "C"
(PAVED AREA)

NPS MARK:(4)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	A	B	t	GUIDE OR STOPPER
02	2"	1+1/2"	SCH80	120	280	10	U100
03	3"	2"	STD				
04	4"	3"		140	300		
06	6"	4"		160	320		
08	8"	6"		220	390		U120
10	10"						
12	12"	8"		260	470		U200
14	14"						
16	16"	10"		320	530	12	
18	18"						
20	20"	12"		350	610		HEB100
24	24"	14"		400	660		
26	26"						
28	28"	16"		450	750	15	HEB120
30	30"						
32	32"	18"		500	880		HEB160
34	34"						
36	36"	20"		550	930		

HEIGHT MARK:(5)

MARK	H
1	600
2	700
3	800
4	900
5	1000
6	1100
7	1200
8	1300
9	1400

INDICATION:

SD-03-[ ][ ][ ]-[ ][ ]
(1) (2) (3) (4) (5)

1-TYPE OF RUN PIPE
2-TYPE OF FOUNDATION
3-TYPE OF FUNCTION
4-NPS MARK
5-HEIGHT MARK

NOTE:

1- TO BE ADJUSTED AT FIELD.

2- FOR STANCHION SIZE ⩽4", a=STANCHION WALL THICKNESS, FOR STANCHION SIZE >4", a=6mm.

3- "G" INDICATES "GUIDE" & "L" INDICATES "LINE STOP" AND "S" INDICATES "SEMI ANCHOR" FOR TYPES OF FUNCTION.

4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

5- MAX. DESIGN TEMP. FOR RUN PIPE SHALL NOT EXCEED 400°C.

MATERIAL:
STANCHION ⓐ : A53 Gr.B, PLATE: A283 Gr.C, STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
GUIDE/LINE STOP/SEMI ANCHOR STOOL (CS-WITHOUT PWHT) 2" ~ 36"	1
SD-03	1

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

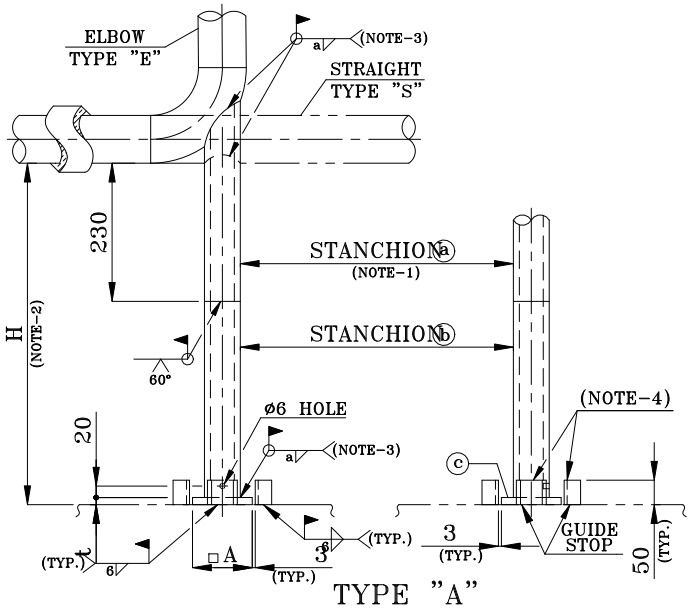
HIRGAN ENERGY

شماره پیمان:

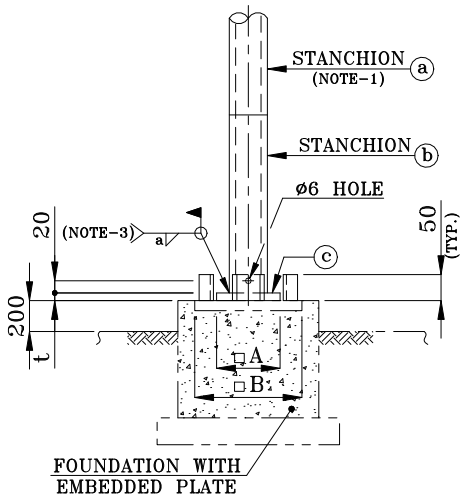
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



TYPE "A"
(STEEL SURFACE)



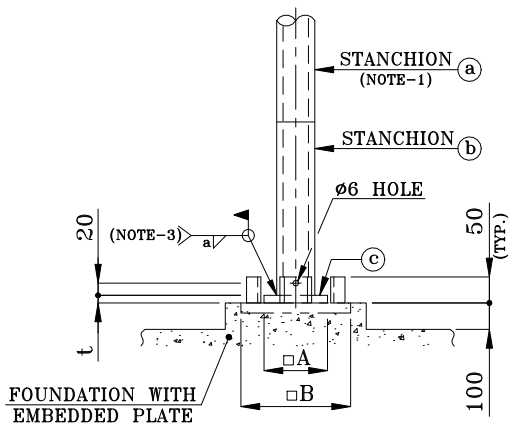
TYPE "B"
(UNPAVED AREA)

NPS MARK:(5)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	A	B	t	GUIDE OR STOPPER
02	2"	1+1/2"	SCH80	120	280	10	U100
03	3"	2"	STD				
04	4"	3"		140	300		
06	6"	4"		160	320		
08	8"	6"		220	390		U120
10	10"						
12	12"	8"		260	470		U200
14	14"						
16	16"	10"		320	530	12	
18	18"						
20	20"	12"		350	610		HEB100
24	24"	14"		400	660		
26	26"						
28	28"	16"		450	750	15	HEB120
30	30"						
32	32"	18"		500	880		HEB160
34	34"						
36	36"	20"		550	930		

HEIGHT MARK:(6)

MARK	H
1	600
2	700
3	800
4	900
5	1000
6	1100
7	1200
8	1300
9	1400



TYPE "C"
(PAVED AREA)

MATERIAL MARK:(4)

DES. TEMP / MATERIAL OF RUN PIPE — MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0 °C TO 400°C	MARK	A	C	E
	ⓐ NOTE-1	–	–	–
	ⓑ	A53 Gr.B	A53 Gr.B	A53 Gr.B
	ⓒ	A283 Gr.C	A283 Gr.C	A283 Gr.C
400 °C TO 550°C	MARK	B	D	F
	ⓐ NOTE-1	–	–	–
	ⓑ	–	A53 Gr.B	A53 Gr.B
	ⓒ	–	A283 Gr.C	A283 Gr.C

INDICATION:

SD-04-[ ][ ][ ]-[ ][ ][ ]-[ ]
(1) (2) (3) (4) (5) (6)

1-TYPE OF RUN PIPE
2-TYPE OF FOUNDATION
3-TYPE OF FUNCTION
4-MATERIAL MARK
5-NPS MARK
6-HEIGHT MARK

NOTE:

1- SAME MATERIAL OF RUN PIPE CAN BE APPLIED FOR MATERIAL ⓐ AND SHALL BE WELDED BEFORE PWHT.

2- TO BE ADJUSTED AT FIELD.

3- FOR STANCHION SIZE ≤4", a=STANCHION WALL THICKNESS, FOR STANCHION SIZE >4", a=6mm.

4- "G" INDICATES "GUIDE" & "L" INDICATES "LINE STOP" AND "S" INDICATES "SEMI ANCHOR" FOR TYPES OF FUNCTION.

5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

MATERIAL:
STANDARD PROFILE: ASTM A36

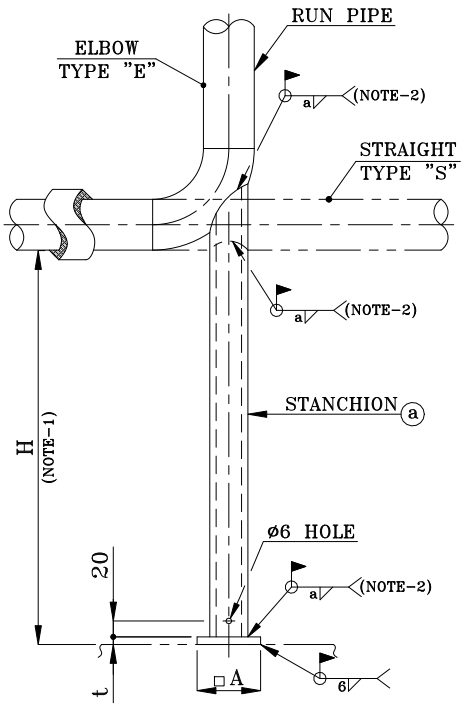
SUPPORT DESCRIPTION:
GUIDE/LINE STOP/SEMI ANCHOR STOOL
(CS-WITH PWHT, AS, SS)
2" ~ 36"
SD-04

SHEET 1 / 1

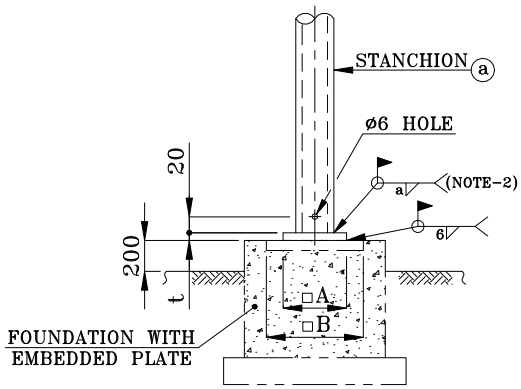
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02

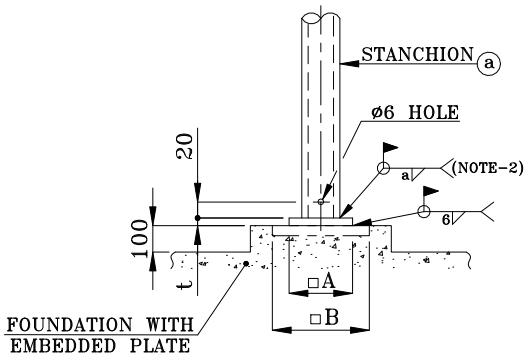
شماره صفحه: 172 از 394



TYPE "A"
(STEEL SURFACE)



TYPE "B"
(UNPAVED AREA)



TYPE "C"
(PAVED AREA)

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	A	B	t
02	2"	1+1/2"	SCH80	120	170	10
03	3"	2"	STD			
04	4"	3"		140	190	
06	6"	4"		160	210	
08	8"	6"		220	270	
10	10"					
12	12"	8"		260	310	
14	14"					
16	16"	10"		320	370	12
18	18"					
20	20"	12"		350	400	
24	24"	14"		400	450	
26	26"					
28	28"	16"		450	500	15
30	30"					
32	32"	18"		500	550	
34	34"					
36	36"	20"		550	600	

HEIGHT MARK:(4)

MARK	H
1	600
2	700
3	800
4	900
5	1000
6	1100
7	1200
8	1300
9	1400

INDICATION:

SD-05-□□-□□□□
(1) (2) (3) (4)

1-TYPE OF RUN PIPE
2-TYPE OF FOUNDATION
3-NPS MARK
4-HEIGHT MARK

NOTE:

1- TO BE ADJUSTED AT FIELD.

2- FOR STANCHION SIZE ⩽4", a=STANCHION WALL THICKNESS, FOR STANCHION SIZE >4", a=6mm.

3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

4- MAX. DESIGN TEMP. FOR RUN PIPE SHALL NOT EXCEED 400°C.

MATERIAL:

STANCHION (a): A53 Gr.B, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
FIXED STOOL (CS-WITHOUT PWHT) 2" ~ 36"	1
SD-05	1

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

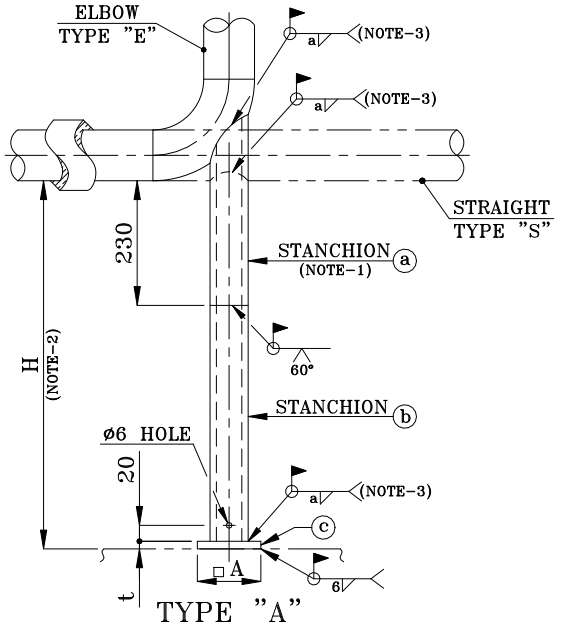
PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

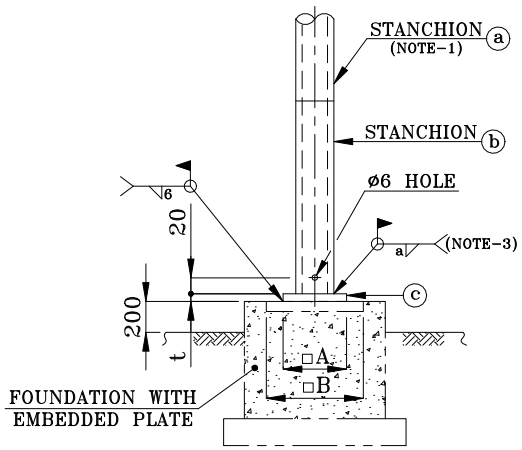
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 173 از 394



TYPE "A"
(STEEL SURFACE)



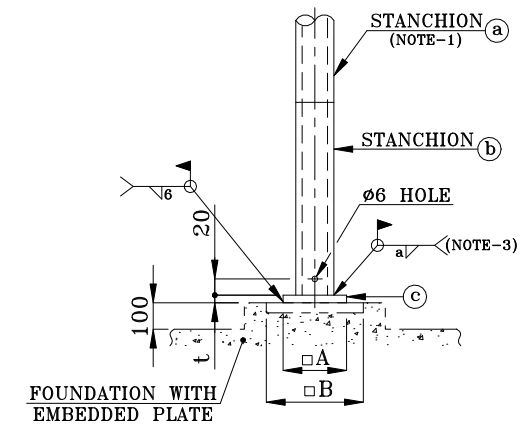
TYPE "B"
(UNPAVED AREA)

NPS MARK:(4)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	A	B	t
02	2"	1+1/2"	SCH80	120	170	10
03	3"	2"	STD			
04	4"	3"		140	190	
06	6"	4"		160	210	
08	8"	6"		220	270	
10	10"					
12	12"	8"		260	310	
14	14"					
16	16"	10"		320	370	12
18	18"					
20	20"	12"		350	400	
24	24"	14"		400	450	
26	26"					
28	28"	16"		450	500	15
30	30"					
32	32"	18"		500	550	
34	34"					
36	36"	20"		550	600	

HEIGHT MARK:(5)

MARK	H
1	600
2	700
3	800
4	900
5	1000
6	1100
7	1200
8	1300
9	1400



TYPE "C"
(PAVED AREA)

MATERIAL MARK:(3)

DES. TEMP	MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0 °C TO 400°C	MARK	A	C	E
	ⓐ NOTE-1	–	–	–
	ⓑ	A53 Gr.B	A53 Gr.B	A53 Gr.B
	ⓒ	A283 Gr.C	A283 Gr.C	A283 Gr.C
400 °C TO 550°C	MARK	B	D	F
	ⓐ NOTE-1	–	–	–
	ⓑ	–	A53 Gr.B	A53 Gr.B
	ⓒ	–	A283 Gr.C	A283 Gr.C

INDICATION:

SD-06-□□-□□□-□

(1) (2) (3) (4) (5)

1-TYPE OF RUN PIPE
2-TYPE OF FOUNDATION
3-MATERIAL MARK
4-NPS MARK
5-HEIGHT MARK

NOTE:

1- SAME MATERIAL OF RUN PIPE CAN BE APPLIED FOR MATERIAL ⓐ AND SHALL BE WELDED BEFORE PWHT.

2- TO BE ADJUSTED AT FIELD.

3- FOR STANCHION SIZE ⩽4", a=STANCHION WALL THICKNESS, FOR STANCHION SIZE >4", a=6mm.

4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

SUPPORT DESCRIPTION:	SHEET
FIXED STOOL (CS-WITH PWHT, AS, SS) 2" ~ 36"	1
SD-06	1

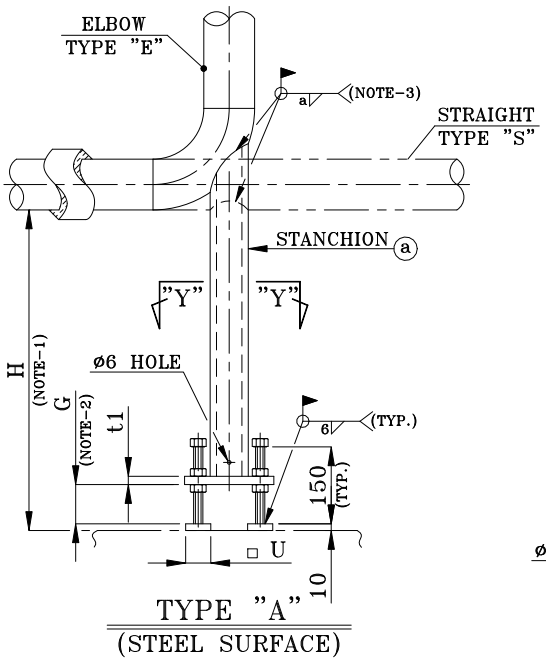
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

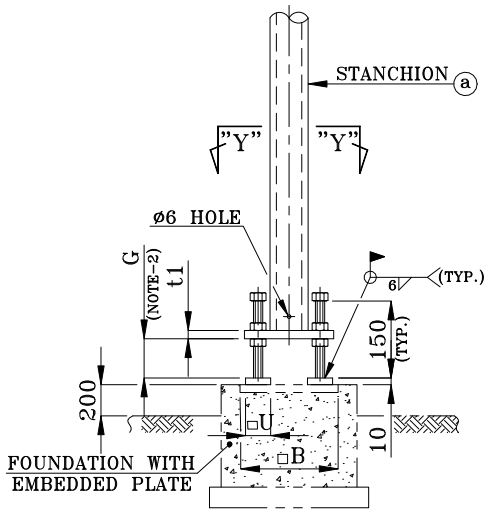
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

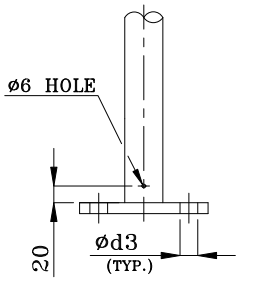
شماره صفحه: 174 از 394



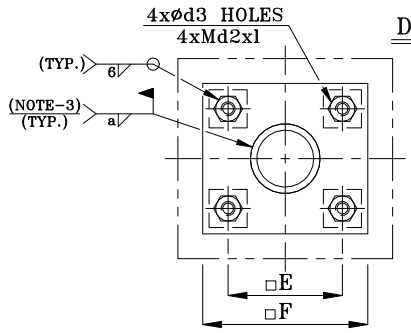
TYPE "A"
(STEEL SURFACE)



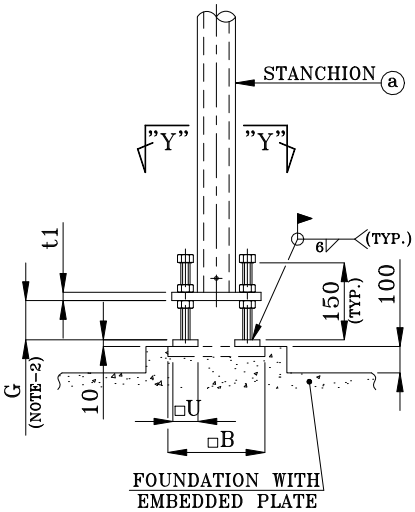
TYPE "B"
(UNPAVED AREA)



DETAIL OF PLATE



VIEW "Y" ~ "Y"



TYPE "C"
(PAVED AREA)

HEIGHT MARK:(4)

MARK	H
1	600
2	700
3	800
4	900
5	1000
6	1100
7	1200
8	1300
9	1400

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	B	F	E	U	t1	ød3	Md2xl
02	2"	1+1/2"	SCH80	250	150	80	30	10	18	M16x150
03	3"	2"	STD	260	160	90	30	10	18	M16x150
04	4"	3"		290	190	120	35	10	20	M18x150
06	6"	4"		310	210	140	35	10	20	M18x150

INDICATION:

SD-07-□□-□□□
(1) (2) (3) (4)

1-TYPE OF RUN PIPE
2-TYPE OF FOUNDATION
3-NPS MARK
4-HEIGHT MARK

NOTE:

1- TO BE ADJUSTED IN THE FIELD.

2- FOR ADJUSTING, "G" SHOULD BE BETWEEN 50 AND 140 (50<G<140).

3- FOR STANCHION SIZE ≤4", a=STANCHION WALL THICKNESS, FOR STANCHION SIZE >4", a=6mm.

4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

5- MAX. DESIGN TEMP. FOR RUN PIPE SHALL NOT EXCEED 400°C.

MATERIAL:
STANCHION (a) : A53 Gr.B, PLATE: A283 Gr.C, BOLT & NUT: A325

SUPPORT DESCRIPTION:	SHEET
ADJUSTABLE SLIDE STOOL (CS-WITHOUT PWHT) 2" ~ 6"	1
SD-07	2

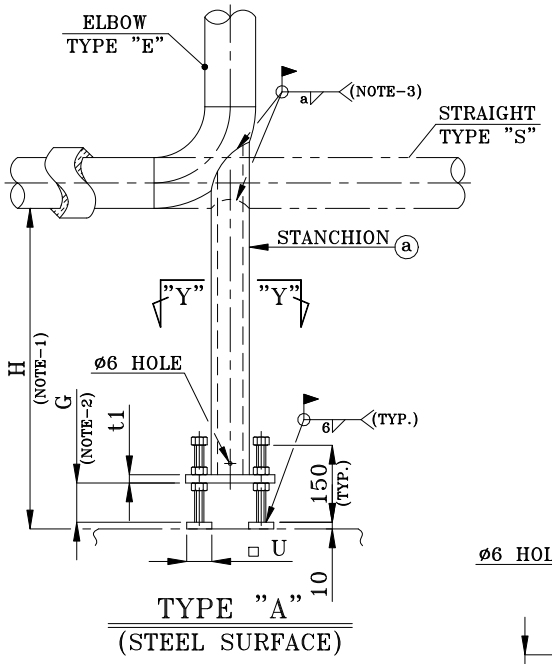
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

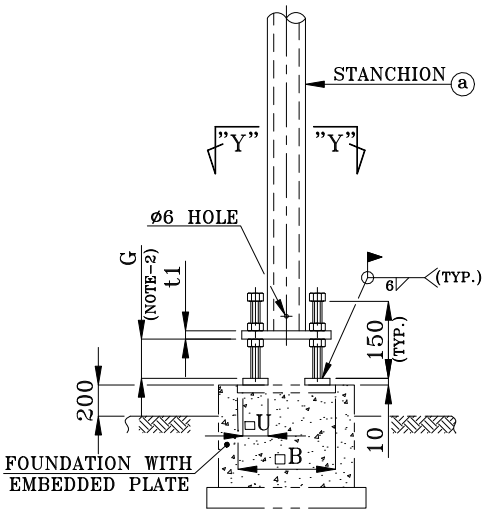
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

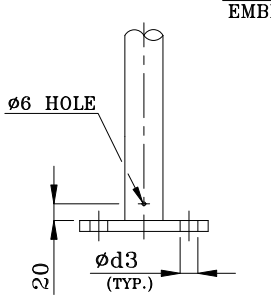
شماره صفحه: 175 از 394



TYPE "A"
(STEEL SURFACE)



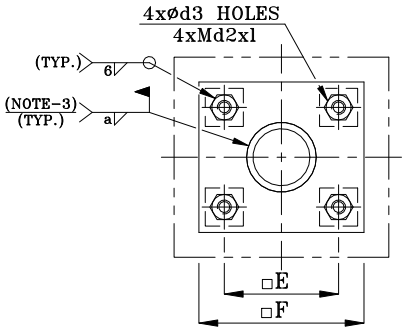
TYPE "B"
(UNPAVED AREA)



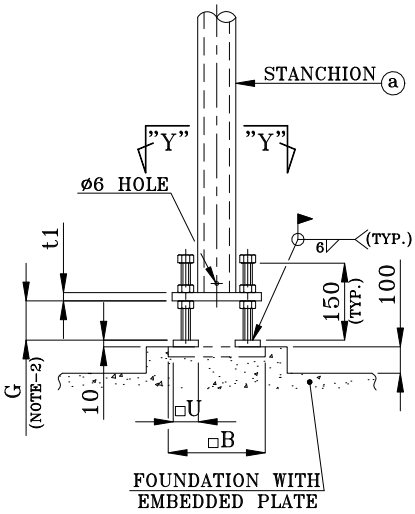
DETAIL OF PLATE

HEIGHT MARK:(4)

MARK	H
1	600
2	700
3	800
4	900
5	1000
6	1100
7	1200
8	1300
9	1400



VIEW "Y" ~ "Y"



TYPE "C"
(PAVED AREA)

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	B	F	E	U	t1	ød3	Md2xl
08	8"	6"	STD	370	270	200	40	12	22	M20x150
10	10"									
12	12"	8"		430	330	250	50	15	26	M24x150
14	14"									
16	16"	10"		490	390	300	55	15	29	M27x150
18	18"									
20	20"	12"		540	440	350	60	15	32	M30x150
24	24"	14"		580	480	380	65	15	35	M33x150

INDICATION:

SD-07-□□-□□□
(1) (2) (3) (4)

1-TYPE OF RUN PIPE
2-TYPE OF FOUNDATION
3-NPS MARK
4-HEIGHT MARK

NOTE:

1- TO BE ADJUSTED IN THE FIELD.

2- FOR ADJUSTING, "G" SHOULD BE BETWEEN 50 AND 140 (50<G<140).

3- FOR STANCHION SIZE ≤4", a=STANCHION WALL THICKNESS, FOR STANCHION SIZE >4", a=6mm.

4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

5- MAX. DESIGN TEMP. FOR RUN PIPE SHALL NOT EXCEED 400°C.

MATERIAL:

STANCHION (a) : A53 Gr.B, PLATE: A283 Gr.C, BOLT & NUT: A325

SUPPORT DESCRIPTION:	SHEET
ADJUSTABLE SLIDE STOOL (CS-WITHOUT PWHT) 8" ~ 24"	2
SD-07	2

NISOC

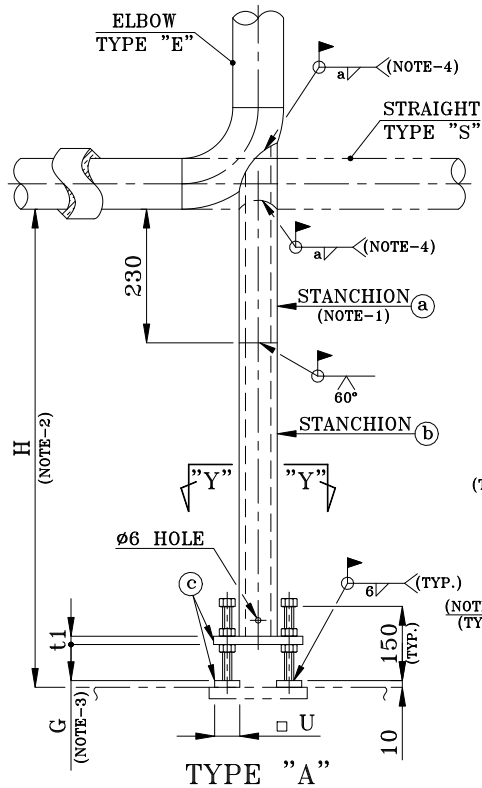
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO
HIRGAN ENERGY

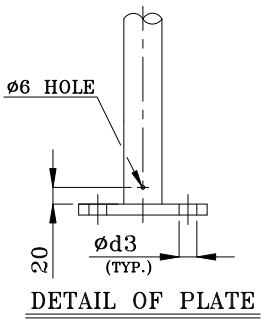
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

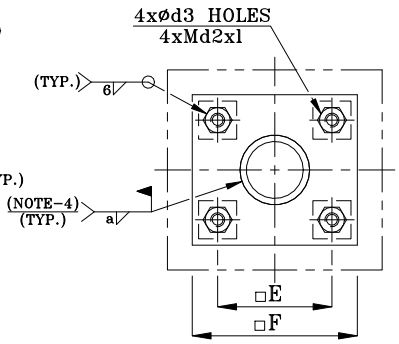
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



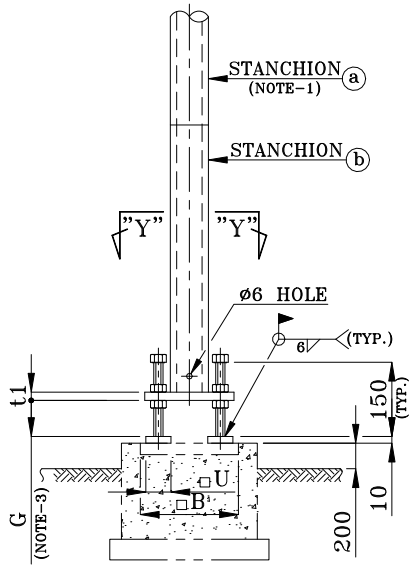
TYPE "A"
(STEEL SURFACE)



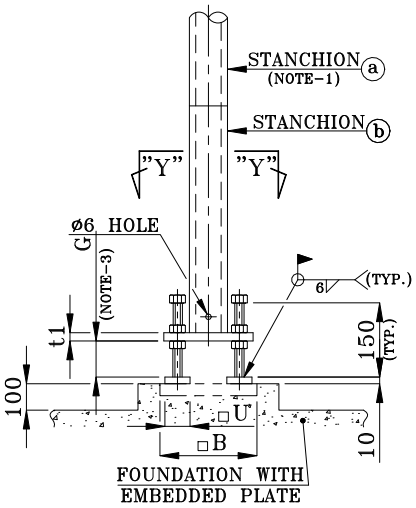
DETAIL OF PLATE



VIEW "Y" ~ "Y"



TYPE "B"
(UNPAVED AREA)



FOUNDATION WITH
EMBEDDED PLATE

TYPE "C"
(PAVED AREA)

MATERIAL MARK:(3)

DES. TEMP / MATERIAL OF RUN PIPE — MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0 °C TO 400°C	MARK	A	C	E
	(a) NOTE-1	–	–	–
	(b)	A53 Gr.B	A53 Gr.B	A53 Gr.B
	(c)	A283 Gr.C	A283 Gr.C	A283 Gr.C
400 °C TO 550°C	MARK	B	D	F
	(a) NOTE-1	–	–	–
	(b)	–	A53 Gr.B	A53 Gr.B
	(c)	–	A283 Gr.C	A283 Gr.C

HEIGHT MARK:(5)

MARK	H
1	600
2	700
3	800
4	900
5	1000
6	1100
7	1200
8	1300
9	1400

NPS MARK:(4)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	B	F	E	U	t1	ød3	Md2xl
02	2"	1+1/2"	SCH80	250	150	80	30	10	18	M16x150
03	3"	2"	STD	260	160	90	30	10	18	M16x150
04	4"	3"	STD	290	190	120	35	10	20	M18x150
06	6"	4"	STD	310	210	140	35	10	20	M18x150

INDICATION:

SD-08-□□-□□□-□
(1) (2) (3) (4) (5)

1-TYPE OF RUN PIPE
2-TYPE OF FOUNDATION
3-MATERIAL MARK
4-NPS MARK
5-HEIGHT MARK

NOTE:

1- SAME MATERIAL OF RUN PIPE CAN BE APPLIED FOR THE MATERIAL (a) AND SHALL BE WELDED BEFORE PWHT.
2- TO BE ADJUSTED IN THE FIELD.
3- FOR ADJUSTING, "G" SHOULD BE BETWEEN 50 AND 140 (50<G<140).
4- FOR STANCHION SIZE ≤4", a=STANCHION WALL THICKNESS, FOR STANCHION SIZE >4", a=6mm.
5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

MATERIAL:
BOLT & NUT: A325

SUPPORT DESCRIPTION:	SHEET
ADJUSTABLE SLIDE STOOL (CS-WITH PWHT, AS, SS) 2" ~ 6"	1
SD-08	2

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

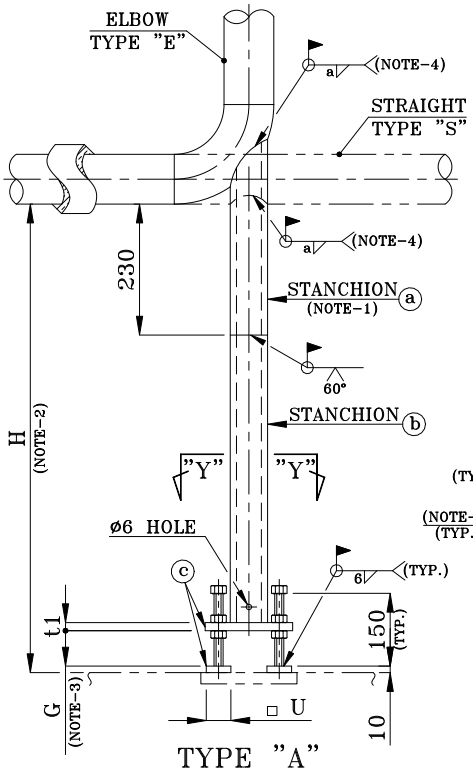
HIRGAN ENERGY

شماره پیمان:

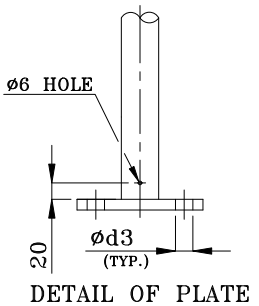
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

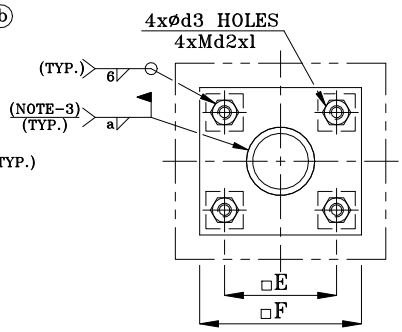
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



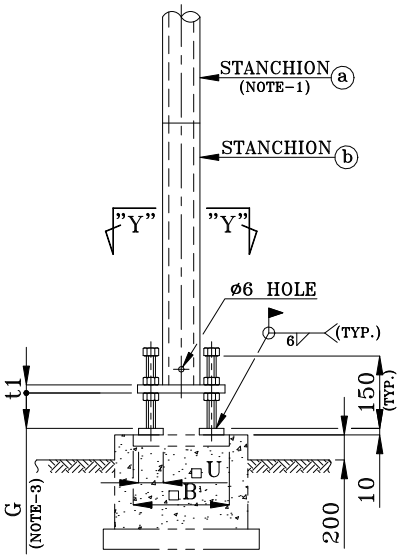
TYPE "A"
(STEEL SURFACE)



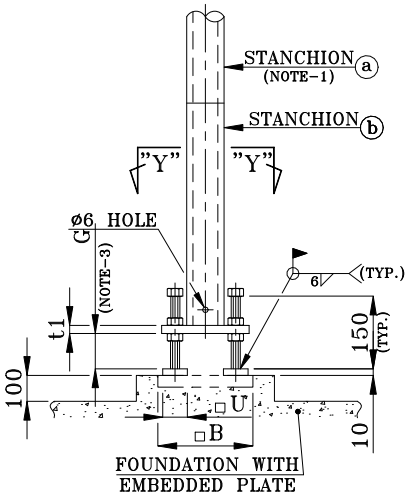
DETAIL OF PLATE



VIEW "Y" ~ "Y"



TYPE "B"
(UNPAVED AREA)



TYPE "C"
(PAVED AREA)

MATERIAL MARK:(3)

DES. TEMP / MATERIAL OF RUN PIPE — MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0 °C TO 400°C	MARK	A	C	E
	(a) NOTE-1	–	–	–
	(b)	A53 Gr.B	A53 Gr.B	A53 Gr.B
	(c)	A283 Gr.C	A283 Gr.C	A283 Gr.C
400 °C TO 550°C	MARK	B	D	F
	(a) NOTE-1	–	–	–
	(b)	–	A53 Gr.B	A53 Gr.B
	(c)	–	A283 Gr.C	A283 Gr.C

HEIGHT MARK:(5)

MARK	H
1	600
2	700
3	800
4	900
5	1000
6	1100
7	1200
8	1300
9	1400

NPS MARK:(4)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	B	F	E	U	t1	ød3	Md2xl
08	8"	6"	STD	370	270	200	40	12	22	M20x150
10	10"									
12	12"	8"		430	330	250	50	15	26	M24x150
14	14"									
16	16"	10"		490	390	300	55	15	29	M27x150
18	18"									
20	20"	12"		540	440	350	60	15	32	M30x150
24	24"	14"		580	480	380	65	15	35	M33x150

INDICATION:

SD-08-□□-□□□-□

(1) (2) (3) (4) (5)

1-TYPE OF RUN PIPE
2-TYPE OF FOUNDATION
3-MATERIAL MARK
4-NPS MARK
5-HEIGHT MARK

NOTE:

1- SAME MATERIAL OF RUN PIPE CAN BE APPLIED FOR THE MATERIAL (a) AND SHALL BE WELDED BEFORE PWHT.

2- TO BE ADJUSTED IN THE FIELD.

3- FOR ADJUSTING, "G" SHOULD BE BETWEEN 50 AND 140 (50<G<140).

4- FOR STANCHION SIZE ⩽4", a=STANCHION WALL THICKNESS, FOR STANCHION SIZE >4", a=6mm.

5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

MATERIAL:

BOLT & NUT: A325

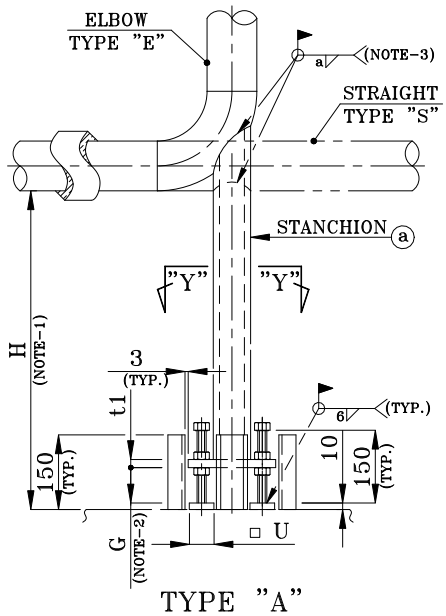
SUPPORT DESCRIPTION:	SHEET
ADJUSTABLE SLIDE STOOL (CS-WITH PWHT, AS, SS) 8" ~ 24"	2
SD-08	2

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

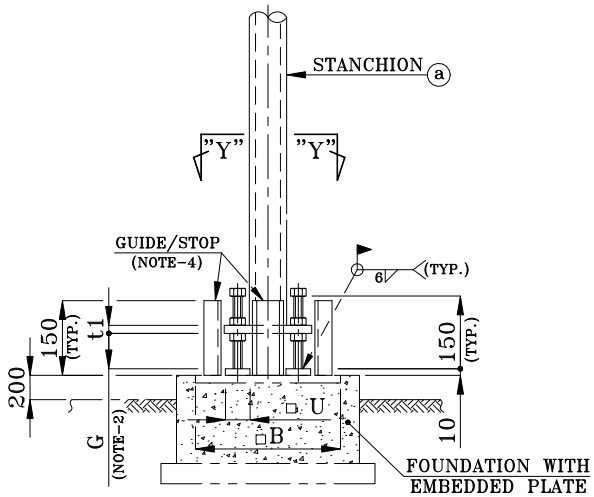
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 178 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

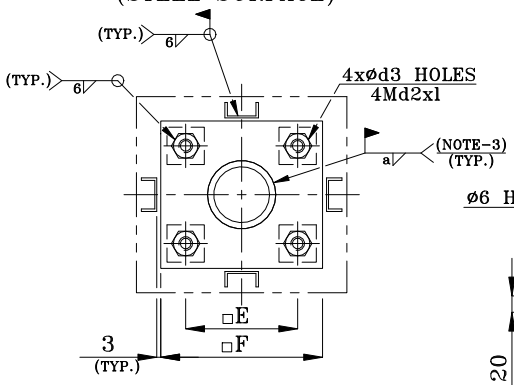
053-073-9184



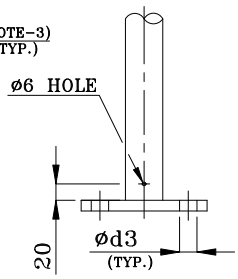
TYPE "A"
(STEEL SURFACE)



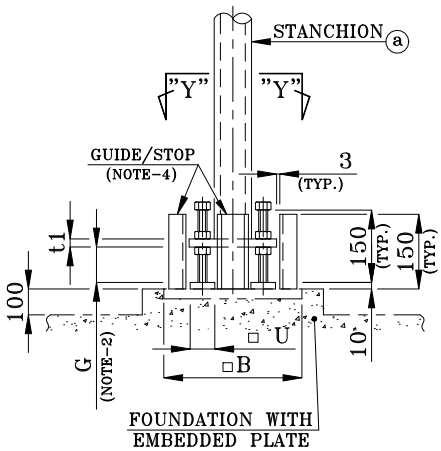
TYPE "B"
(UNPAVED AREA)



VIEW "Y" ~ "Y"



DETAIL OF PLATE



TYPE "C"
(PAVED AREA)

HEIGHT MARK:(5)

MARK	H
1	600
2	700
3	800
4	900
5	1000
6	1100
7	1200
8	1300
9	1400

NPS MARK:(4)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	B	F	E	U	t1	Ød3	Md2xl	STOP/ GUIDE
02	2"	1+1/2"	SCH80	290	150	80	30	10	18	M16x150	U100
03	3"	2"	STD	310	160	90	30	10	18	M16x150	U120
04	4"	3"		340	190	120	35	10	20	M18x150	U120
06	6"	4"		380	210	140	35	10	20	M18x150	U160

INDICATION:

SD-09-[ ][ ][ ]-[ ][ ][ ]
(1) (2) (3) (4) (5)

1-TYPE OF RUN PIPE
2-TYPE OF FOUNDATION
3-TYPE OF FUNCTION
4-NPS MARK
5-HEIGHT MARK

NOTE:

1- TO BE ADJUSTED IN THE FIELD.

2- FOR ADJUSTING, "G" SHOULD BE BETWEEN 50 AND 140 (50<G<140).

3- FOR STANCHION SIZE ⩽4", a=STANCHION WALL THICKNESS, FOR STANCHION SIZE >4", a=6mm.

4- "G" INDICATES "GUIDE" & "L" INDICATES "LINE STOP" AND "S" INDICATES "SEMI ANCHOR" FOR TYPES OF FUNCTION. 5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

6- MAX. DESIGN TEMP. FOR RUN PIPE SHALL NOT EXCEED 400°C.

MATERIAL:

STANCHION (a): A53 Gr.B, PLATE: A283 Gr.C, STANDARD PROFILE: ASTM A36, BOLT & NUT: A325

SUPPORT DESCRIPTION:	SHEET
ADJUSTABLE GUIDE/LINE STOP/SEMI ANCHOR STOOL (CS-WITHOUT PWHT) 2" ~ 6"	1
SD-09	3

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

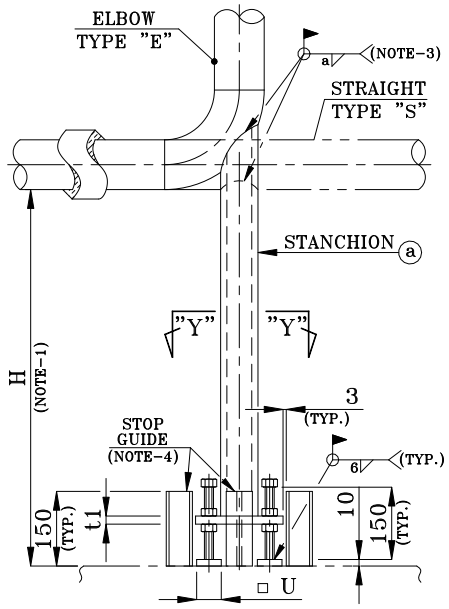
PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

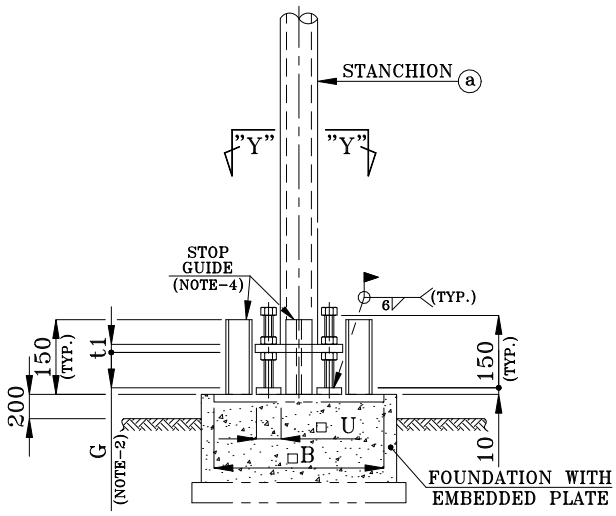
STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK

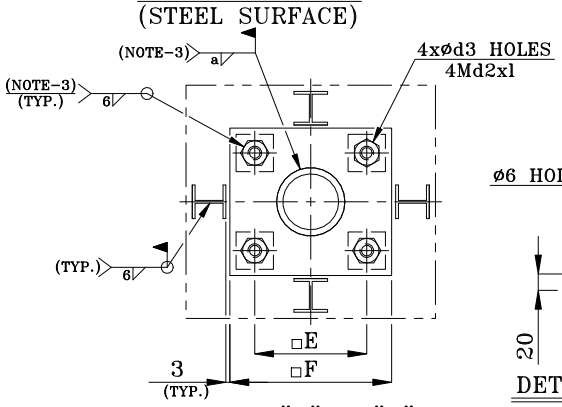
شماره صفحه: 179 از 394



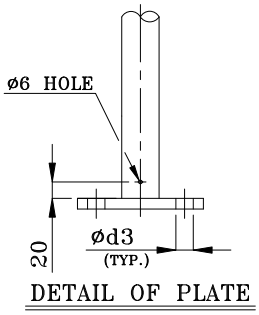
TYPE "A"
(STEEL SURFACE)



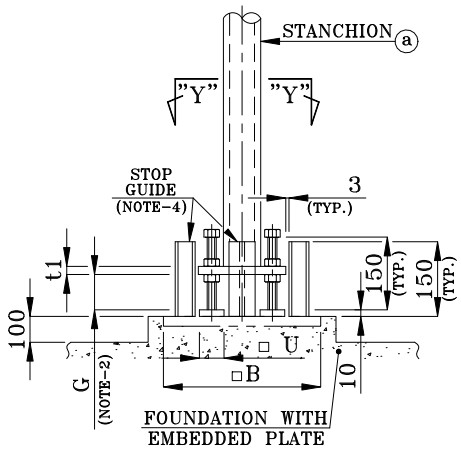
TYPE "B"
(UNPAVED AREA)



VIEW "Y" ~ "Y"



DETAIL OF PLATE



TYPE "C"
(PAVED AREA)

HEIGHT MARK:(5)

MARK	H
1	600
2	700
3	800
4	900
5	1000
6	1100
7	1200
8	1300
9	1400

NPS MARK:(4)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	B	F	E	U	t1	ød3	Md2xl	STOP/ GUIDE
08	8"	6"	STD	520	270	200	40	12	22	M20x150	HEB100
10	10"										
12	12"	8"		580	330	250	50	15	26	M24x150	HEB100
14	14"										

INDICATION:

SD-09-[ ][ ][ ]-[ ][ ][ ]
(1) (2) (3) (4) (5)

1-TYPE OF RUN PIPE
2-TYPE OF FOUNDATION
3-TYPE OF FUNCTION
4-NPS MARK
5-HEIGHT MARK

NOTE:

1- TO BE ADJUSTED IN THE FIELD.

2- FOR ADJUSTING, "G" SHOULD BE BETWEEN 50 AND 140 (50<G<140).

3- FOR STANCHION SIZE ⩽4", a=STANCHION WALL THICKNESS, FOR STANCHION SIZE >4", a=6mm.

4- "G" INDICATES "GUIDE" & "L" INDICATES "LINE STOP" AND "S" INDICATES "SEMI ANCHOR" FOR TYPES OF FUNCTION. 5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

6- MAX. DESIGN TEMP. FOR RUN PIPE SHALL NOT EXCEED 400°C.

MATERIAL:

STANCHION (a): A53 Gr.B, PLATE: A283 Gr.C, STANDARD PROFILE: ASTM A36, BOLT & NUT: A325

SUPPORT DESCRIPTION:
ADJUSTABLE GUIDE/LINE STOP/SEMI ANCHOR STOOL (CS-WITHOUT PWHT)
8" ~ 14"
SD-09

SHEET 2 3

NISOC

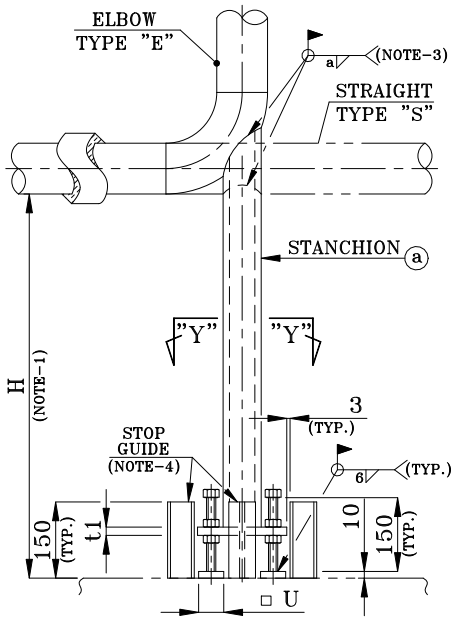
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO
HIRGAN ENERGY

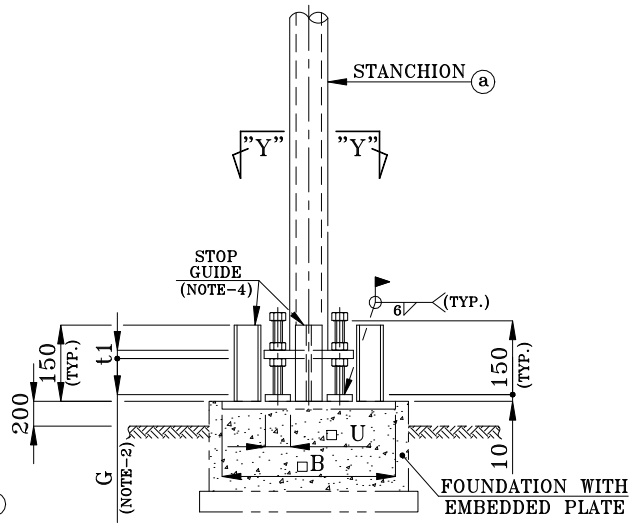
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

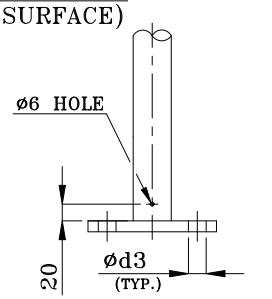
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



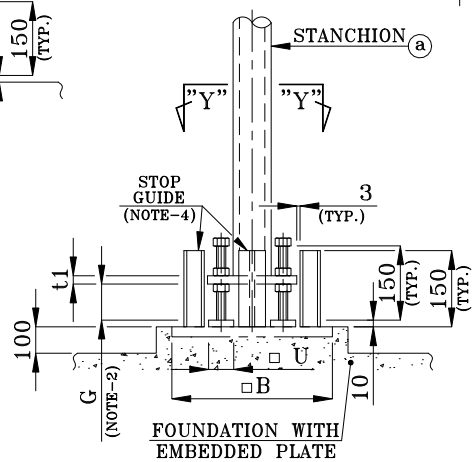
TYPE "A"
(STEEL SURFACE)



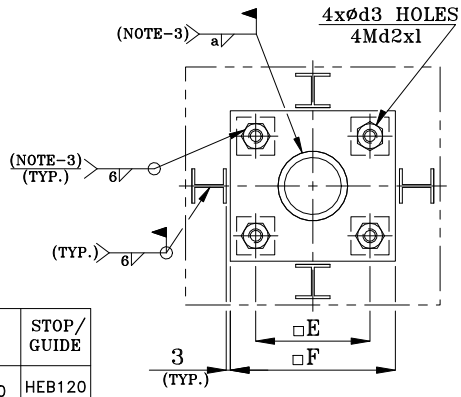
TYPE "B"
(UNPAVED AREA)



DETAIL OF PLATE



TYPE "C"
(PAVED AREA)



VIEW "Y" ~ "Y"

HEIGHT MARK:(5)

MARK	H
1	600
2	700
3	800
4	900
5	1000
6	1100
7	1200
8	1300
9	1400

NPS MARK:(4)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	B	F	E	U	t1	ød3	Md2xl	STOP/ GUIDE
16	16"	10"	STD	680	390	300	55	15	29	M27x150	HEB120
18	18"										
20	20"	12"		770	440	350	60	15	32	M30x150	HEB140
24	24"	14"		850	480	380	65	15	35	M33x150	HEB160

INDICATION:

SD-09-[ ][ ][ ]-[ ][ ][ ]
(1) (2) (3) (4) (5)

1-TYPE OF RUN PIPE
2-TYPE OF FOUNDATION
3-TYPE OF FUNCTION
4-NPS MARK
5-HEIGHT MARK

NOTE:

1- TO BE ADJUSTED IN THE FIELD.

2- FOR ADJUSTING, "G" SHOULD BE BETWEEN 50 AND 140 (50<G<140).

3- FOR STANCHION SIZE ≤4", a=STANCHION WALL THICKNESS, FOR STANCHION SIZE >4", a=6mm.

4- "G" INDICATES "GUIDE" & "L" INDICATES "LINE STOP" AND "S" INDICATES "SEMI ANCHOR" FOR TYPES OF FUNCTION. 5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

6- MAX. DESIGN TEMP. FOR RUN PIPE SHALL NOT EXCEED 400°C.

MATERIAL:

STANCHION (a): A53 Gr.B, PLATE: A283 Gr.C, STANDARD PROFILE: ASTM A36, BOLT & NUT: A325

SUPPORT DESCRIPTION:
ADJUSTABLE GUIDE/LINE STOP/SEMI ANCHOR STOOL (CS-WITHOUT PWHT)
16" ~ 24"
SD-09

SHEET 3

3

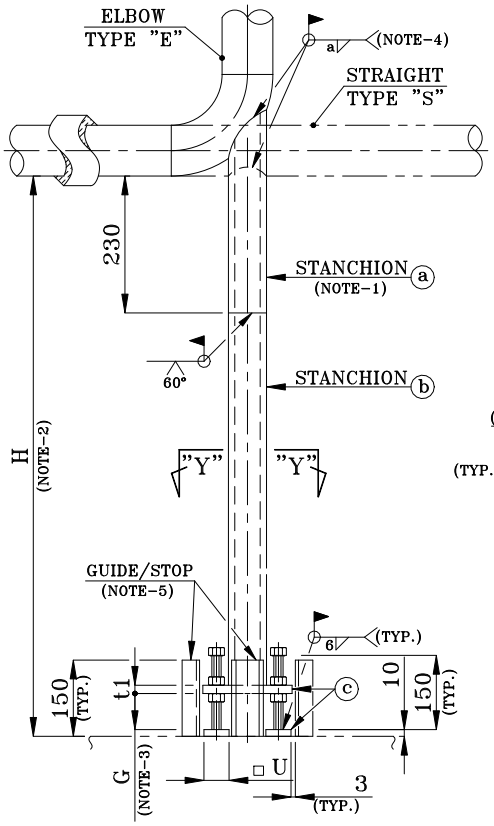
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

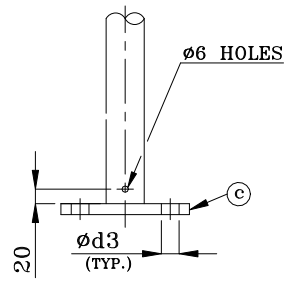
STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK

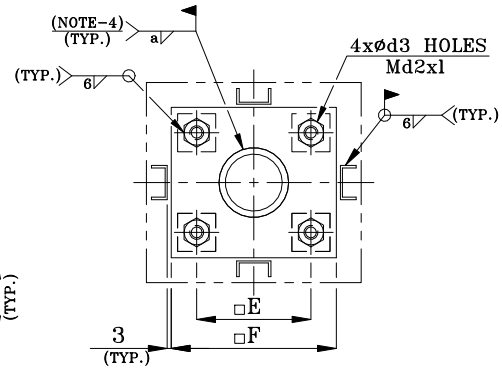
شماره صفحه: 181 از 394



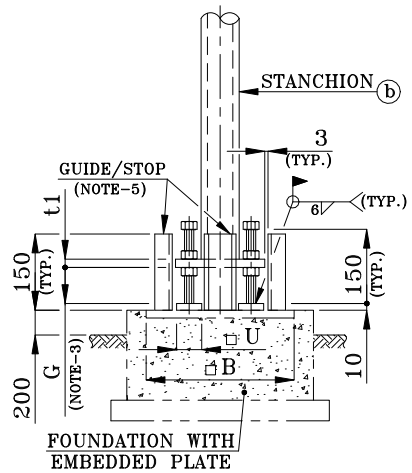
TYPE "A"
(STEEL SURFACE)



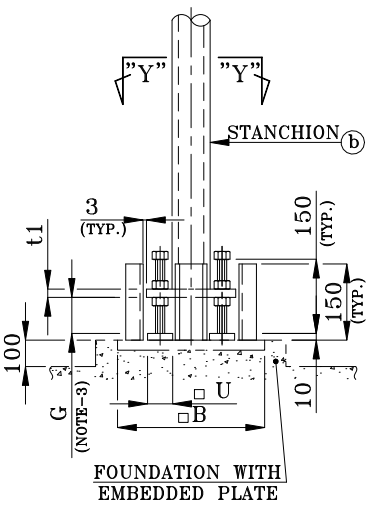
DETAIL OF PLATE



VIEW "Y" ~ "Y"



TYPE "B"
(UNPAVED AREA)



TYPE "C"
(PAVED AREA)

NPS MARK:(5)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	B	F	E	U	t1	ød3	Md2x1	STOP/ GUIDE
02	2"	1+1/2"	SCH80	290	150	80	30	10	18	M16x150	U100
03	3"	2"	STD	310	160	90	30	10	18	M16x150	U120
04	4"	3"		340	190	120	35	10	20	M18x150	U120
06	6"	4"		380	210	140	35	10	20	M18x150	U160

HEIGHT MARK:(6)

MARK	H
1	600
2	700
3	800
4	900
5	1000
6	1100
7	1200
8	1300
9	1400

MATERIAL MARK:(4)

DES. TEMP	MEMBER \ MATERIAL OF RUN PIPE	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0 °C TO 400°C	MARK	A	C	E
	ⓐ NOTE-1	–	–	–
	ⓑ	A53 Gr.B	A53 Gr.B	A53 Gr.B
	ⓒ	A283 Gr.C	A283 Gr.C	A283 Gr.C
400 °C TO 550°C	MARK	B	D	F
	ⓐ NOTE-1	–	–	–
	ⓑ	–	A53 Gr.B	A53 Gr.B
	ⓒ	–	A283 Gr.C	A283 Gr.C

INDICATION:

SD-10-[ ][ ][ ]-[ ][ ][ ]-[ ]
(1) (2) (3) (4) (5) (6)

1-TYPE OF RUN PIPE
2-TYPE OF FOUNDATION
3-TYPE OF FUNCTION
4-MATERIAL MARK
5-NPS MARK
6-HEIGHT MARK

NOTE:

1- SAME MATERIAL OF RUN PIPE CAN BE APPLIED FOR THE MATERIAL ⓐ AND SHALL BE WELDED BEFORE PWHT.

2- TO BE ADJUSTED IN THE FIELD.

3- FOR ADJUSTING, "G" SHOULD BE BETWEEN 50 AND 140 (50<G<140).

4- FOR STANCHION SIZE ≤4", a=STANCHION WALL THICKNESS, FOR STANCHION SIZE >4", a=6mm.

5- "G" INDICATES "GUIDE" & "L" INDICATES "LINE STOP" AND "S" INDICATES "SEMI ANCHOR" FOR TYPES OF FUNCTION.

6- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

MATERIAL: STANDARD PROFILE: ASTM A36, BOLT & NUT: A325

SUPPORT DESCRIPTION:	SHEET
ADJUSTABLE GUIDE/LINE STOP/SEMI ANCHOR STOOL (CS-WITH PWHT,AS,SS) 2" ~ 6"	1
SD-10	3

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

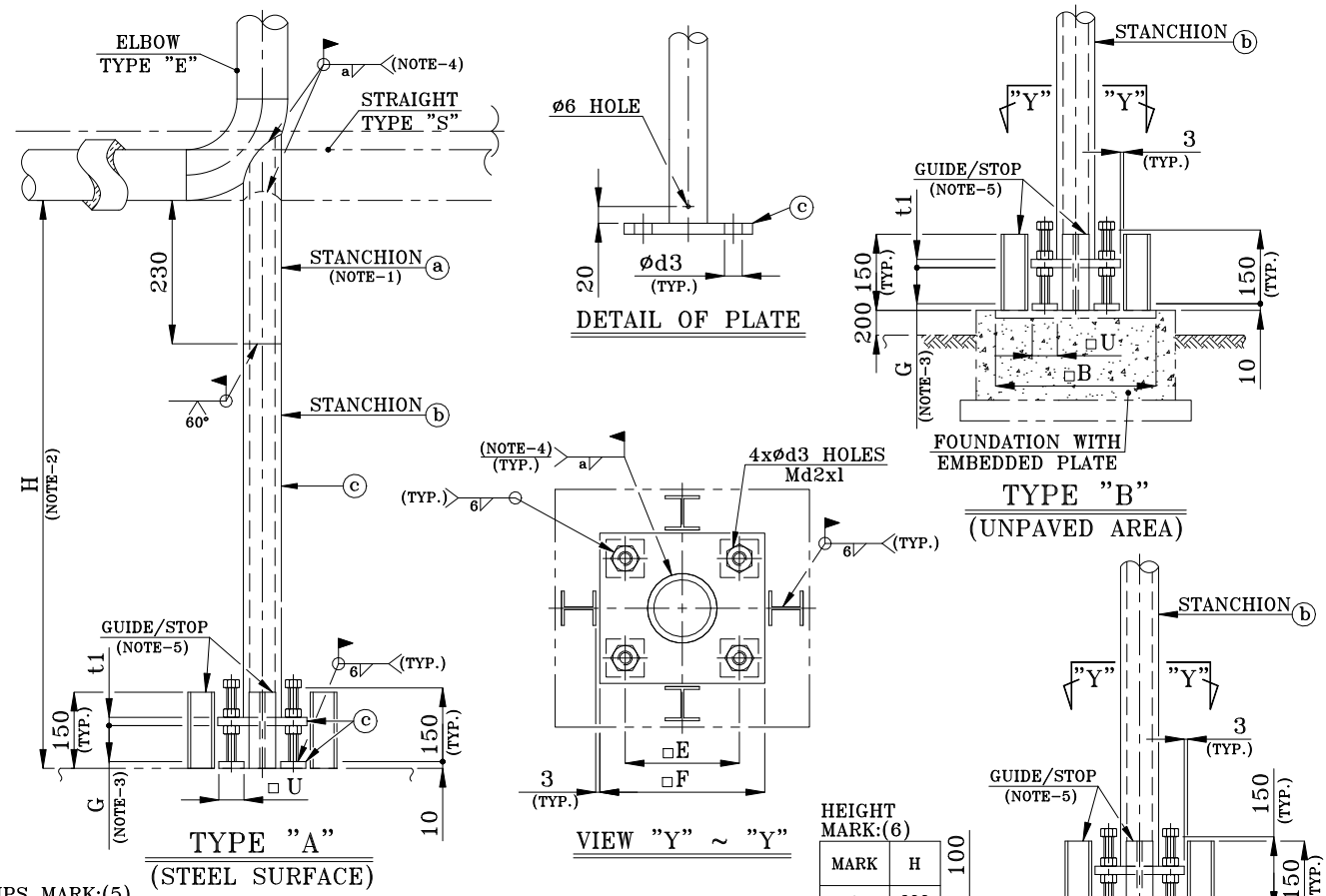
PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 182 از 394



NPS MARK:(5)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	B	F	E	U	t1	ød3	Md2xl	STOP/ GUIDE
08	8"	6"	STD	520	270	200	40	12	22	M20x150	HEB100
10	10"										
12	12"	8"		580	330	250	50	15	26	M24x150	HEB100
14	14"										

MARK	H
1	600
2	700
3	800
4	900
5	1000
6	1100
7	1200
8	1300
9	1400

MATERIAL MARK:(4)

DES. TEMP	MEMBER \ MATERIAL OF RUN PIPE	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0 °C TO 400°C	MARK	A	C	E
	ⓐ NOTE-1	–	–	–
	ⓑ	A53 Gr.B	A53 Gr.B	A53 Gr.B
	ⓒ	A283 Gr.C	A283 Gr.C	A283 Gr.C
400 °C TO 550°C	MARK	B	D	F
	ⓐ NOTE-1	–	–	–
	ⓑ	–	A53 Gr.B	A53 Gr.B
	ⓒ	–	A283 Gr.C	A283 Gr.C

INDICATION:

SD-10-[ ][ ][ ]-[ ][ ][ ]-[ ]
(1) (2) (3) (4) (5) (6)

1-TYPE OF RUN PIPE
2-TYPE OF FOUNDATION
3-TYPE OF FUNCTION
4-MATERIAL MARK
5-NPS MARK
6-HEIGHT MARK

NOTE:

1- SAME MATERIAL OF RUN PIPE CAN BE APPLIED FOR THE MATERIAL ⓐ AND SHALL BE WELDED BEFORE PWHT.

2- TO BE ADJUSTED IN THE FIELD.

3- FOR ADJUSTING, "G" SHOULD BE BETWEEN 50 AND 140 (50<G<140).

4- FOR STANCHION SIZE ≤4", a=STANCHION WALL THICKNESS, FOR STANCHION SIZE >4", a=6mm.

5- "G" INDICATES "GUIDE" & "L" INDICATES "LINE STOP" AND "S" INDICATES "SEMI ANCHOR" FOR TYPES OF FUNCTION.

6- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

MATERIAL: STANDARD PROFILE: ASTM A36, BOLT & NUT: A325

SUPPORT DESCRIPTION:	SHEET
ADJUSTABLE GUIDE/LINE STOP/SEMI ANCHOR STOOL (CS-WITH PWHT, AS, SS) 8" ~ 14"	2
SD-10	3

NISOC

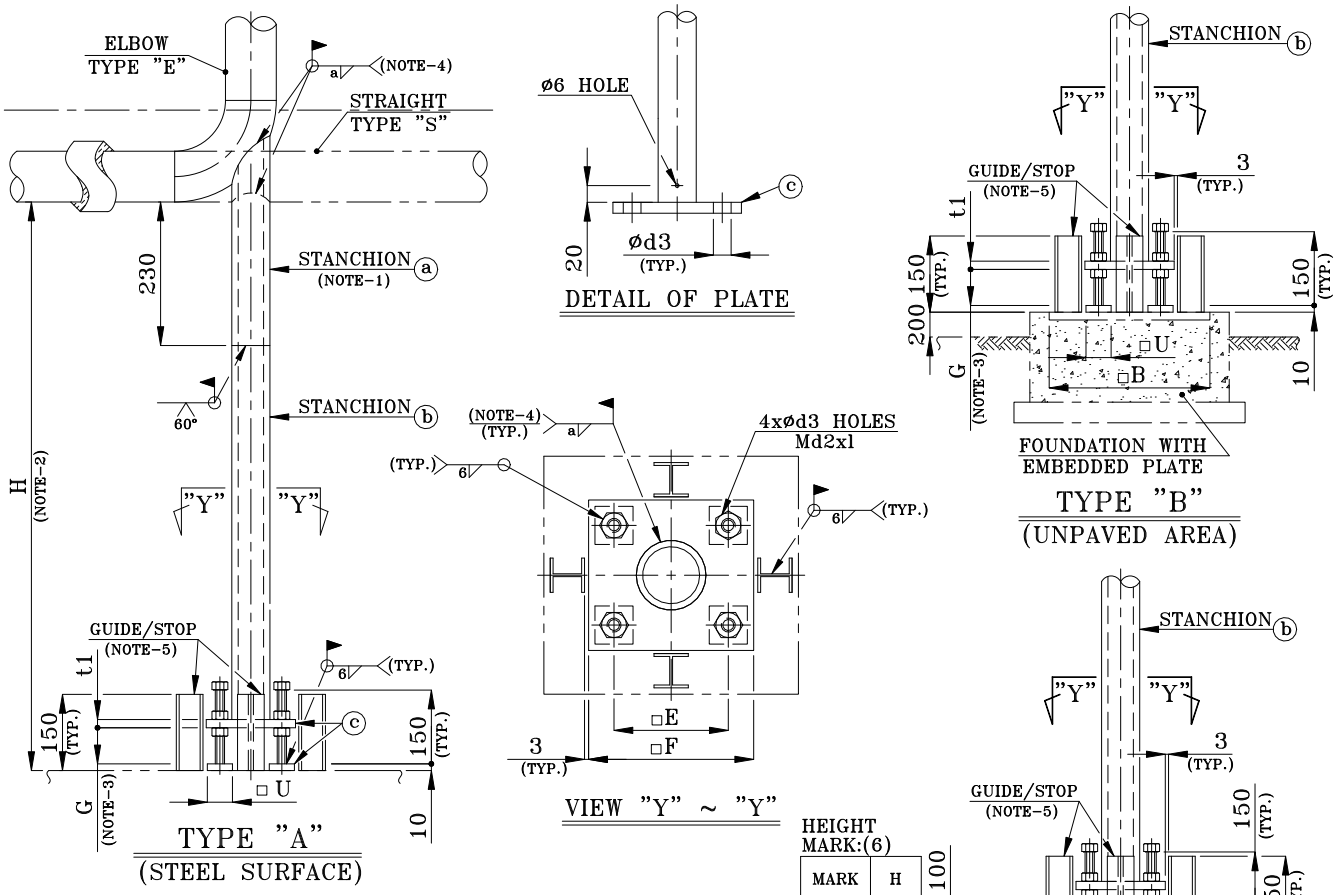
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



NPS MARK:(5)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	B	F	E	U	t1	ød3	Md2xl	STOP/ GUIDE
16	16"	10"	STD	680	390	300	55	15	29	M27x150	HEB120
18	18"										
20	20"	12"		770	440	350	60	15	32	M30x150	HEB140
24	24"	14"		850	480	380	65	15	35	M33x150	HEB160

HEIGHT MARK:(6)

MARK	H
1	600
2	700
3	800
4	900
5	1000
6	1100
7	1200
8	1300
9	1400

MATERIAL MARK:(4)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0 °C TO 400°C	MARK	A	C	E
	(a) NOTE-1	–	–	–
	(b)	A53 Gr.B	A53 Gr.B	A53 Gr.B
	(c)	A283 Gr.C	A283 Gr.C	A283 Gr.C
400 °C TO 550°C	MARK	B	D	F
	(a) NOTE-1	–	–	–
	(b)	–	A53 Gr.B	A53 Gr.B
	(c)	–	A283 Gr.C	A283 Gr.C

INDICATION:

SD-10-□□□-□□□-□
(1) (2) (3) (4) (5) (6)

1-TYPE OF RUN PIPE
2-TYPE OF FOUNDATION
3-TYPE OF FUNCTION
4-MATERIAL MARK
5-NPS MARK
6-HEIGHT MARK

NOTE:

1- SAME MATERIAL OF RUN PIPE CAN BE APPLIED FOR THE MATERIAL (a) AND SHALL BE WELDED BEFORE PWHT.

2- TO BE ADJUSTED IN THE FIELD.

3- FOR ADJUSTING, "G" SHOULD BE BETWEEN 50 AND 140 (50<G<140).

4- FOR STANCHION SIZE ≤4", a=STANCHION WALL THICKNESS, FOR STANCHION SIZE >4", a=6mm.

5- "G" INDICATES "GUIDE" & "L" INDICATES "LINE STOP" AND "S" INDICATES "SEMI ANCHOR" FOR TYPES OF FUNCTION.

6- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

MATERIAL: STANDARD PROFILE: ASTM A36, BOLT & NUT: A325

SUPPORT DESCRIPTION:
ADJUSTABLE GUIDE/LINE STOP/SEMI ANCHOR STOOL (CS-WITH PWHT, AS, SS)
16" ~ 24"
SD-10

SHEET 3

3

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

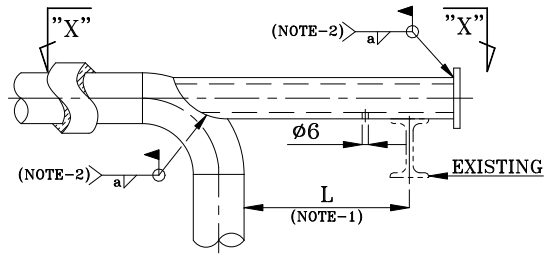
HIRGAN ENERGY

شماره پیمان:

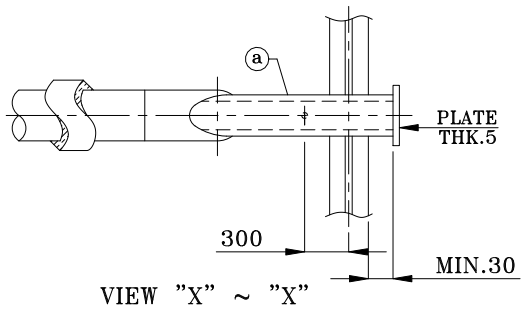
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

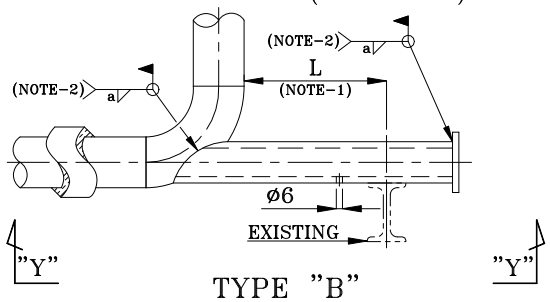
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



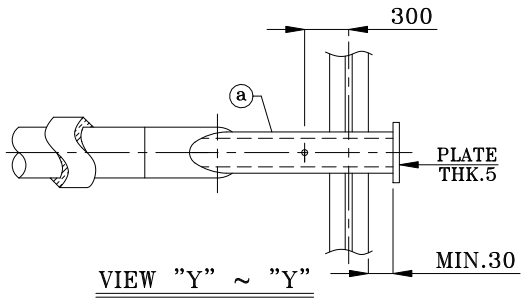
TYPE "A"
VERTICAL BEND (DOWNWARD)



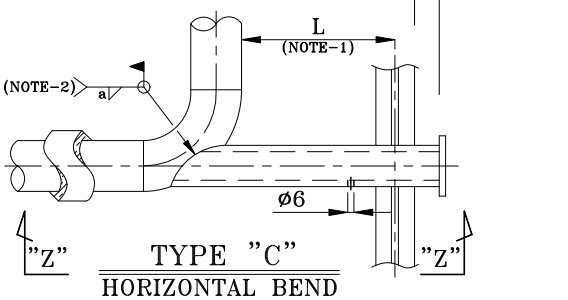
VIEW "X" ~ "X"



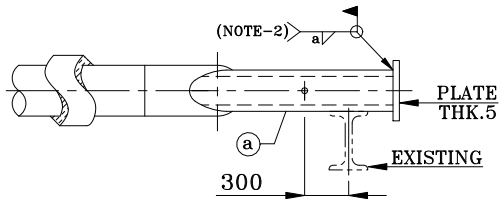
TYPE "B"
VERTICAL BEND (UPWARD)



VIEW "Y" ~ "Y"



TYPE "C"
HORIZONTAL BEND



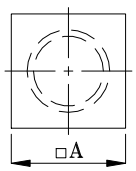
VIEW "Z" ~ "Z"

LENGTH MARK:(3)

MARK	L
01	500
02	600
03	700
04	800
05	900
06	1000
07	1100
08	1200
09	1300
10	1400
11	1500
12	1600
13	1700
14	1800
15	1900
16	2000

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	A
02	2"	1+1/2"	SCH80	100
03	3"	2"	STD	110
04	4"	3"		140
06	6"	4"		170
08	8"	6"		220
10	10"			
12	12"	8"		270
14	14"			
16	16"	10"		320
18	18"			
20	20"	12"		350
24	24"	14"		400
26	26"			
28	28"	16"		450
30	30"			
32	32"	18"		500
34	34"			
36	36"	20"		550



DETAIL OF PLATE

INDICATION:

SD-11-□-(1) (2) (3)

1-TYPE OF DUMMY
2-NPS MARK
3-LENGTH MARK

NOTE:

1- TO BE ADJUSTED IN THE FIELD.

2- FOR STANCHION SIZE ≤4", a=STANCHION WALL THICKNESS, FOR STANCHION SIZE >4", a=6mm.

3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

4- MAX. DESIGN TEMP. FOR RUN PIPE SHALL NOT EXCEED 400°C.

MATERIAL:

DUMMY ⓐ : A53 Gr.B, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:
DUMMY PIPE
FOR 90° ELBOW
(CS-WITHOUT PWHT)
2" ~ 36"
SD-11

SHEET 1 / 1

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

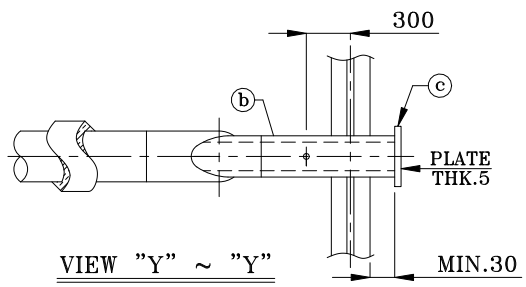
HIRGAN ENERGY

شماره پیمان:

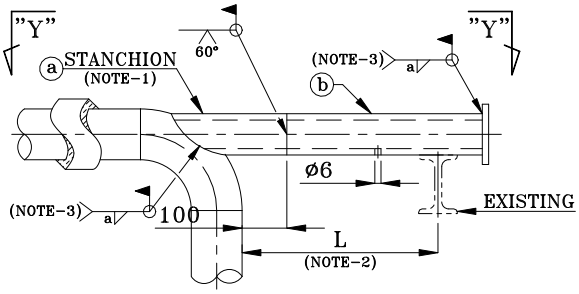
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK

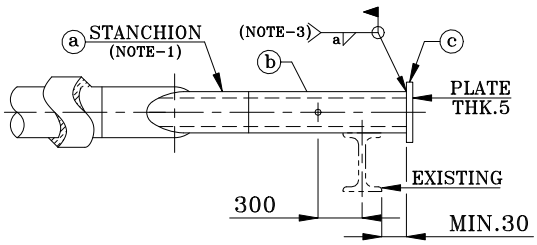


VIEW "Y" ~ "Y"

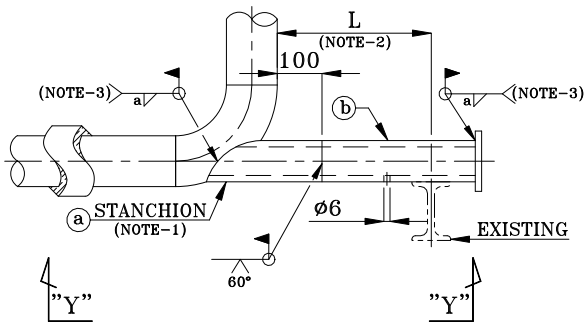


TYPE "A"

VERTICAL BEND (DOWNWARD)



VIEW "Z" ~ "Z"



TYPE "B"

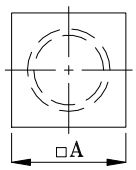
VERTICAL BEND (UPWARD)

LENGTH MARK:(4)

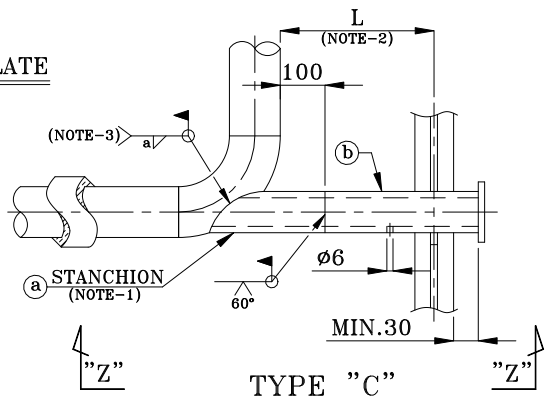
MARK	L
01	500
02	600
03	700
04	800
05	900
06	1000
07	1100
08	1200
09	1300
10	1400
11	1500
12	1600
13	1700
14	1800
15	1900
16	2000

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE	STANCHION		A
		PIPE SIZE	PIPE THK.	
02	2"	1+1/2"	SCH80	100
03	3"	2"	STD	110
04	4"	3"		140
06	6"	4"		170
08	8"	6"		220
10	10"			
12	12"	8"		270
14	14"			
16	16"	10"		320
18	18"			
20	20"	12"		350
24	24"	14"		400
26	26"			
28	28"	16"		450
30	30"			
32	32"	18"		500
34	34"			
36	36"	20"		550



DETAIL OF PLATE



TYPE "C"

HORIZONTAL BEND

MATERIAL MARK:(2)

DES. TEMP	MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0 °C TO 400°C	MARK	A	C	E
	ⓐ NOTE-1	–	–	–
	ⓑ	A53 Gr.B	A53 Gr.B	A53 Gr.B
	ⓒ	A283 Gr.C	A283 Gr.C	A283 Gr.C
400 °C TO 550°C	MARK	B	D	F
	ⓐ NOTE-1	–	–	–
	ⓑ	–	A53 Gr.B	A53 Gr.B
	ⓒ	–	A283 Gr.C	A283 Gr.C

INDICATION:

SD-12-□-□□□-□□

(1) (2) (3) (4)

1-TYPE OF DUMMY
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK

NOTE:

1- SAME MATERIAL OF RUN PIPE CAN BE APPLIED FOR THE MATERIAL ⓐ, AND SHALL BE WELDED BEFORE PWHT.

2- TO BE ADJUSTED IN THE FIELD.

3- FOR STANCHION SIZE ≤4", a=STANCHION WALL THICKNESS, FOR STANCHION SIZE >4", a=6mm.

4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

SUPPORT DESCRIPTION:	SHEET
DUMMY PIPE FOR 90° ELBOW (CS-WITH PWHT, AS, SS) 2" ~ 36"	1
SD-12	1

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

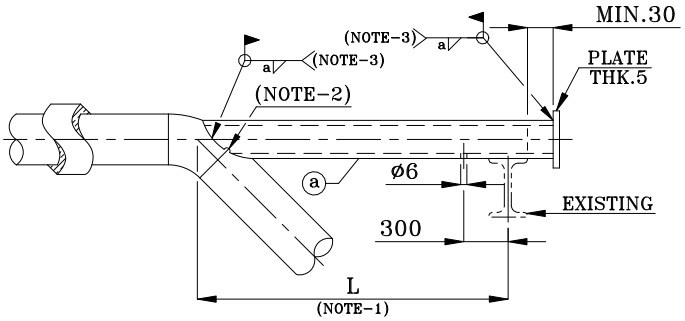
HIRGAN ENERGY

شماره پیمان:

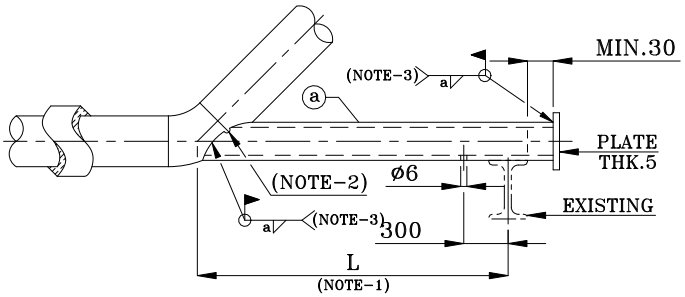
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



TYPE "A"



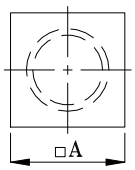
TYPE "B"

LENGTH MARK:(3)

MARK	L
01	500
02	600
03	700
04	800
05	900
06	1000
07	1100
08	1200
09	1300
10	1400
11	1500
12	1600
13	1700
14	1800
15	1900
16	2000
17	2100

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	A
02	2"	1+1/2"	SCH80	100
03	3"	2"	STD	110
04	4"	3"		140
06	6"	4"		170
08	8"	6"		220
10	10"			
12	12"	8"		270
14	14"			
16	16"	10"		320
18	18"			
20	20"	12"		350
24	24"	14"		400
26	26"			
28	28"	16"		450
30	30"			
32	32"	18"		500
34	34"			
36	36"	20"		550



DETAIL OF PLATE

INDICATION:

SD-13-□-□□□

(1) (2) (3)

1-TYPE OF DUMMY
2-NPS MARK
3-LENGTH MARK

NOTE:

1- TO BE ADJUSTED IN THE FIELD.

2- A SCALLOP SHALL BE PROVIDED TO AVOID INTERFERENCE WITH SEAM WELD OF THE RUN PIPE.

3- FOR STANCHION SIZE ⩽4", a=STANCHION WALL THICKNESS, FOR STANCHION SIZE >4", a=6mm.

4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

5- MAX. DESIGN TEMP. FOR RUN PIPE SHALL NOT EXCEED 400°C.

MATERIAL:

DUMMY ⓐ : A53 Gr.B, PLATE: A283 Gr.C

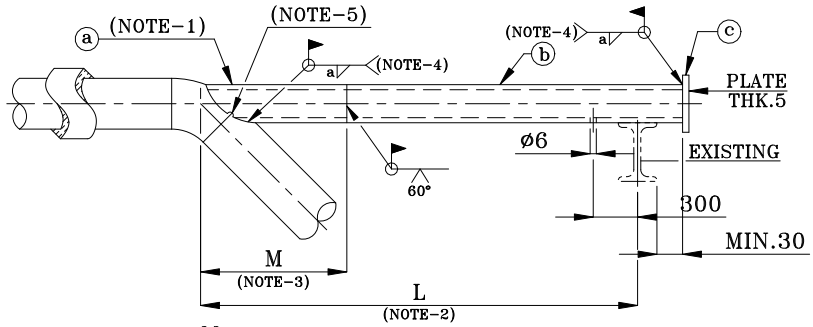
SUPPORT DESCRIPTION:	SHEET
DUMMY PIPE FOR 45° ELBOW (CS-WITHOUT PWHT) 2" ~ 36"	1
SD-13	1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

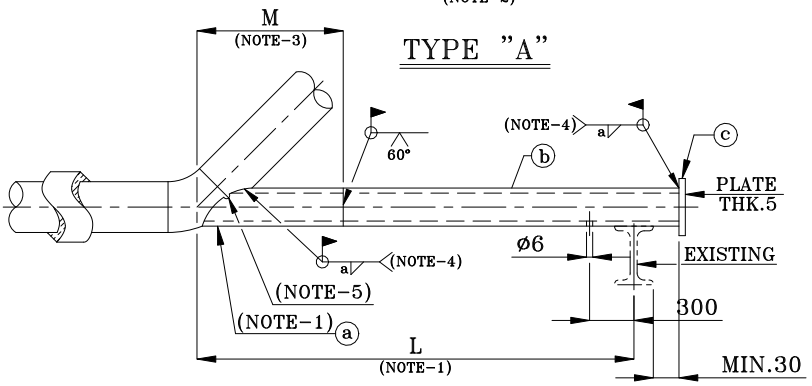
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 187 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

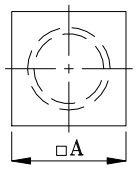
053-073-9184



TYPE "A"



TYPE "B"



DETAIL OF PLATE

LENGTH MARK:(4)

MARK	L
01	500
02	600
03	700
04	800
05	900
06	1000
07	1100
08	1200
09	1300
10	1400
11	1500
12	1600
13	1700
14	1800
15	1900
16	2000
17	2100

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	A
02	2"	1+1/2"	SCH80	100
03	3"	2"	STD	110
04	4"	3"		140
06	6"	4"		170
08	8"	6"		220
10	10"			
12	12"	8"		270
14	14"			
16	16"	10"		320
18	18"			
20	20"	12"		350
24	24"	14"		400
26	26"			
28	28"	16"		450
30	30"			
32	32"	18"		500
34	34"			
36	36"	20"		550

MATERIAL MARK:(2)

DES. TEMP	MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0 °C TO 400°C	MARK	A	C	E
	ⓐ NOTE-1	–	–	–
	ⓑ	A53 Gr.B	A53 Gr.B	A53 Gr.B
	ⓒ	A283 Gr.C	A283 Gr.C	A283 Gr.C
400 °C TO 550°C	MARK	B	D	F
	ⓐ NOTE-1	–	–	–
	ⓑ	–	A53 Gr.B	A53 Gr.B
	ⓒ	–	A283 Gr.C	A283 Gr.C

INDICATION:

SD-14-□-□□□-□□

(1) (2) (3) (4)

1-TYPE OF DUMMY
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK

NOTE:

1- SAME MATERIAL OF RUN PIPE CAN BE APPLIED FOR THE MATERIAL ⓐ, AND SHALL BE WELDED BEFORE PWHT.

2- TO BE ADJUSTED IN THE FIELD.

3- CUTTING LENGTH "M", IS EQUAL OD OF RUN PIPE + 80mm.

4- FOR STANCHION SIZE ≤4", a=STANCHION WALL THICKNESS, FOR STANCHION SIZE >4", a=6mm.

5- A SCALLOP SHALL BE PROVIDED TO AVOID INTERFERENCE WITH SEAM WELD OF THE RUN PIPE.

6- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

SUPPORT DESCRIPTION:	SHEET
DUMMY PIPE FOR 45° ELBOW (CS-WITH PWHT, AS, SS) 2" ~ 36"	1
SD-14	1

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

HIRGAN ENERGY

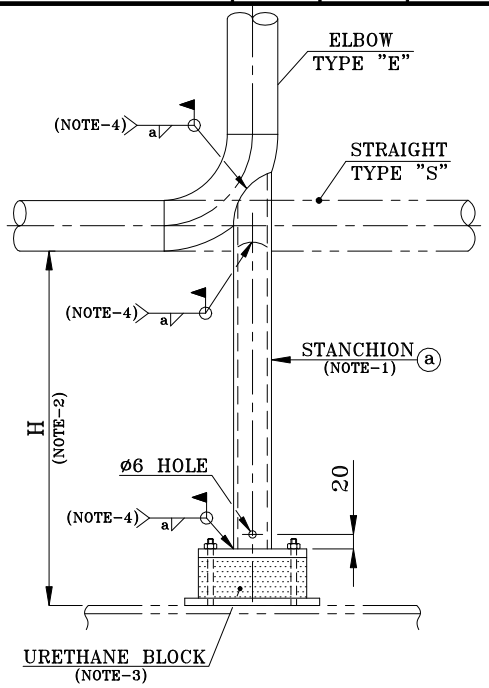
شماره پیمان:

053-073-9184

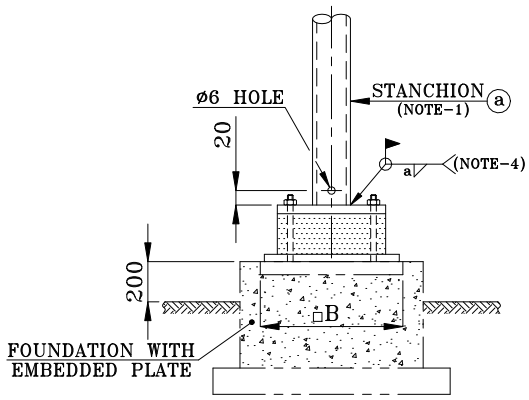
STANDARD PIPE SUPPORT DRAWINGS

شماره صفحه: 188 از 394

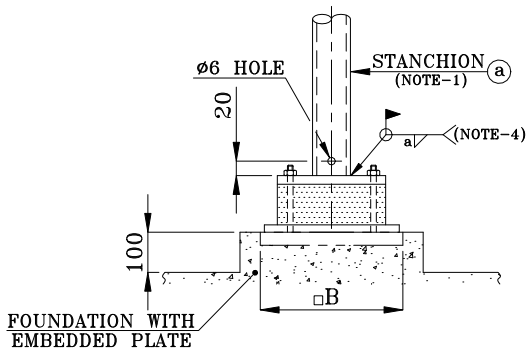
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



TYPE "A"
(STEEL SURFACE)



TYPE "B"
(UNPAVED AREA)



TYPE "C"
(PAVED AREA)

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	B
02	2"	1+1/2"	SCH80	230
03	3"	2"	STD	
04	4"	3"		270
06	6"	4"		
08	8"	6"		320
10	10"			
12	12"	8"		370
14	14"			
16	16"	10"		420
18	18"			
20	20"	12"		500
24	24"	14"		
26	26"			
28	28"	16"		590
30	30"			
32	32"	18"		
34	34"			
36	36"	20"		610

HEIGHT MARK:(4)

MARK	H
1	600
2	700
3	800
4	900
5	1000
6	1100
7	1200
8	1300
9	1400

INDICATION:

SD-15-□□-□□□□
(1) (2) (3) (4)

1-TYPE OF RUN PIPE
2-TYPE OF FOUNDATION
3-NPS MARK
4-HEIGHT MARK

NOTE:

1- SAME MATERIAL OF RUN PIPE CAN BE APPLIED FOR THE MATERIAL (a).

2- TO BE ADJUSTED IN THE FIELD.

3- FOR THE DETAIL OF URETHANE BLOCK SEE (G-05).

4- FOR STANCHION SIZE ≤4", a=STANCHION WALL THICKNESS, FOR STANCHION SIZE >4", a=6mm.

5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

SUPPORT DESCRIPTION:	SHEET
SLIDE STOOL (COLD INSULATION) 2" ~ 36"	1
SD-15	1

NISOC

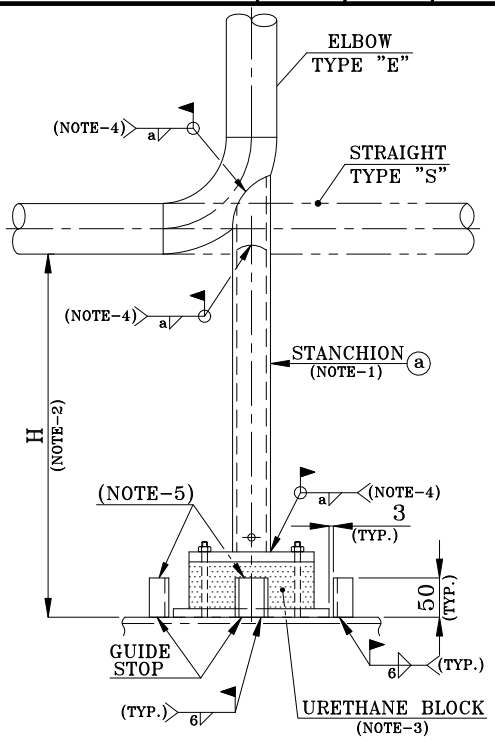
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO
HIRGAN ENERGY

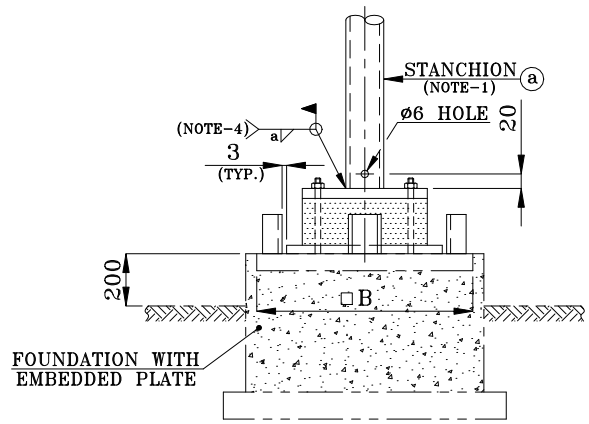
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

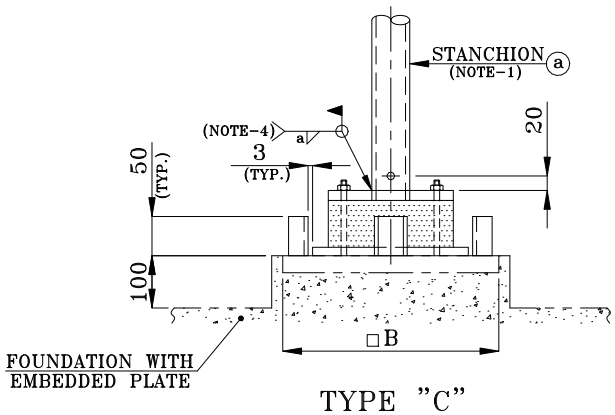
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



TYPE "A"
(STEEL SURFACE)



TYPE "B"
(UNPAVED AREA)



TYPE "C"
(PAVED AREA)

NPS MARK:(4)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	B	GUIDE OR STOPPER
02	2"	1+1/2"	SCH80	340	U100
03	3"	2"	STD		
04	4"	3"		380	
06	6"	4"			
08	8"	6"		440	U120
10	10"				
12	12"	8"		530	U200
14	14"				
16	16"	10"		580	
18	18"				
20	20"	12"		710	HEB100
24	24"	14"			
26	26"				
28	28"	16"		840	HEB120
30	30"				
32	32"	18"		920	HEB160
34	34"				
36	36"	20"		940	

HEIGHT MARK:(5)

MARK	H
1	600
2	700
3	800
4	900
5	1000
6	1100
7	1200
8	1300
9	1400

INDICATION:

SD-16-[ ][ ][ ]-[ ][ ][ ]
(1) (2) (3) (4) (5)

1-TYPE OF RUN PIPE
2-TYPE OF FOUNDATION
3-TYPE OF FUNCTION
4-NPS MARK
5-HEIGHT MARK

NOTE:

1- SAME MATERIAL OF RUN PIPE CAN BE APPLIED FOR THE MATERIAL (a).

2- TO BE ADJUSTED IN THE FEILD.

3- FOR DETAIL OF URETHANE BLOCK SEE (G-05).

4- FOR STANCHION SIZE ⩽4", a=STANCHION WALL THICKNESS, FOR STANCHION SIZE >4", a=6mm.

5- "G" INDICATES "GUIDE" & "L" INDICATES "LINE STOP" AND "S" INDICATES "SEMI ANCHOR" FOR TYPES OF FUNCTION.

6- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

MATERIAL:
STANDARD PROFILE: ASTM A36

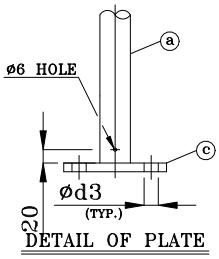
SUPPORT DESCRIPTION:	SHEET
GUIDE/LINE STOP/SEMI ANCHOR STOOL (COLD INSULATION) 2" ~ 36"	1
SD-16	1

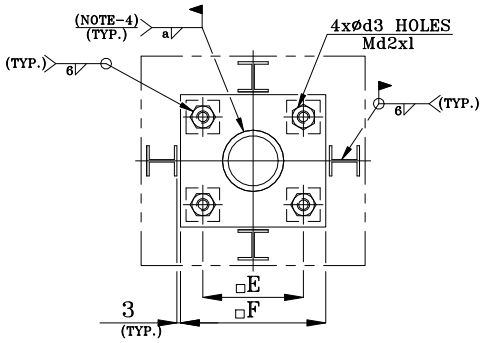
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 190 از 394

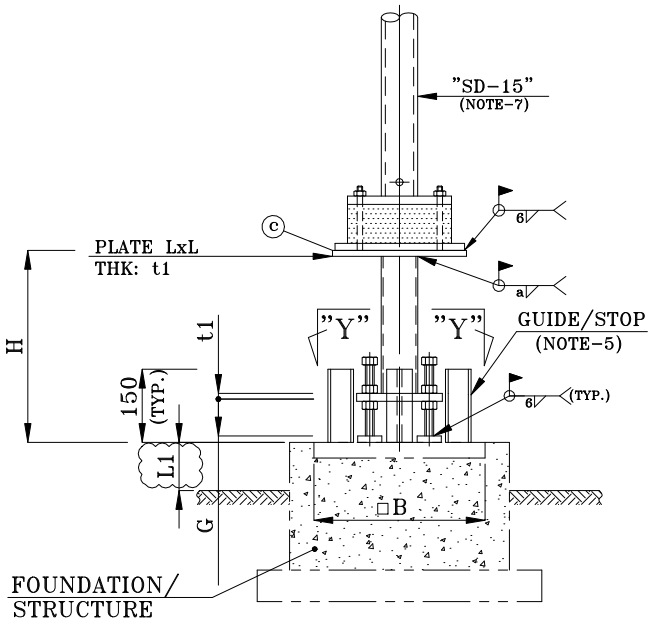
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

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VIEW "Y" ~ "Y"



NPS MARK:(5)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	B	F	E	U	L	t1	ød3	Md2xl	STOP/ GUIDE
02	2"	1+1/2"	SCH80	290	150	80	30	230	10	18	M16x150	U100
03	3"	2"	STD	310	160	90	30		10	18	M16x150	U120
04	4"	3"		340	190	120	35	270	10	20	M18x150	U120
06	6"	4"		380	210	140	35		10	20	M18x150	U160
08	8"	6"	STD	520	270	200	40	320	12	22	M20x150	HEB100
10	10"											
12	12"	8"		580	330	250	50	370	15	26	M24x150	HEB100
14	14"											
16	16"	10"	STD	680	390	300	55	420	15	29	M27x150	HEB120
18	18"											
20	20"	12"		770	440	350	60	500	15	32	M30x150	HEB140
24	24"	14"		850	480	380	65		15	35	M33x150	HEB160

HEIGHT MARK:(4)

MARK	H
1	600
2	700
3	800
4	900

TYPE OF FOUNDATION:(1)

TYPE	FOUNDATION	L1
A	STEEL	-
B	UNPAVED	200
C	PAVED	100

MATERIAL	
ⓑ	A53 Gr.B
ⓒ	A283 Gr.C

INDICATION:

SD-17-[ ][ ][ ][ ]-[ ]
(1) (2) (3) (4)

1-TYPE OF FOUNDATION
2-TYPE OF FUNCTION (NOTE-5)
3-NPS MARK
4-HEIGHT MARK

NOTE:

1- SAME MATERIAL OF RUN PIPE CAN BE APPLIED FOR THE MATERIAL ⓐ AND SHALL BE WELDED BEFORE PWHT.
2- TO BE ADJUSTED IN THE FIELD.
3- FOR ADJUSTING, "G" SHOULD BE BETWEEN 50 AND 140 (50<G<140).
4- FOR STANCHION SIZE <4", a=STANCHION WALL THICKNESS, FOR STANCHION SIZE >4", a=6mm.
5- "G" INDICATES "GUIDE" , "L" INDICATES "LINE STOP" , "S" INDICATES "SEMI ANCHOR" AND "R" INDICATES "REST" FOR TYPES OF FUNCTION.
6- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).
7- SEPARATED TAG (SD-15) IS REQUIRED.

MATERIAL: STANDARD PROFILE: ASTM A36, BOLT & NUT: A325

SUPPORT DESCRIPTION:	SHEET
ADJUSTABLE GUIDE/LINE STOP/SEMI ANCHOR STOOL (COLD INSULATION) 2" ~ 36"	1
SD-17	1

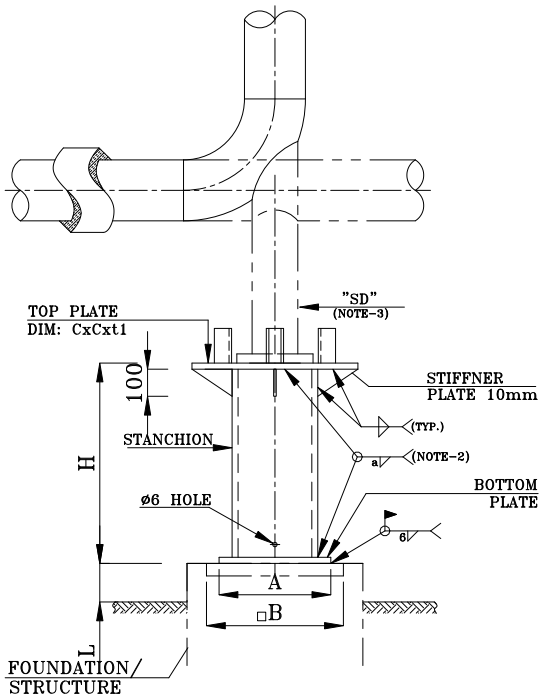
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

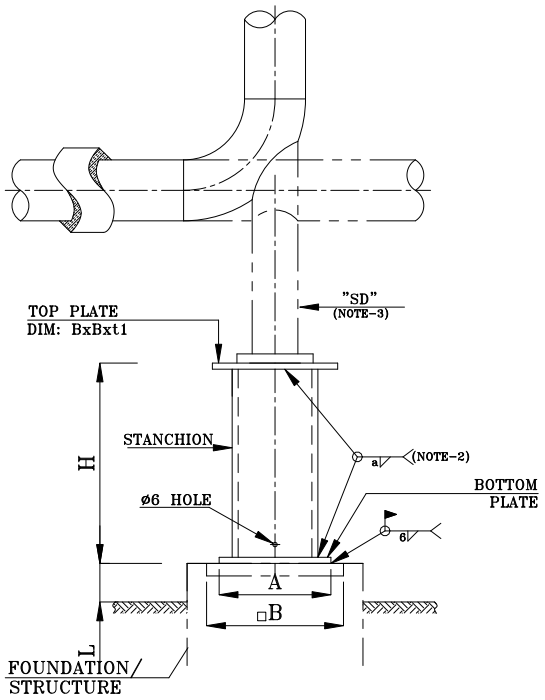
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 191 از 394



TYPE A
GUIDE/STOP



TYPE B
REST

SIZE MARK:(2)

SIZE MARK	STANCHION PIPE SIZE	STANCHION PIPE THK.	A	t	B	C	t1	LOAD FOR HEIGHT MARKS (Kg) H1	H2~H4	H5,H6
02	2"	STD	120	10	170	280	12	330	220	160
03	3"		140		190	300	12	960	660	500
04	4"		160		210	320	12	1500	1050	800
06	6"		220		270	390	15	3100	2200	1700
08	8"		260		310	470	15	5100	3600	2800
10	10"		320	12	370	530	20	7500	5400	4200
12	12"		350		400	610	20	10000	7200	5700
14	14"		400		450	660	25	12000	8700	6900
16	16"		450	15	500	750	25	15000	11000	8800
18	18"		500		550	880	25	18000	13000	11000
20	20"		550		600	930	25	20000	16500	13000

HEIGHT MARK:(3)

MARK	H
1	600
2	700
3	800
4	900
5	1000
6	1200

TYPE OF FOUNDATION:(1)

TYPE	FOUNDATION	L
A	STEEL	–
B	UNPAVED	200
C	PAVED	100

INDICATION:

SD-18-□-□□□-□
(1) (2) (3) (4)

1-TYPE MARK
2-TYPE OF FOUNDATION
3-SIZE MARK
4-HEIGHT MARK

NOTE:

1- TO BE ADJUSTED IN THE FIELD.

2- FOR STANCHION SIZE <4", a=STANCHION WALL THICKNESS, FOR STANCHION SIZE >4", a=6mm.

3- SEPARATED TAG IS REQUIRED FOR "SD" SUPPORT DIRECTLY CONNECTED TO PIPE.

4- ALLOWABLE VERTICAL LOAD "Fv" HAS BEEN CALCULATED BASED ON μ=0.3, ALSO "Fv" IS THE MAX. CONCENTRATED VERTICAL LOAD AND "FL"=0.3x"Fv" AND "FA"=0.3x"Fv" WHICH ARE APPLIED CONCURRENTLY.

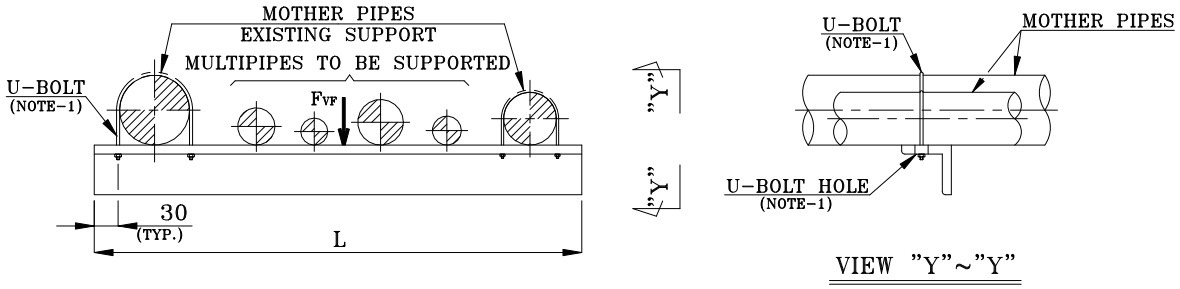
5- SELECTED STANCHION SIZE SHALL BE GREATER THAN OR EQUAL TO DUMMY SIZE.

MATERIAL: A53 Gr.B , PLATE:A283 Gr.C

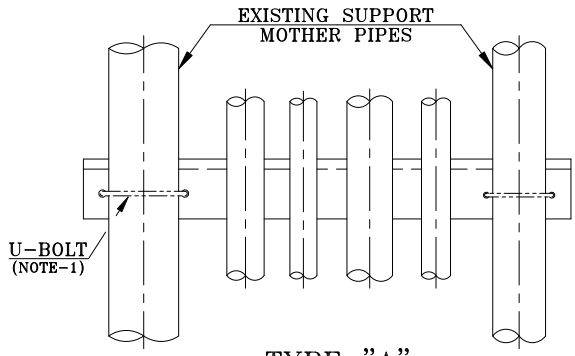
SUPPORT DESCRIPTION:	SHEET
LOAD STANCHION	1
SD-18	1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

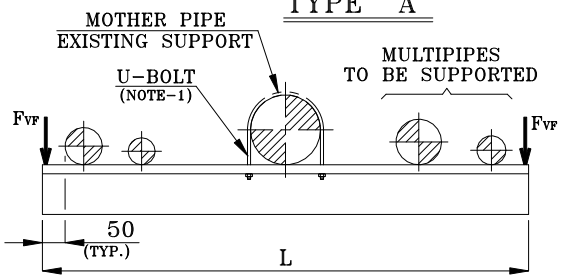
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 192 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	



VIEW "Y"~"Y"



TYPE "A"



TYPE "B"

LENGTH MARK:(3)

MARK	L
01	500
02	600
03	700
04	800
05	900
06	1000
07	1100
08	1200
09	1300
10	1400
11	1500

SIZE MARK:(2)

MARK	TYPE OF ANGLE	ALLOW. LOAD(kg)-FVF, TYPE-"A"		ALLOW. LOAD(kg)-FVF, TYPE-"B"&"C"	
		L≤1000	L>1000	L≤1000	L>1000
1	L50x50x5	220	150	50	30
2	L70x70x7	600	400	150	100
3	L80x80x8	900	600	230	150
4	L100x100x10	1600	1100	450	300

INDICATION:

SE-01-□-□□□
(1) (2) (3)

1-TYPE MARK
2-SIZE MARK
3-LENGTH MARK

NOTE:

1- SEPARATED TAG IS REQUIRED FOR U-BOLT, AND LOCATION OF U-BOLT HOLES SHALL BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR SHOE.

3- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

4- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR ANGLE.
ALLOWABLE LOAD OF U-BOLT OR SHOE SHALL BE CHECKED SEPARATELY.

MATERIAL:
STANDARD PROFILE: ASTM A36

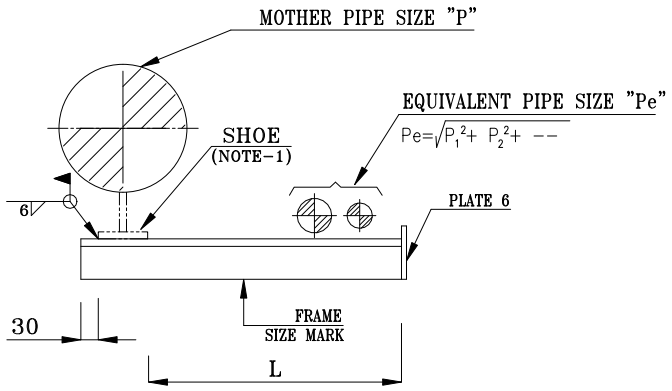
SUPPORT DESCRIPTION:	SHEET
RESTING WITH MOTHER PIPE	1
SE-01	2

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

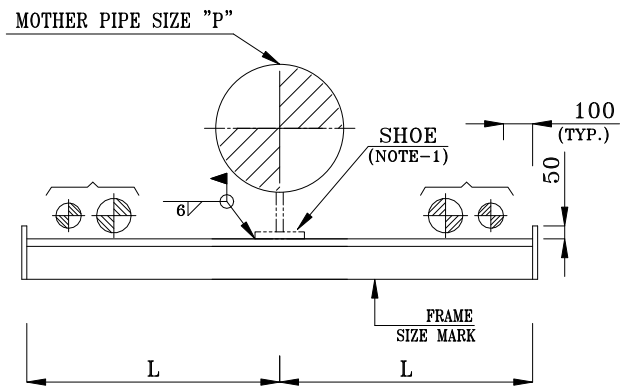
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

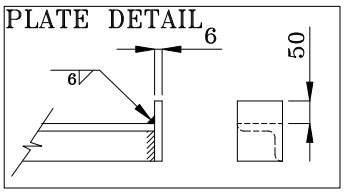


TYPE "D"



TYPE "C"

MOTHER PIPE SIZE "P" 4" TO 32"



SIZE MARK:(2)

MOTHER PIPE SIZE SIZE	EQUIVALENT PIPE SIZE "Pe"	DIM. L (mm)		
		500	1000	1500
		SIZE MARK		
		2	3	4
4"	1-1/2" AND SMALLER	A70x70x7	-	-
6"	2" AND SMALLER			
8"				
10"				
12"	3" AND SMALLER		A80x80x8	A100x100x10
14"				
16"				
18"				
20"				
24"				
30"				
32"				

LENGTH MARK:(3)

MARK	L
01	500
02	600
03	700
04	800
05	900
06	1000
07	1100
08	1200
09	1300
10	1400
11	1500

INDICATION:

SE-01-□-□□□
(1) (2) (3)

1-TYPE MARK
2-SIZE MARK
3-LENGTH MARK

NOTE:

1- SEPARATED TAG IS REQUIRED FOR SHOE.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR ANGLE.
ALLOWABLE LOAD OF U-BOLT OR SHOE SHALL BE CHECKED SEPARATELY.

MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
RESTING WITH MOTHER PIPE	2
SE-01	2

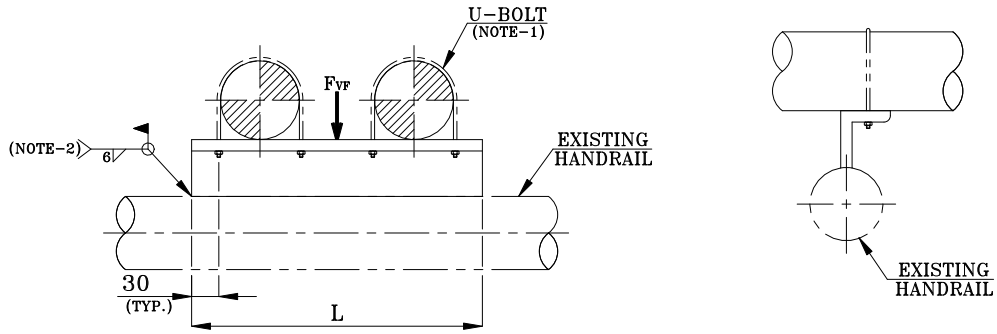
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

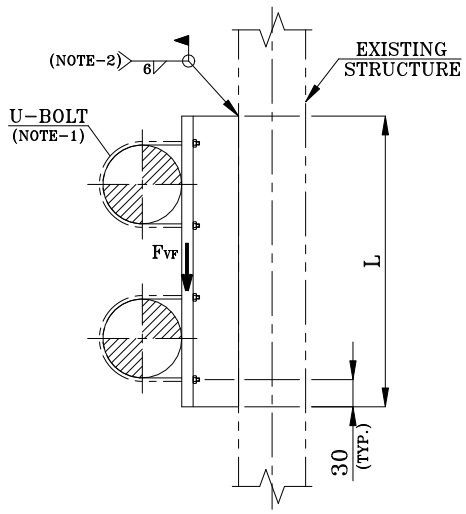
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 194 از 394



TYPE "A"



TYPE "B"

LENGTH MARK:(3)

MARK	L
01	500
02	600
03	700
04	800
05	900
06	1000
07	1100
08	1200
09	1300
10	1400
11	1500

SIZE MARK:(2)

MARK	TYPE OF ANGLE	ALLOW. LOAD(kg)-FVF, TYPE-"A"		ALLOW. LOAD(kg)-FVF, TYPE-"B"	
		L<1000	L≥1000	L<1000	L≥1000
1	L50x50x5	350	700	450	1000
2	L70x70x7	490	950	650	1400
3	L80x80x8	550	1100	750	1600
4	L100x100x10	700	1400	950	2000

INDICATION:

SE-02-□-□□□
(1) (2) (3)

1-TYPE MARK
2-SIZE MARK
3-LENGTH MARK

NOTE:

1- SEPARATED TAG IS REQUIRED FOR U-BOLT, AND LOCATION OF U-BOLT HOLES SHALL BE ADJUSTED AT FIELD.

2- TO BE WELDED BOTH SIDE OF ANGLE IF POSSIBLE.

3- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

4- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR ANGLE.
ALLOWABLE LOAD OF U-BOLT OR SHOE SHALL BE CHECKED SEPARATELY.

MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
ANGLE SUPPORT 1/2" ~ 2"	1
SE-02	1

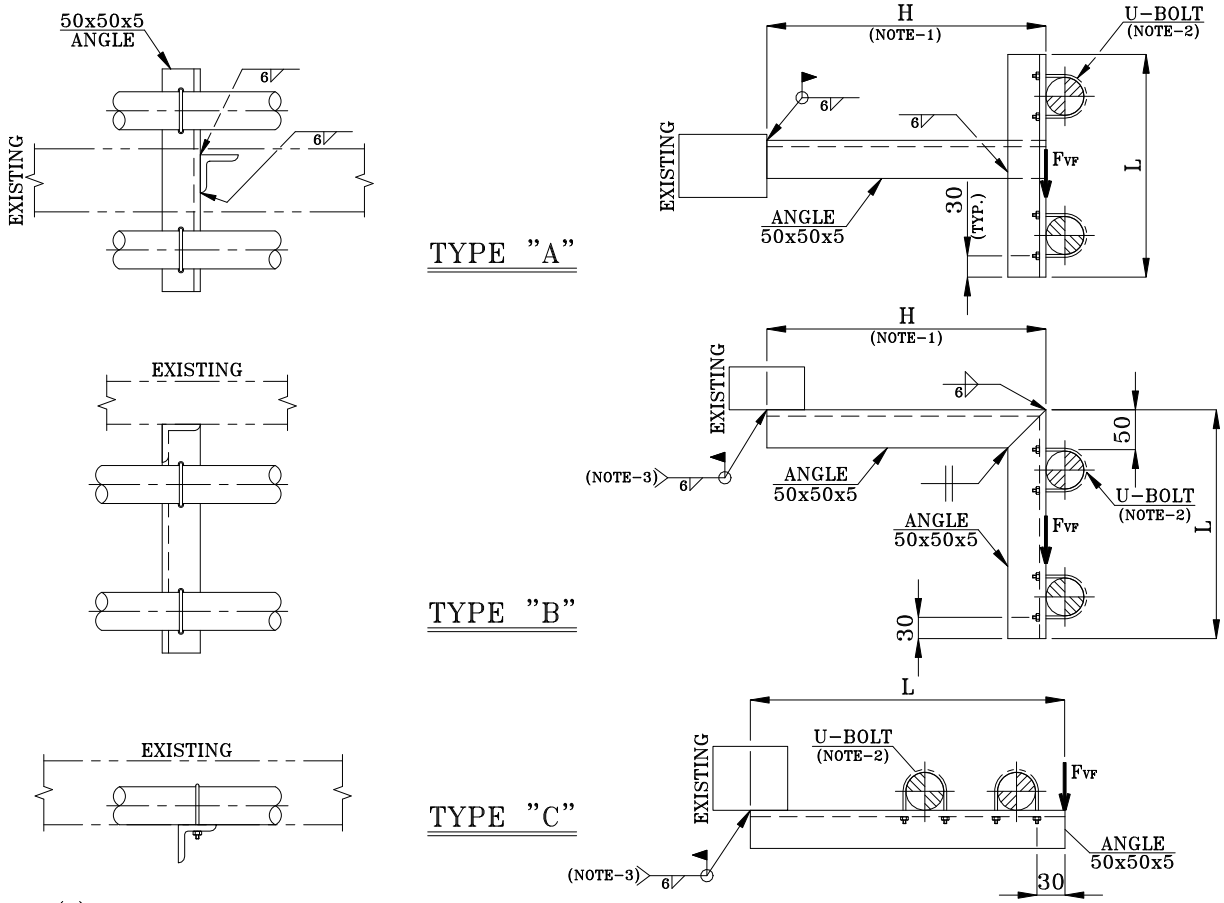
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

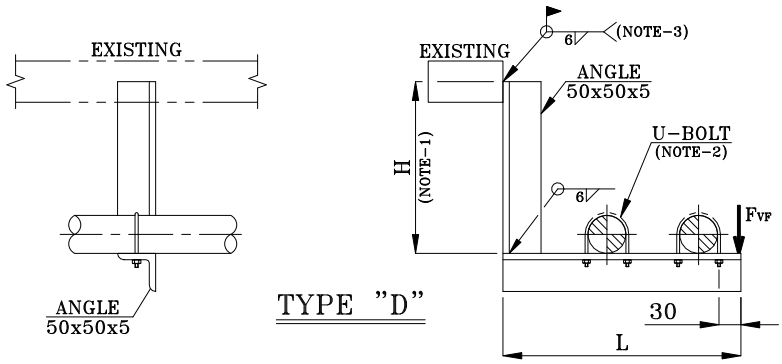
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 195 از 394



SIZE MARK:(2)

MARK	L	H	ALLOW. LOAD(kg)-FVF	
			TYPE"A"&"B"	TYPE"C"&"D"
01	200	200	40	40
02	300			30
03	450			
04	600			20
05	200	400	30	40
06	300			30
07	450			
08	600			20
09	200	600	20	40
10	300			30
11	450			
12	600			20



INDICATION:

SE-03-[ ][ ][ ]
(1) (2)

1-TYPE MARK
2-SIZE MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR U-BOLT AND LOCATION OF U-BOLT HOSES SHALL BE ADJUSTED AT FIELD.

3- FOR TYPE "B", "C", AND "D", ALLOW. LOADS HAVE BEEN CALCULATED BASED ON WELD THICKNESS 6mm AND WELD LENGTH 50mm OTHERWISE SHALL BE CALCULATED PER CASE.

4- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

5- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR ANGLE. ALLOWABLE LOAD OF U-BOLT SHALL BE CHECKED SEPARATELY.

MATERIAL: STANDARD PROFILE: ASTM A36

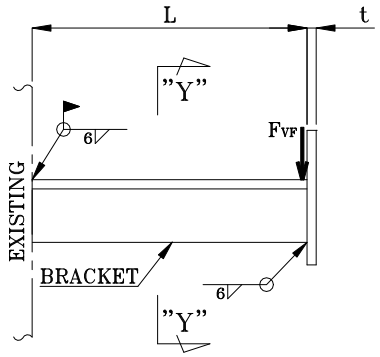
SUPPORT DESCRIPTION:	SHEET
ANGLE BRACKET 1/2" ~ 2"	1
SE-03	1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

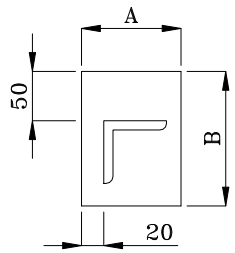
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

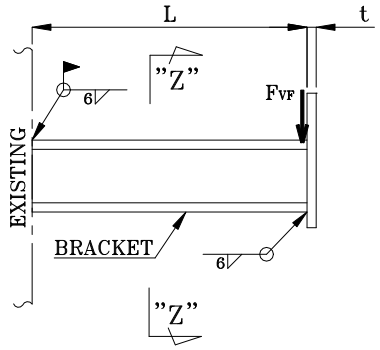
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



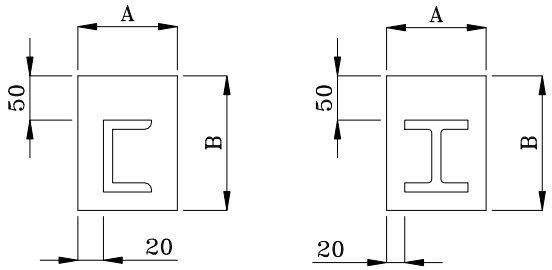
TYPE "A"



VIEW "Y"~"Y"



TYPE "B"



VIEW "Z"~"Z"

SIZE MARK:(2) - TYPE(A)

MARK	L	BRACKET	A	B	t	ALLOW. LOAD(kg) FVF
01	200	ANGLE 50x50x5	100	130	5	80
02	300					
03	400					50
04	500					
05	600	ANGLE 70x70x7	120	150		110
06	700					90
07	800					

SIZE MARK:(2) - TYPE(B)

MARK	L	BRACKET	A	B	t	ALLOW. LOAD(kg) FVF
01	500	U160	110	240	8	1500
02	600					
03	700					1200
04	800					
05	900					950
06	1000					
07	700	HEB140	180	230	10	2100
08	800					1700
09	900					
10	1000					1300
11	1200					
12	1300	HEB160	200	250		1500
13	1400					1300
14	1500					

INDICATION:

SE-04-[ ][ ][ ]
(1) (2)

1-TYPE MARK
2-SIZE MARK

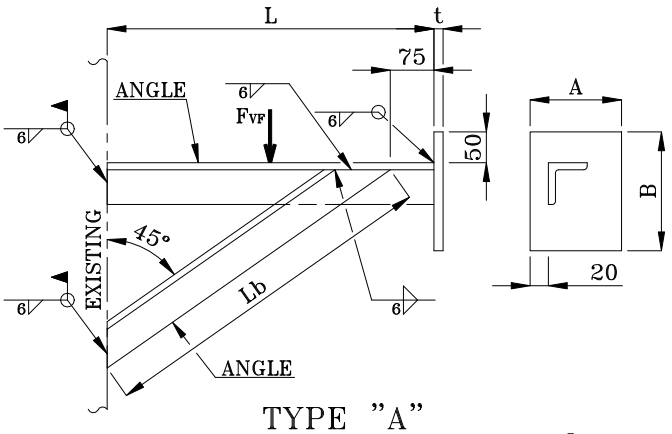
NOTE:

MATERIAL:
STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

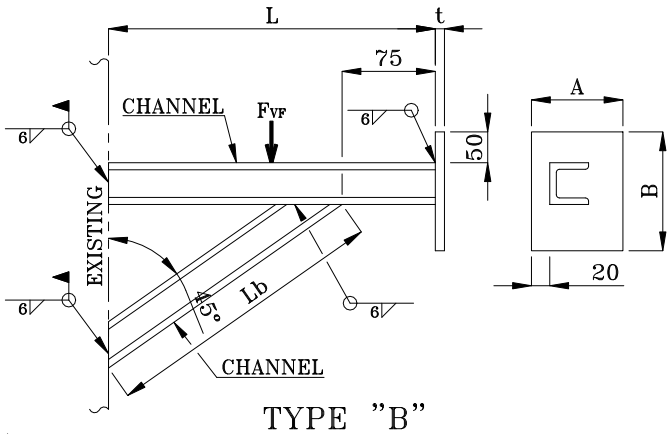
SUPPORT DESCRIPTION:	SHEET
SIMPLE BRACKET	1
SE-04	1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

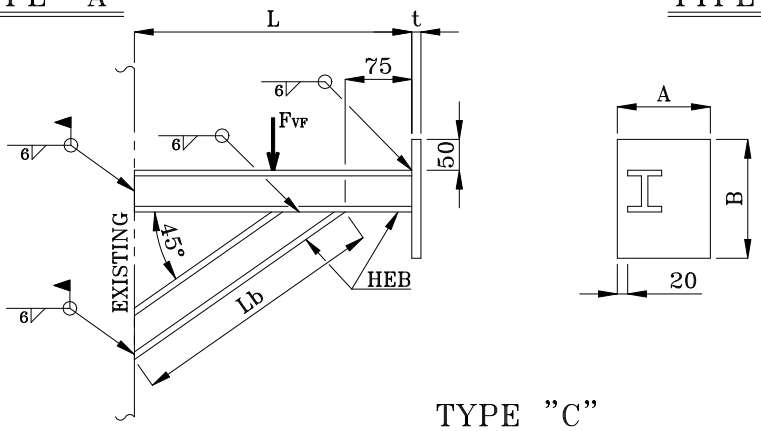
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 197 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02



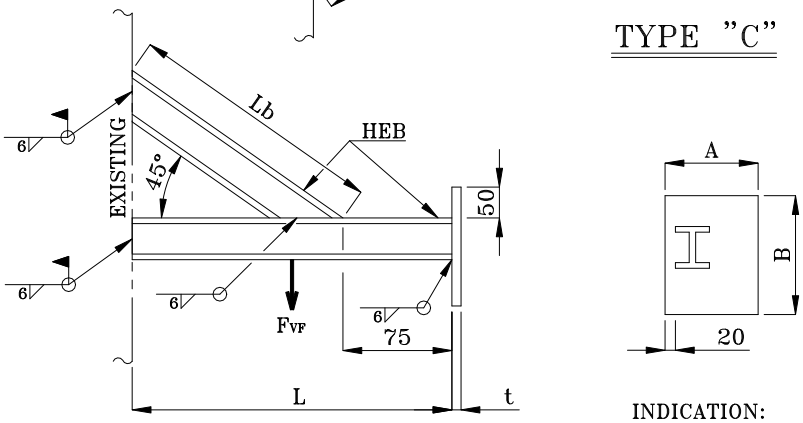
TYPE "A"



TYPE "B"



TYPE "C"



TYPE "D"

INDICATION:

SE-05- [ ][ ][ ]
(1) (2)

1-TYPE MARK
2-SIZE MARK

NOTE:

1- FOR TYPE "A", "B" AND "C", IMPOSED LOAD SHALL BE LOCATED ON THE MIDDLE OF BRACKET, FOR TYPE "D" LOAD IS LOCATED ON THE INTERSECTION OF BRACKET AND BRACE.

MATERIAL:

STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
REINFORCED BRACKET	1
SE-05	2

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 198 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

053-073-9184

SIZE MARK:(2) – TYPE(A)

MARK	L	Lb	BRACKET	A	B	t	ALLOW. LOAD(kg) Fvf
01	500	601	ANGLE 50x50x5	100	130	5	230
02	600	743					
03	700	884					
04	800	1026					150
05	900	1167					
06	1000	1308					
07	700	884	ANGLE 70x70x7	120	150		470
08	800	1026					
09	900	1167					
10	1000	1308					340
11	1100	1450					
12	1200	1591					

SIZE MARK:(2) – TYPE(B)

MARK	L	Lb	BRACKET	A	B	t	ALLOW. LOAD(kg) Fvf
01	800	1026	U160	110	240	8	1100
02	900	1167					
03	1000	1308					
04	1100	1450					950
05	1200	1591					
06	1300	1733					
07	900	1167	U200	120	280		1700
08	1000	1308					
09	1100	1450					
10	1200	1591					1300
11	1300	1733					
12	1400	1874					

SIZE MARK:(2) – TYPE(D)

MARK	L	Lb	BRACKET	A	B	t	ALLOW. LOAD(kg) Fvf
01	500	601	HEB120	160	210	10	4000
02	600	743					
02	700	883					2000
03	800	1026					
03	900	1166					
04	1000	1308					
05	1100	1450					
06	800	1026	HEB140	180	230		3500
07	900	1167					
08	1000	1308					2200
09	1100	1449					
10	1200	1591					
11	1300	1732					
12	1400	1874					
13	1200	1591	HEB160	200	250		3000
14	1300	1732					
15	1400	1874					
16	1500	2015					
17	1600	2157					2100
18	1700	2298					
19	1800	2440					
20	1900	2440					
21	2000	2723					

SIZE MARK:(2) – TYPE(C)

MARK	L	Lb	BRACKET	A	B	t	ALLOW. LOAD(kg) Fvf
01	600	743	HEB140	180	230	10	4500
02	800	1026					
03	1000	1308					2600
04	1200	1591					
05	1400	1874					
06	1000	1308	HEB160	200	250		4000
07	1200	1591					
08	1400	1874					
09	1600	2157					2500
10	1800	2440					

INDICATION:

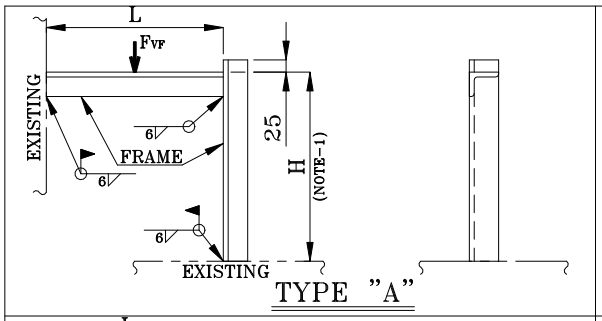
SE-05- [ ][ ]
(1) (2)

1-TYPE MARK
2-SIZE MARK

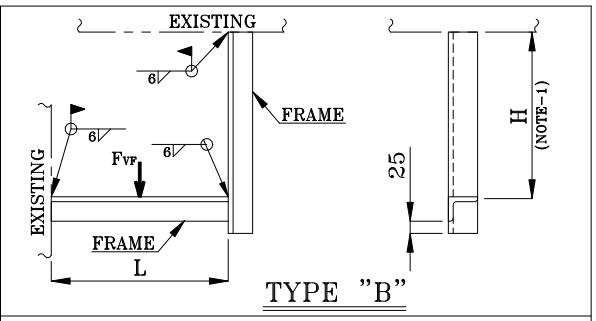
SUPPORT DESCRIPTION:	SHEET
REINFORCED BRACKET	2
SE-05	2

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY
شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 199 از 394

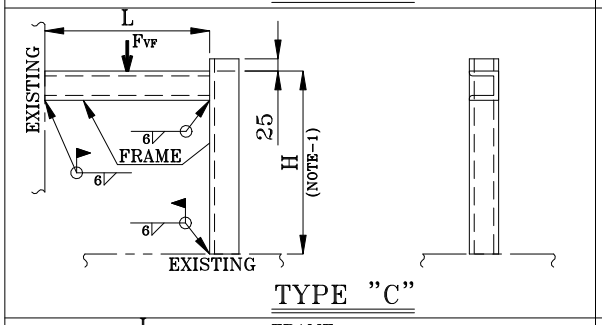
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



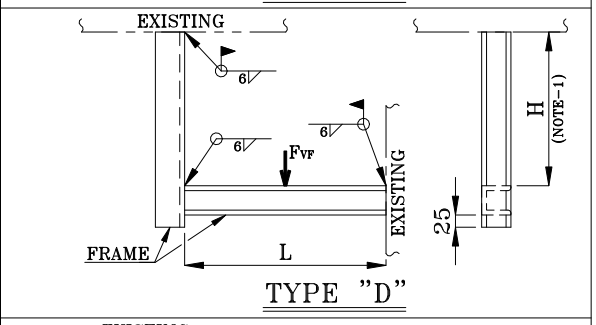
TYPE "A"



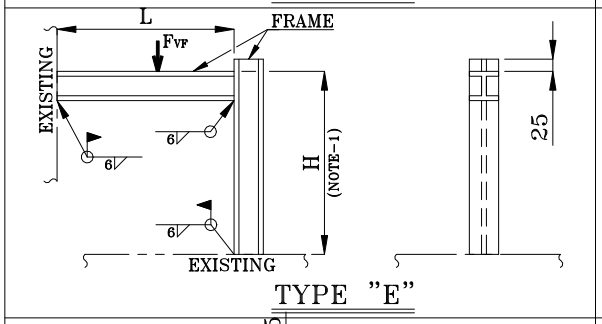
TYPE "B"



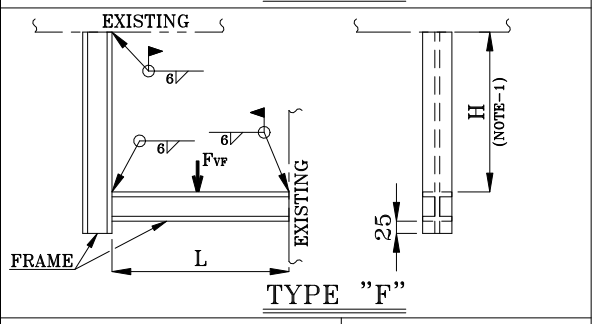
TYPE "C"



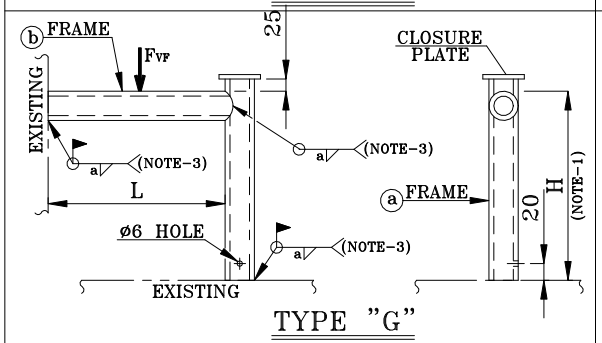
TYPE "D"



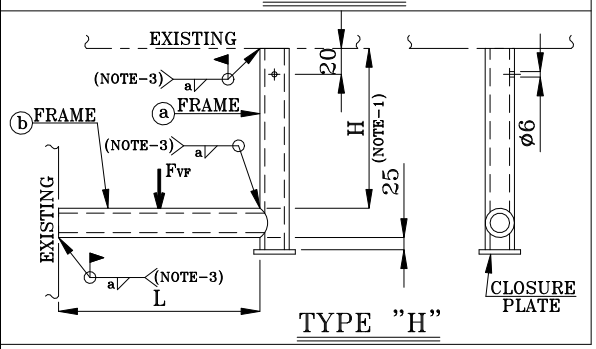
TYPE "E"



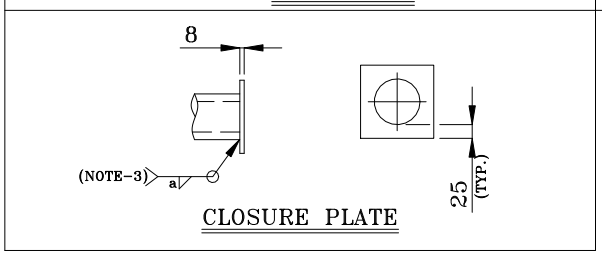
TYPE "F"



TYPE "G"



TYPE "H"



CLOSURE PLATE

INDICATION:

SE-06- □□□□ - □□□

(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH THE ALLOWABLE LOAD.

3- FOR FRAME SIZE ≤4", a=FRAME WALL THICKNESS, FOR FRAME SIZE>4", a=6mm.

MATERIAL:

STANDARD PROFILE: ASTM A36, PIPE: A53 Gr.B, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
CHAIR-TYPE SUPPORT AT STEEL STRUCTURE	1
SE-06	6

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (A)&(B)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
001	400	01	400	ANGLE 50x50x5	200
002	500				
003	600				
004	700	02	500		
005	800				
006	900				
007	1000	03	600		
008	1100				
009	1200				
010	400	04	700		150
011	500				
012	600				
013	700				
014	800				
015	900	05	800		
016	1000				
017	1100				
018	1200				
019	400	06	900		130
020	500				
021	600				
022	700				
023	800				
024	900	07	1000		
025	1000				
026	1100				
027	1200				
028	400	08	400	ANGLE 70x70x7	470
029	500				
030	600	09	500		
031	700				
032	800				
033	900	10	600		
034	1000				
035	1100	11	700		
036	1200				
037	400	12	800		300
038	500				
039	600				
040	700				
041	800				
042	900	13	900		
043	1000				
044	1100				
045	1200				

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (A)&(B)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
046	400	14	1000	ANGLE 70x70x7	330
047	500				
048	600				
049	700				
050	800				
051	900	15	1100		
052	1000				
053	1100				
054	1200				
055	400	16	400	ANGLE 100x100x10	1100
056	500				
057	600	17	500		
058	700				
059	800	18	600		
060	900	19	700		
061	1000				
062	1100	20	800		
063	1200				
064	400	21	900		980
065	500				
066	600				
067	700				
068	800				
089	900	22	1000		
070	1000				
071	1100				
072	1200				
073	400	23	1000		840
074	500				
075	600				
076	700				
077	800				
078	900	24	1100		
079	1000				
080	1100				
081	1200				

INDICATION:

SE-06-[ ][ ][ ][ ]-[ ][ ]
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

SUPPORT DESCRIPTION:
CHAIR-TYPE SUPPORT
AT STEEL STRUCTURE

SE-06

SHEET 2 6

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY
شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 201 از 394

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (C)&(D)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
001	600	01	600	CHANNEL 120	980
002	700				
003	800				
004	900				
005	1000	02	700		
006	1100				
007	1200				
008	1300	03	800		
009	1400				
010	1500				
011	1600				
012	600	04	900		900
013	700				
014	800				
015	900				
016	1000				
017	1100				
018	1200	05	1000		
019	1300				
020	1400				
021	1500				
022	1600				
023	600	06	1100		820
024	700				
025	800				
026	900				
027	1000				
028	1100				
029	1200	07	1200		
030	1300				
031	1400				
032	1500				
033	1600				
034	600	08	600	CHANNEL 160	1400
035	700				
036	800				
037	900	09	700		
038	1000				
039	1100				
040	1200	10	800		
041	1300				
042	1400	11	900		
043	1500				
044	1600				

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (C)&(D)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
045	600	12	1000	CHANNEL 160	1400
046	700				
047	800				
048	900	13	1100		
049	1000				
050	1100				
051	1200	14	1200		
052	1300				
053	1400	15	1300		
054	1500				
055	1600				
056	600	16	600	CHANNEL 200	1800
057	700	17	700		
058	800	18	800		
059	900				
060	1000	19	900		
061	1100	20	1000		
062	1200	21	1100		
063	1300	22	1200		
064	1400				
065	1500	23	1300		
066	1600	24	1400		

INDICATION:

SE-06- [ ][ ][ ][ ]-[ ][ ]
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

SUPPORT DESCRIPTION:	SHEET
CHAIR-TYPE SUPPORT AT STEEL STRUCTURE	3
SE-06	6

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (E)&(F)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
001	800	01	800	HEB120	2700
002	900				
003	1000				
004	1100				
005	1200				
006	1300				
007	1400				
008	1500	02	900		
009	1600				
010	1700				
011	1800				
012	1900				
013	2000				
014	800	03	1000		2100
015	900				
016	1000				
017	1100				
018	1200	04	1100		
019	1300				
020	1400				
021	1500				
022	1600				
023	1700	05	1200		
024	1800				
025	1900				
026	2000				
027	800	06	1300		1900
028	900				
029	1000				
030	1100				
031	1200				
032	1300				
033	1400				
034	1500	07	1400		
035	1600				
036	1700				
037	1800				
038	1900				
039	2000				

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (E)&(F)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
040	800	08	800	HEB160	4000
041	900				
042	1000				
043	1100				
044	1200	09	900		
045	1300				
046	1400				
047	1500				
048	1600				
049	1700	10	1000		
050	1800				
051	1900				
052	2000				
053	800	11	1100		3500
054	900				
055	1000				
056	1100				
057	1200				
058	1300				
059	1400				
060	1500	12	1200		
061	1600				
062	1700				
063	1800				
064	1900				
065	2000				
066	800	13	1300		3100
067	900				
068	1000				
069	1100				
070	1200	14	1400		
071	1300				
072	1400				
073	1500				
074	1600				
075	1700	15	1500		
076	1800				
077	1900				
078	2000				

INDICATION:

SE-06-[ ][ ][ ]-[ ][ ]
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

SUPPORT DESCRIPTION:	SHEET
CHAIR-TYPE SUPPORT AT STEEL STRUCTURE	4
SE-06	6

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (E)&(F)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
079	800	16	800	HEB200	6000
080	900				
081	1000				
082	1100	17	900		
083	1200				
084	1300				
085	1400	18	1000		
086	1500				
087	1600				
088	1700				
089	1800	19	1100		
090	1900				
091	2000				
092	800	20	1200		5200
093	900				
094	1000				
095	1100				
096	1200	21	1300		
097	1300				
098	1400				
099	1500				
100	1600				
101	1700	22	1400		
102	1800				
103	1900				
104	2000				
105	800	23	1500		4700
106	900				
107	1000				
108	1100				
109	1200				
110	1300				
111	1400				
112	1500	24	1600		
113	1600				
114	1700				
115	1800				
116	1900				
117	2000				

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (G)&(H)

HEIGHT MARK	H	LENGTH MARK	L	FRAME a	FRAME b	ALLOWABLE LOAD (kg) Fvf
001	700	01	700	PIPE 4",STD	PIPE 3",STD	1500
002	800					
003	900					
004	1000	02	800			
005	1100					
006	1200					
007	1300	03	900			
008	1400					
009	1500					
010	700	04	1000			1300
011	800					
012	900					
013	1000					
014	1100	05	1100			
015	1200					
016	1300					
017	1400					
018	1500					
019	700	06	1200			1100
020	800					
021	900					
022	1000					
023	1100	07	1300			
024	1200					
025	1300					
026	1400					
027	1500					
028	700	08	700	PIPE 6",STD	PIPE 4",STD	2400
029	800					
030	900	09	800			
031	1000					
032	1100					
033	1200	10	900			
034	1300					
035	1400	11	1000			
036	1500					

INDICATION:

SE-06-[ ][ ][ ]-[ ][ ]
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

SUPPORT DESCRIPTION:	SHEET
CHAIR-TYPE SUPPORT AT STEEL STRUCTURE	5
SE-06	6

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (G)&(H)

HEIGHT MARK	H	LENGTH MARK	L	FRAME a	FRAME b	ALLOWABLE LOAD (kg) FVF
037	700	12	1100	PIPE 6",STD	PIPE 4",STD	2100
038	800					
039	900					
040	1000					
041	1100	13	1200			
042	1200					
043	1300					
044	1400					
045	1500					
046	700	14	1300			1800
047	800					
048	900					
049	1000					
050	1100	15	1400			
051	1200					
052	1300					
053	1400					
054	1500					
055	700	16	700	PIPE 8",STD	PIPE 6",STD	4600
056	800					
057	900	17	800			
058	1000					
059	1100	18	900			
060	1200					
061	1300	19	1000			
062	1400	20	1100			
063	1500					
064	700	21	1200			4000
065	800					
066	900					
067	1000					
068	1100	22	1300			
069	1200					
070	1300					
071	1400					
072	1500					

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (G)&(H)

HEIGHT MARK	H	LENGTH MARK	L	FRAME a	FRAME b	ALLOWABLE LOAD (kg) FVF
073	700	23	1400	PIPE 8",STD	PIPE 6",STD	3600
074	800					
075	900					
076	1000					
077	1100	24	1500			
078	1200					
079	1300					
080	1400					
081	1500					

INDICATION:

SE-06-[ ][ ][ ]-[ ][ ]
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

SUPPORT DESCRIPTION:	SHEET
CHAIR-TYPE SUPPORT AT STEEL STRUCTURE	6
SE-06	6

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

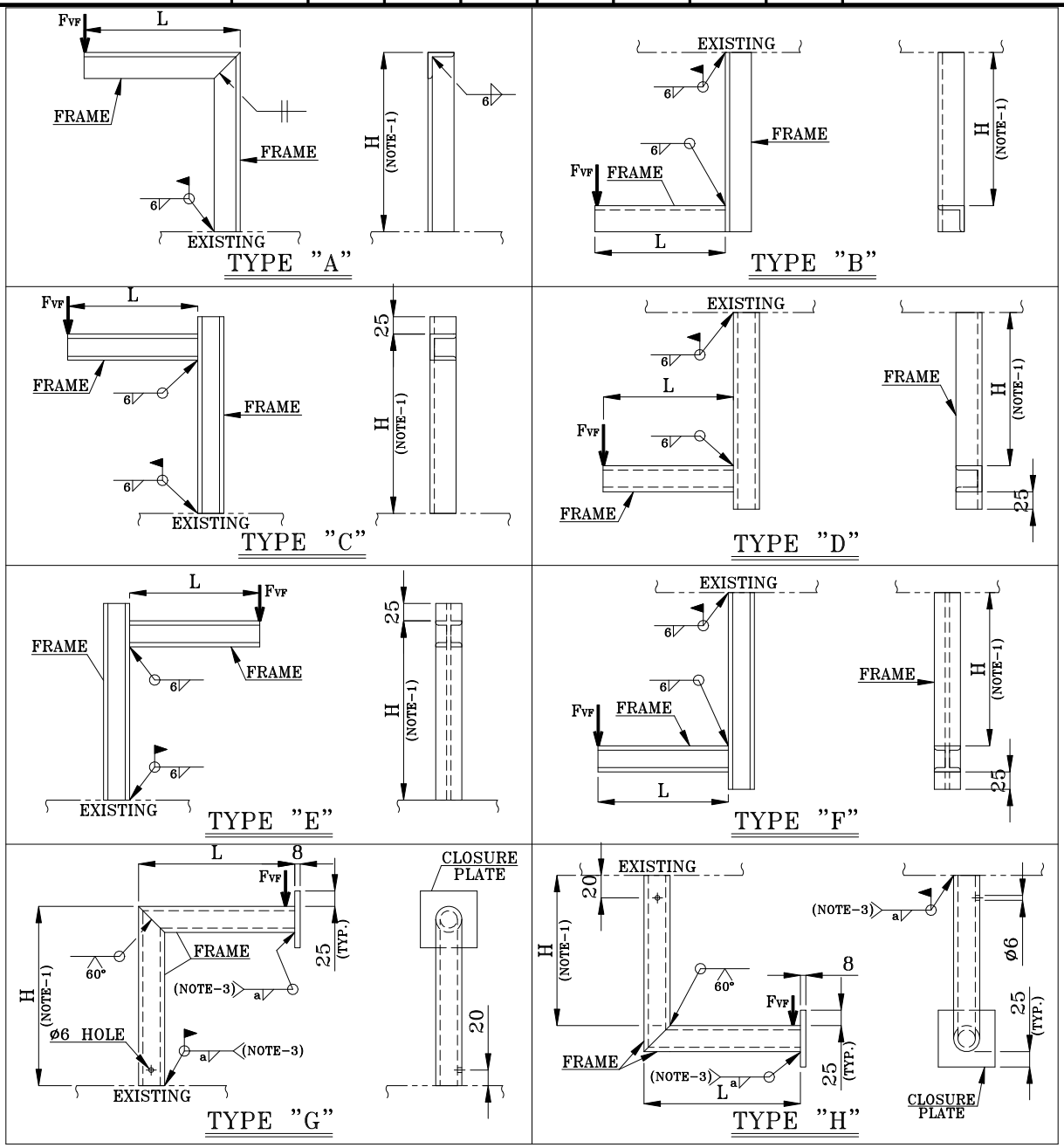
HIRGAN ENERGY

شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



INDICATION:

SE-07- (1) (2) - (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- a=FRAME WALL THICKNESS.

MATERIAL:

STANDARD PROFILE: ASTM A36, PIPE: A53 Gr.B, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
L-TYPE SUPPORT AT STEEL STRUCTURE	1
SE-07	4

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (A)&(B)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
01	300	01	200	ANGLE 50x50x5	30
02	400				
03	500	02	300		
04	600				
05	700				
06	800	03	400		
07	900				
08	300	04	500		25
09	400				
10	500				
11	600				
12	700				
13	800				
14	900				
15	300	05	600		20
16	400				
17	500				
18	600	06	700		
19	700				
20	800				
21	900				
22	300	07	200	ANGLE 70x70x7	110
23	400				
24	500	08	300		
25	600	09	400		
26	700				
27	800	10	500		
28	900				
29	300	11	600		85
30	400				
31	500				
32	600				
33	700				
34	800				
35	900				
36	300	12	700		70
37	400				
38	500				
39	600				
40	700	13	800		
41	800				
42	900				

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (C)&(D)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
01	400	01	200	CHANNEL 140	210
02	500				
03	600	02	300		
04	700				
05	800				
06	900	03	450		
07	1000				
08	400	04	500		160
09	500				
10	600				
11	700	05	600		
12	800				
13	900				
14	1000				
15	400	06	700		120
16	500				
17	600				
18	700	07	800		
19	800				
20	900				
21	1000				

INDICATION:

SE-07- [ ][ ][ ] - [ ][ ]
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

SUPPORT DESCRIPTION:	SHEET
L-TYPE SUPPORT AT STEEL STRUCTURE	2
SE-07	4

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (C)&(D)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
22	500	08	200	CHANNEL 180	260
23	600				
24	700	09	300		
25	800				
26	900	10	400		
27	1000	11	500		
28	1100				
29	500	12	600		210
30	600				
31	700				
32	800	13	700		
33	900				
34	1000				
35	1100				
36	500	14	850		180
37	600				
38	700				
39	800				
40	900				
41	1000				
42	1100				

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (E)&(F)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
01	600	01	200	HEB140	780
02	700				
03	800	02	300		
04	900				
05	1000	03	400		
06	1100	04	500		
07	1200				
08	600	05	600		640
09	700				
10	800				
11	900	06	700		
12	1000				
13	1100				
14	1200				
15	600	07	800		530
16	700				
17	800				
18	900	08	900		
19	1000				
20	1100				
21	1200				

INDICATION:

SE-07-[ ][ ][ ]-[ ][ ]

(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

SUPPORT DESCRIPTION:	SHEET
L-TYPE SUPPORT AT STEEL STRUCTURE	3
SE-07	4

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (G)&(H)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	A	ALLOWABLE LOAD (kg) Fvf
01	400	01	200	PIPE 2", STD	140	90
02	500					
03	600	02	300			
04	700					
05	800	03	400			
06	900	04	500			
07	1000					
08	400	05	600			70
09	500					
10	600					
11	700	06	700			
12	800					
13	900					
14	1000					
15	400	07	800			60
16	500					
17	600					
18	700	08	900			
19	800					
20	900					
21	1000					
22	500	09	200	PIPE 4", STD	170	410
23	600	10	300			
24	700					
25	800	11	400			
26	900	12	500			
27	1000					
28	1100	13	650			
29	500	14	700			350
30	600					
31	700					
32	800	15	800			
33	900					
34	1000					
35	1100					
36	500	16	900			260
37	600					
38	700	17	1000			
39	800					
40	900	18	1100			
41	1000	19	1200			
42	1100					

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (E)&(F)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
22	600	09	200	HEB180	1100
23	700	10	300		
24	800				
25	900	11	400		
26	1000	12	500		
27	1100				
28	1200	13	600		
29	600	14	700		900
30	700				
31	800				
32	900	15	800		
33	1000				
34	1100				
35	1200				
36	600	16	900		760
37	700				
38	800				
39	900	17	1000		
40	1000				
41	1100				
42	1200				

INDICATION:

SE-07-[ ][ ][ ]-[ ][ ]
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

SUPPORT DESCRIPTION:	SHEET
L-TYPE SUPPORT AT STEEL STRUCTURE	4
SE-07	4

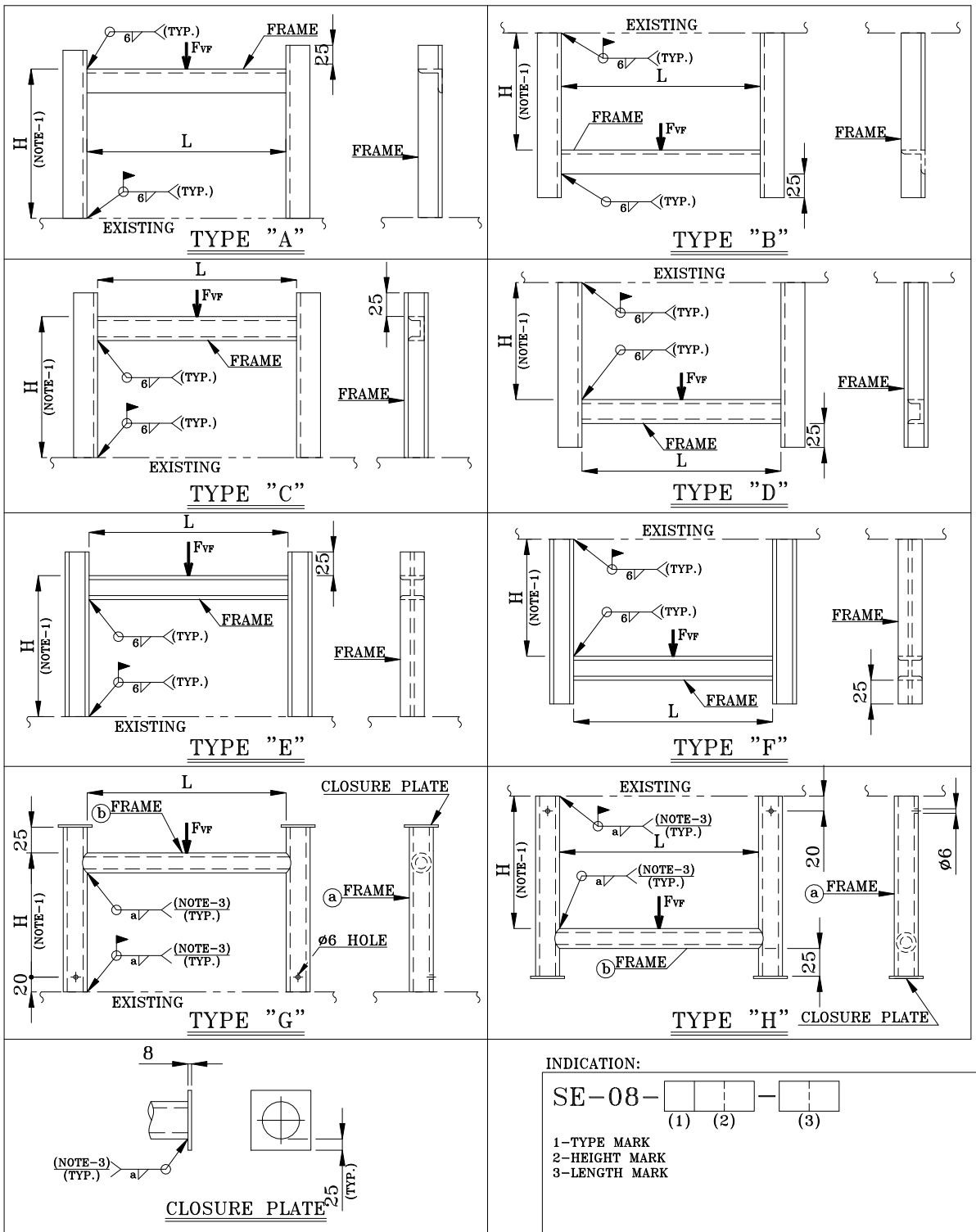
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 209 از 394



INDICATION:

SE-08- □□□ - □□□
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- FOR FRAME SIZE≤4", a=FRAME WALL THICKNESS, FOR FRAME SIZE>4", a=6MM.

MATERIAL:
STANDARD PROFILE: ASTM A36, PIPE: A53 Gr.B, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
U-TYPE SUPPORT AT STEEL STRUCTURE	1
SE-08	6

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (A)&(B)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
01	600	01	300	ANGLE 50x50x5	170
02	700	02	400		
03	800	03	500		
04	900	04	600		
05	1000				
06	1100	05	700		
07	1200	06	800		
08	600	07	900		160
09	700				
11	800				
12	900	08	1000		
13	1000				
14	1100				
15	1200				
16	600	09	1100		140
17	700				
18	800				
19	900	10	1200		
20	1000				
21	1100				
22	1200				
23	600	11	300	ANGLE 70x70x7	470
24	700	12	400		
25	800				
26	900	13	500		
27	1000	14	600		
28	1100				
29	1200	15	700		
30	600	16	800		440
31	700				
32	800				
33	900	17	900		
34	1000				
35	1100				
36	1200				
37	600	18	1000		400
38	700				
39	800				
40	900	19	1100		
41	1000				
42	1100				
43	1200				

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (A)&(B)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
44	600	20	1200	ANGLE 70x70x7	350
45	700				
46	800				
47	900	21	1300		
48	1000				
49	1100				
50	1200				
51	600	22	300	ANGLE 100x100x10	1100
52	700	23	400		
53	800	24	500		
54	900				
55	1000	25	600		
56	1100	26	700		
57	1200	27	800		
58	600	28	900		1000
59	700				
60	800				
61	900	29	1000		
62	1000				
63	1100				
64	1200				
65	600	30	1100		1000
66	700				
67	800				
68	900	31	1200		
69	1000				
70	1100				
71	1200				
72	600	32	1300		900
73	700				
74	800				
75	900	33	1400		
76	1000				
77	1100				
78	1200				

INDICATION:

SE-08- [ ][ ][ ] - [ ][ ]
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

SUPPORT DESCRIPTION:	SHEET
U-TYPE SUPPORT AT STEEL STRUCTURE	2
SE-08	6

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 211 از 394

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (C)&(D)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
01	600	01	300	CHANNEL 100	800
02	700				
03	800	02	400		
04	900				
05	1000	03	500		
06	1100	04	600		
07	1200				
08	600	05	700		730
09	700				
10	800				
11	900	06	800		
12	1000				
13	1100				
14	1200				
15	600	07	900		
16	700				
17	800				
18	900	08	1000		
19	1000				
20	1100				
21	1200				
22	600	09	1100		700
23	700				
24	800				
25	900	10	1200		
26	1000				
27	1100				
28	1200				
29	600	11	300	CHANNEL 140	1400
30	700	12	400		
31	800				
32	900	13	500		
33	1000	14	600		
34	1100				
35	1200	15	700		
36	600	16	800		1300
37	700				
38	800				
39	900	17	900		
40	1000				
41	1100				
42	1200				
43	600	18	1000		
44	700				
45	800				
46	900	19	1100		
47	1000				
48	1100				
49	1200				

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (C)&(D)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
50	600	20	1200	CHANNEL 140	1200
51	700				
52	800				
53	900	21	1300		
54	1000				
55	1100				
56	1200				
57	600	22	300	CHANNEL 160	1700
58	700	23	400		
59	800	24	500		
60	900				
61	1000	25	600		
62	1100	26	700		
63	1200	27	800		
64	600	28	900		1500
65	700				
66	800				
67	900	29	1000		
68	1000				
69	1100				
70	1200				
71	600	30	1100		
72	700				
73	800				
74	900	31	1200		
75	1000				
76	1100				
77	1200				
78	600	32	1300		1400
79	700				
80	800				
81	900	33	1400		
82	1000				
83	1100				
84	1200				

INDICATION:

SE-08-[ ][ ][ ]-[ ][ ]
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

SUPPORT DESCRIPTION:	SHEET
U-TYPE SUPPORT AT STEEL STRUCTURE	3
SE-08	6

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (E)&(F)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
01	700	01	400	HEB100	1300
02	800				
03	900	02	500		
04	1000	03	600		
05	1100				
06	1200	04	700		
07	1300				
08	1400	05	800		
09	1500	06	900		
10	700	07	1000		1200
11	800				
12	900	08	1100		
13	1000				
14	1100	09	1200		
15	1200				
16	1300	10	1300		
17	1400	11	1400		
18	1500				
19	700	12	400	HEB140	2400
20	800	13	500		
21	900	14	600		
22	1000	15	700		
23	1100	16	800		
24	1200	17	900		
25	1300	18	1000		
26	1400	19	1100		
27	1500	20	1200		
28	700	21	1300		2300
29	800				
30	900				
31	1000	22	1400		
32	1100				
33	1200				
34	1300	23	1500		
35	1400				
36	1500				

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (E)&(F)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
37	700	24	1600	HEB140	2200
38	800				
39	900	25	1700		
40	1000				
41	1100	26	1800		
42	1200				
43	1300	27	1900		
44	1400	28	2000		
45	1500				
46	700	29	400	HEB200	4600
47	800	30	500		
48	900				
49	1000	31	600		
50	1100	32	700		
51	1200	33	800		
52	1300	34	900		
53	1400				
54	1500	35	1000		

INDICATION:

SE-08-□□□-□□□

(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

SUPPORT DESCRIPTION:	SHEET
U-TYPE SUPPORT AT STEEL STRUCTURE	4
SE-08	6

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (E)&(F)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
55	700	36	1100	HEB200	4500
56	800				
57	900	37	1200		
58	1000				
59	1100	38	1300		
60	1200				
61	1300	39	1400		
62	1400	40	1500		
63	1500				
64	700	41	1600		4400
65	800				
66	900	42	1700		
67	1000				
68	1100	43	1800		
69	1200				
70	1300	44	1900		
71	1400	45	2000		
72	1500				
73	700	46	2100		3900
74	800				
75	900	47	2200		
76	1000				
77	1100	48	2300		
78	1200				
79	1300	49	2400		
80	1400	50	2500		
81	1500				

INDICATION:

SE-08-□□□-□□

(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

SUPPORT DESCRIPTION:	SHEET
U-TYPE SUPPORT AT STEEL STRUCTURE	5
SE-08	6

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 214 از 394

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (G)&(H)

HEIGHT MARK	H	LENGTH MARK	L	FRAME a	FRAME b	A	ALLOWABLE LOAD (kg) Fvf
01	600	01	400	PIPE 3", STD	PIPE 2", STD	140	580
02	700						
03	800	02	500				
04	900						
05	1000	03	600				
06	1100	04	700				
07	1200						
08	600	05	800				500
09	700						
10	800						
11	900	06	900				
12	1000						
13	1100						
14	1200						
15	600	07	1000				440
16	700						
17	800						
18	900	08	1100				
19	1000						
20	1100						
21	1200						
22	600	09	1200				390
23	700						
24	800						
25	900	10	1300				
26	1000						
27	1100						
28	1200						
29	600	11	400	PIPE 4", STD	PIPE 3", STD	170	1500
30	700	12	500				
31	800	13	600				
32	900						
33	1000	14	700				
34	1100	15	800				
35	1200	16	900				
36	600	17	1000				1300
37	700						
38	800						
39	900	18	1100				
40	1000						
41	1100						
42	1200						
43	600	19	1200				1100
44	700						
45	800						
46	900	20	1300				
47	1000						
48	1100						
49	1200						

HEIGHT & LENGTH MARK: (2)&(3)-TYPE (G)&(H)

HEIGHT MARK	H	LENGTH MARK	L	FRAME a	FRAME b	A	ALLOWABLE LOAD (kg) Fvf
50	600	21	1400	PIPE 4", STD	PIPE 3", STD	1100	1000
51	700						
52	800						
53	900	22	1500				
54	1000						
55	1100						
56	1200						
57	600	23	400	PIPE 8", STD	PIPE 6", STD	270	4700
58	700	34	500				
59	800	25	600				
60	900	26	700				
61	1000	27	800				
62	1100	28	900				
63	1200	29	1000				
64	600	30	1100				4100
65	700	31	1200				
66	800						
67	900	32	1300				
78	1000						
89	1100						
70	1200						
71	600	33	1400				3600
72	700						
73	800						
74	900	34	1500				
75	1000						
76	1100						
77	1200						
78	600	35	1600				3200
79	700						
80	800						
81	900	36	1700				
82	1000						
83	1100						
84	1200						

INDICATION:

SE-08- [ ] [ ] - [ ] [ ]

(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

SUPPORT DESCRIPTION:	SHEET
U-TYPE SUPPORT AT STEEL STRUCTURE	6
SE-08	6

NISOC

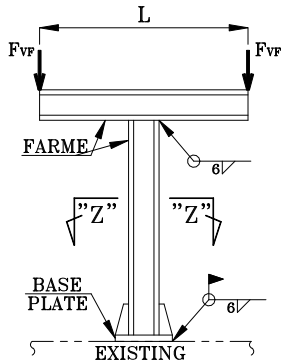
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

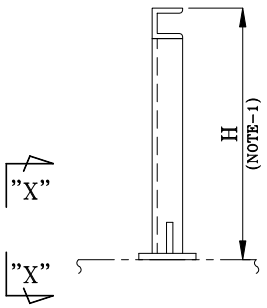
PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

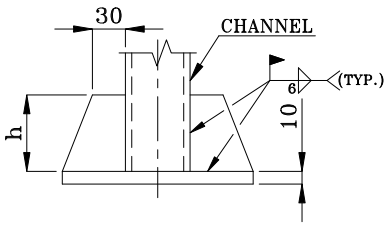
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

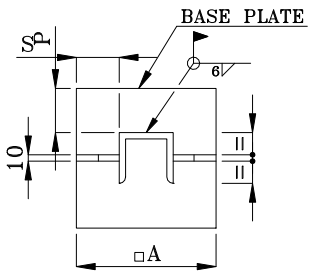




TYPE "A"
CHANNEL



VIEW "X"~"X"



VIEW "Z"~"Z"

HEIGHT MARK:(3)

MARK	H
01	400
02	500
03	600
04	700
05	800
06	900
07	1000
08	1100
09	1200
10	1300
11	1400
12	1500
13	1600
14	1700
15	1800
16	1900
17	2000
18	2100
19	2200
20	2300
21	2400
22	2500
23	2600
24	2700
25	2800
26	2900
27	3000
28	3100
29	3200
30	3300
31	3400
32	3500
33	3600
34	3700
35	3800
36	3900
37	4000

LENGTH MARK:(4)

MARK	L
01	400
02	500
03	600
04	700
05	800
06	900
07	1000
08	1100
09	1200
10	1300
11	1400
12	1500
13	1600
14	1700
15	1800

SIZE MARK:(2) - TYPE (A)

MARK	FRAME	A	S	P	h	ALLOW.LOAD(kg)-FVF (NOTE-3)			ALLOW.LOAD(kg)-FVF (NOTE-4)		
						H≤1200	1200<H≤2500	2500<H≤4000	L≤600	600<L≤1200	1200<L≤1800
1	U100	220	60	85	80	130	60	40	90	40	30
2	U120	240	60	90	80	170	80	50	110	50	30
3	U140	300	80	120	80	200	100	60	140	70	40
4	U160	320	80	130	100	290	140	85	180	90	60
5	U180	340	80	135	100	360	175	110	200	100	60
6	U200	400	100	160	100	430	215	135	240	120	80

INDICATION:

SE-09-□□-□□□□
(1) (2) (3) (4)

1-TYPE MARK
2-SIZE MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- ALLOWABLE LOAD HAS BEEN CALCULATED BASED ON HORIZONTAL FORCES IN ONE DIRECTION.

4- ALLOWABLE LOAD HAS BEEN CALCULATED BASED ON VICE VERSA HORIZONTAL FORCES.

MATERIAL:
STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
T-TYPE SUPPORT AT STEEL STRUCTURE (CHANNEL)	1
SE-09	3

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

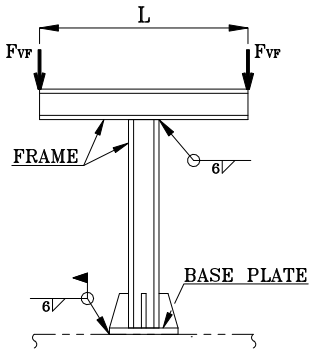
HIRGAN ENERGY

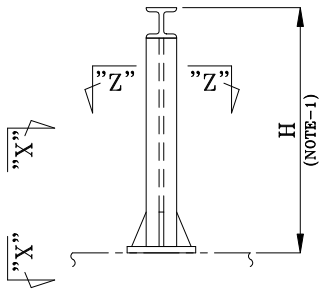
شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

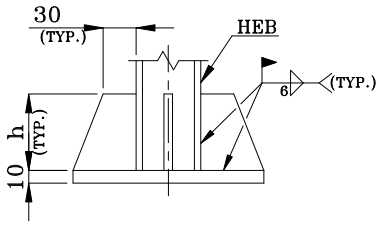
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



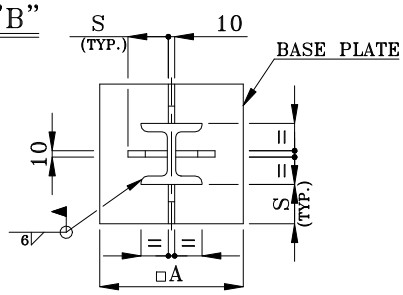


TYPE "B"

HEB



VIEW "X"~"X"



VIEW "Z"~"Z"

HEIGHT MARK:(3)

MARK	H
01	400
02	500
03	600
04	700
05	800
06	900
07	1000
08	1100
09	1200
10	1300
11	1400
12	1500
13	1600
14	1700
15	1800
16	1900
17	2000
18	2100
19	2200
20	2300
21	2400
22	2500
23	2600
24	2700
25	2800
26	2900
27	3000
28	3100
29	3200
30	3300
31	3400
32	3500
33	3600
34	3700
35	3800
36	3900
37	4000

SIZE MARK:(2) - TYPE (B)

MARK	FRAME	A	S	h	ALLOW.LOAD(kg)-FVF (NOTE-3)			ALLOW.LOAD(kg)-FVF (NOTE-4)		
					H≤1200	1200<H≤2500	2500<H≤4000	L≤600	600<L≤1200	1200<L≤1800
1	HEB100	220	60	80	380	180	120	195	95	65
2	HEB120	240	60	80	600	300	180	250	125	80
3	HEB140	300	80	80	890	440	280	310	155	100
4	HEB160	320	80	100	1250	620	390	380	190	130
5	HEB180	340	80	100	1700	840	530	450	220	150
6	HEB200	400	100	100	2200	1100	700	520	270	180

MARK:(4)

MARK	L
01	400
02	500
03	600
04	700
05	800
06	900
07	1000
08	1100
09	1200
10	1300
11	1400
12	1500
13	1600
14	1700
15	1800

INDICATION:

SE-09-□□-□□□

(1) (2) (3) (4)

1-TYPE MARK
2-SIZE MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- ALLOWABLE LOAD HAS BEEN CALCULATED BASED ON HORIZONTAL FORCES IN ONE DIRECTION.

4- ALLOWABLE LOAD HAS BEEN CALCULATED BASED ON VICE VERSA HORIZONTAL FORCES.

MATERIAL:

STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
T-TYPE SUPPORT AT STEEL STRUCTURE (HEB)	2
SE-09	3

NISOC

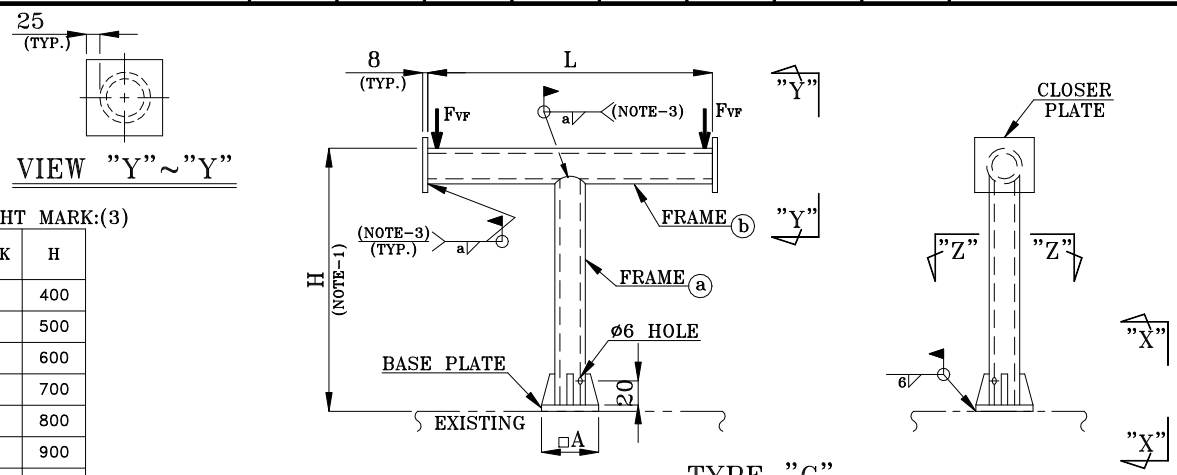
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

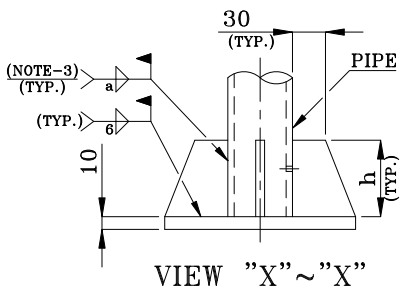
PEDCO
HIRGAN ENERGY

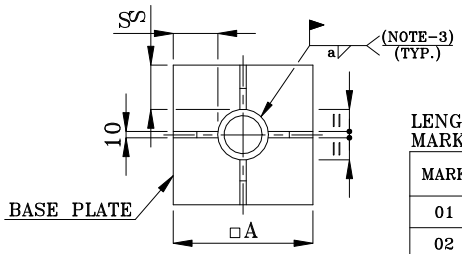
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02







HEIGHT MARK:(3)

MARK	H
01	400
02	500
03	600
04	700
05	800
06	900
07	1000
08	1100
09	1200
10	1300
11	1400
12	1500
13	1600
14	1700
15	1800
16	1900
17	2000
18	2100
19	2200
20	2300
21	2400
22	2500
23	2600
24	2700
25	2800
26	2900
27	3000
28	3100
29	3200
30	3300
31	3400
32	3500
33	3600
34	3700
35	3800
36	3900
37	4000

LENGTH MARK:(4)

MARK	L
01	400
02	500
03	600
04	700
05	800
06	900
07	1000
08	1100
09	1200
10	1300
11	1400
12	1500
13	1600
14	1700
15	1800

SIZE MARK:(2)

MARK	FRAME (a)	FRAME (b)	A	S	h	ALLOW.LOAD(kg)-FVF		
						H≤1200	1200<H≤2500	2500<H≤4000
1	PIPE 2", STD	PIPE 3", STD	180	60	80	90	50	30
2	PIPE 3", STD	PIPE 4", STD	250	80	100	290	140	90
3	PIPE 4", STD	PIPE 6", STD	275	80	100	540	270	170
4	PIPE 6", STD	PIPE 8", STD	330	80	100	1300	690	440
5	PIPE 8", STD	PIPE 10", STD	420	100	100	2600	1300	850

INDICATION:

SE-09-□□-□□□□
(1) (2) (3) (4)

1-TYPE MARK
2-SIZE MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- DIMENSIONS "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- FOR FRAME SIZE ≤4", a=FRAME WALL THICKNESS, FOR FRAME SIZE >4", a=6mm.

MATERIAL:
STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C, PIPE: A53 Gr.B

SUPPORT DESCRIPTION:
T-TYPE SUPPORT
AT STEEL STRUCTURE
(PIPE)

SE-09

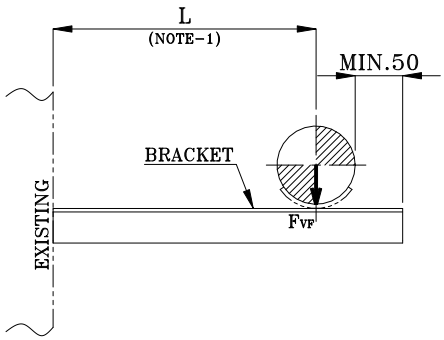
SHEET
3
3

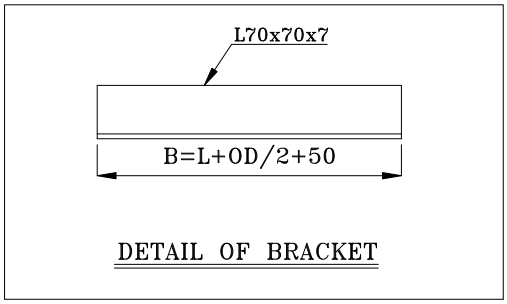
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

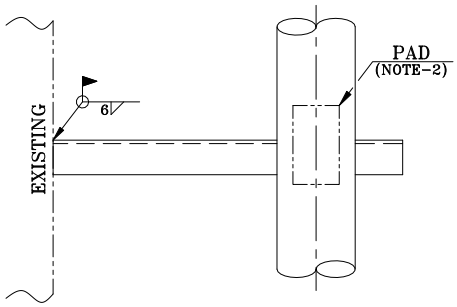
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02







TYPE "A"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg)-F_{VF}
01	300	150
02	400	
03	500	85
04	600	
05	700	
06	800	60
07	900	
08	1000	

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE
0A	1/2"
0B	3/4"
01	1"
1A	1+1/2"
02	2"

INDICATION:

SE-10-□□□-□□□
(1) (2) (3)

1-TYPE MARK
2-NPS MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR PAD (SC-05).

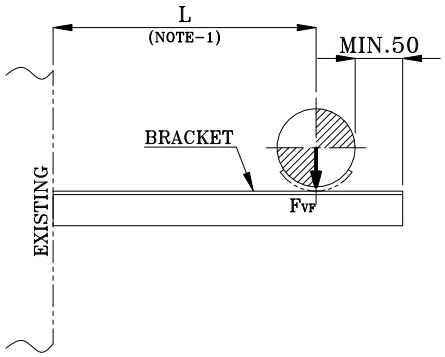
MATERIAL:

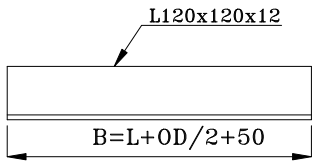
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE HORIZONTAL RUN PIPE (TYPE "A")	1
SE-10	6

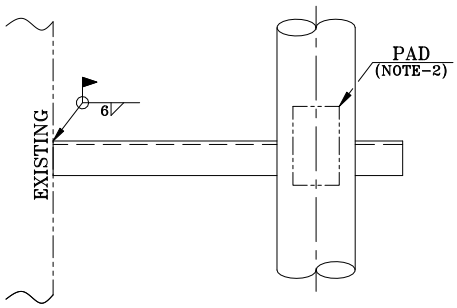
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 219 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	





DETAIL OF BRACKET



TYPE "B"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg)-F_{VF}
01	300	350
02	400	
03	500	200
04	600	
05	700	
06	800	140
07	900	
08	1000	

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE
0A	1/2"
0B	3/4"
01	1"
1A	1+1/2"
02	2"
03	3"
04	4"

INDICATION:

SE-10-□□□-□□□

(1) (2) (3)

1-TYPE MARK
2-NPS MARK
3-LENGTH MARK

NOTE:

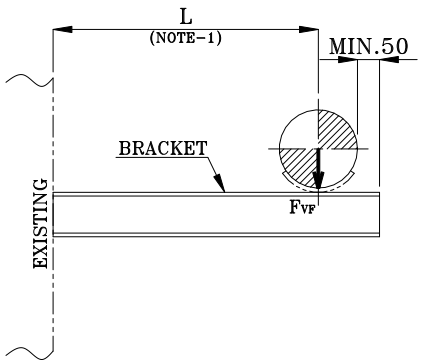
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

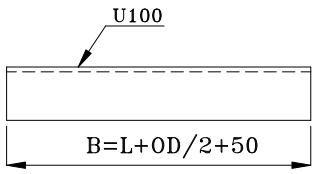
2- SEPARATED TAG IS REQUIRED FOR PAD (SC-05).

MATERIAL:

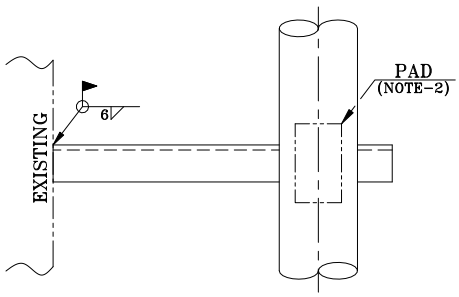
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE HORIZONTAL RUN PIPE (TYPE "B")	2
SE-10	6





DETAIL OF BRACKET



TYPE "C"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg)-F_{VF}
01	300	270
02	400	
03	500	
04	600	
05	700	180
06	800	
07	900	
08	1000	130
09	1100	
10	1200	
11	1300	100
12	1400	
13	1500	

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE
0A	1/2"
0B	3/4"
01	1"
1A	1+1/2"
02	2"
03	3"
04	4"
06	6"

INDICATION:

SE-10- [ ][ ][ ] - [ ][ ]
(1) (2) (3)

1-TYPE MARK
2-NPS MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR PAD (SC-05).

MATERIAL:

STANDARD PROFILE: ASTM A36

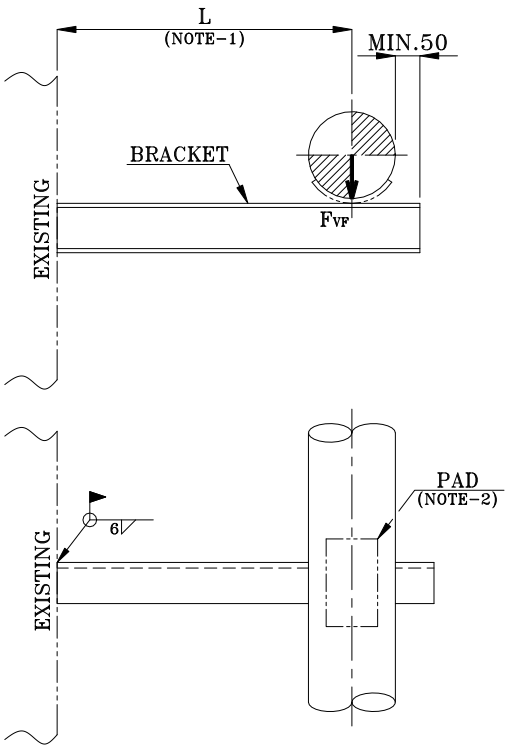
SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE HORIZONTAL RUN PIPE (TYPE "C")	3
SE-10	6

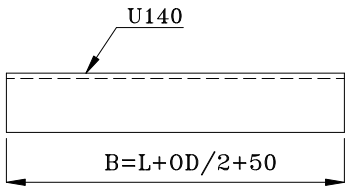
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02





DETAIL OF BRACKET

TYPE "D"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg)-F_{VF}
01	300	500
02	400	
03	500	
04	600	
05	700	340
06	800	
07	900	
08	1000	250
09	1100	
10	1200	
11	1300	200
12	1400	
13	1500	

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE
0A	1/2"
0B	3/4"
01	1"
1A	1+1/2"
02	2"
03	3"
04	4"
06	6"

INDICATION:

SE-10-[ ][ ][ ]-[ ][ ]
(1) (2) (3)

1-TYPE MARK
2-NPS MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR PAD (SC-05).

MATERIAL:

STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE HORIZONTAL RUN PIPE (TYPE "D")	4
SE-10	6

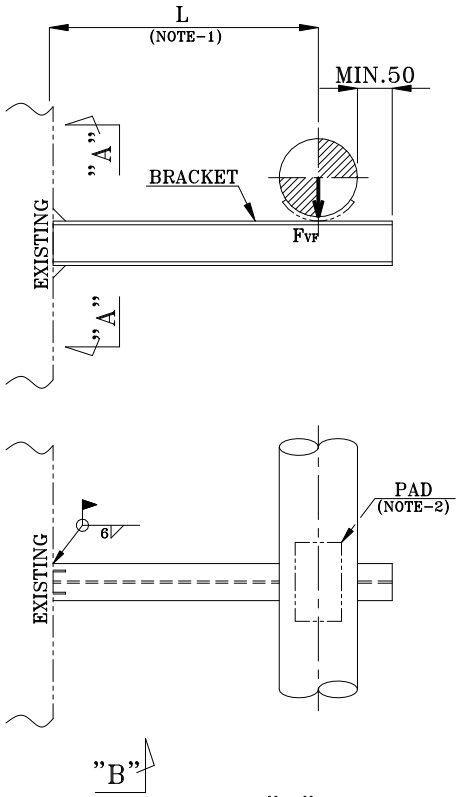
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

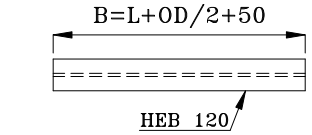
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

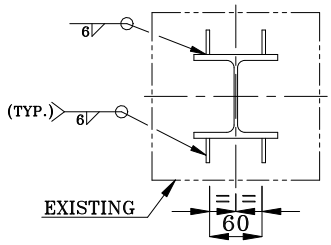
شماره صفحه: 222 از 394



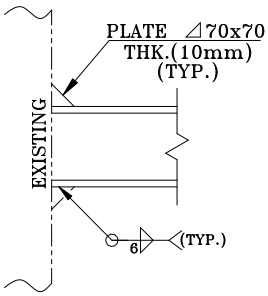
TYPE "E"



DETAIL OF BRACKET



VIEW "A"~"A"



VIEW "B"~"B"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg)-F_{VF}
01	300	1000
02	400	
03	500	
04	600	720
05	700	
06	800	
07	900	560
08	1000	
09	1100	
10	1200	460
11	1300	
12	1400	
13	1500	390
14	1600	
15	1700	
16	1800	330
17	1900	
18	2000	

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE
0A	1/2"
0B	3/4"
01	1"
1A	1+1/2"
02	2"
03	3"
04	4"
06	6"
08	8"
10	10"

INDICATION:

SE-10-[ ][ ][ ]-[ ][ ]
(1) (2) (3)

1-TYPE MARK
2-NPS MARK
3-LENGTH MARK

NOTE:

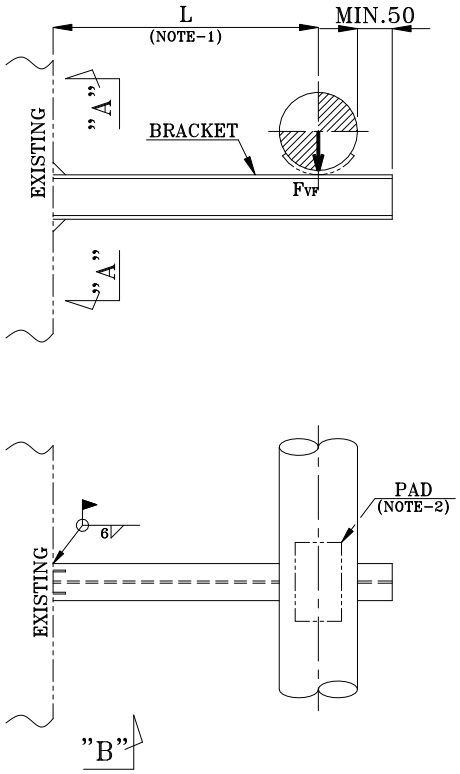
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR PAD (SC-05).

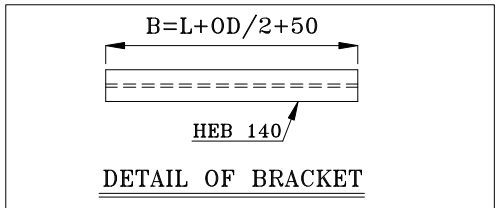
MATERIAL:

STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

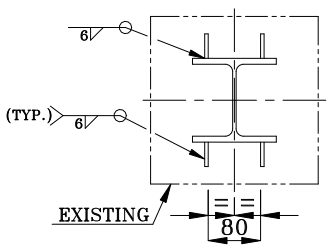
SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE HORIZONTAL RUN PIPE (TYPE "E")	5
SE-10	6



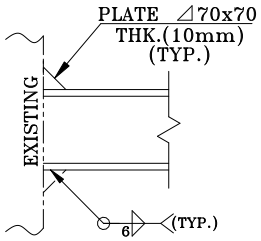
TYPE "F"



DETAIL OF BRACKET



VIEW "A"~"A"



VIEW "B"~"B"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg)-FVF
01	300	1500
02	400	
03	500	
04	600	1050
05	700	
06	800	
07	900	830
08	1000	
09	1100	
10	1200	680
11	1300	
12	1400	
13	1500	580
14	1600	
15	1700	
16	1800	500
17	1900	
18	2000	

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE
0A	1/2"
0B	3/4"
01	1"
1A	1+1/2"
02	2"
03	3"
04	4"
06	6"
08	8"
10	10"
12	12"
14	14"

INDICATION:

SE-10-□□□-□□ (1) (2) (3)

1-TYPE MARK
2-NPS MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR PAD (SC-05).

MATERIAL:

STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE HORIZONTAL RUN PIPE (TYPE "F")	6
SE-10	6

NISOC

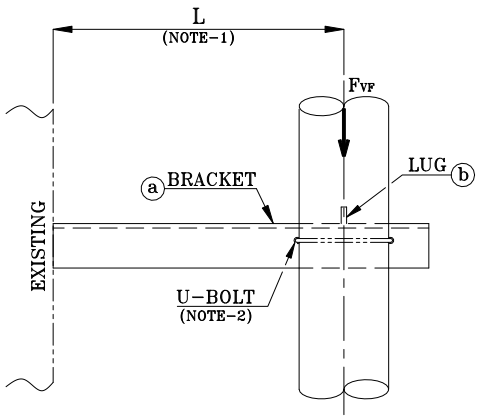
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

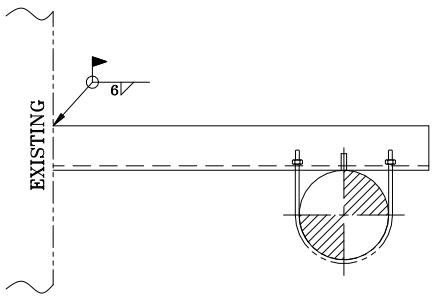
PEDCO
HIRGAN ENERGY

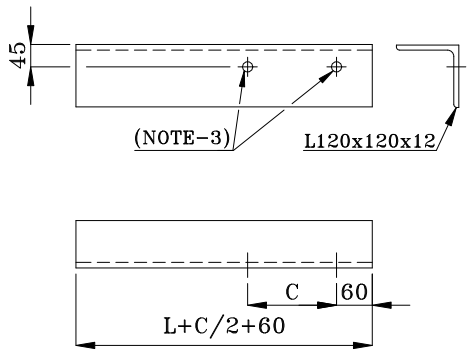
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

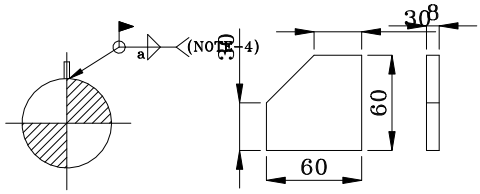
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02







DETAIL OF BRACKET



DETAIL OF LUG

LENGTH MARK:(3)

MARK	L
1	200
2	300
3	400
4	500
5	600
6	700
7	800

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	C
0A	1/2"	34
0B	3/4"	40
01	1"	48
1A	1+1/2"	66
02	2"	78

ALLOW. LOAD(kg)-F_{VF}

SIZE \ LENGTH	L≤600	600<L≤800
1/2"	230	
3/4"~2"	420	310

MATERIAL MARK:(1)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C — MARK	A	B	C
ⓐ	ASTM A36	ASTM A36	ASTM A36
ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
ⓒ	A325	A325	A325
ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SE-11-[ ][ ][ ]-[ ]
(1) (2) (3)

1-MATERIAL MARK
2-NPS MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- SEPARATED TAG IS REQUIRED FOR U-BOLT (SA-01).
3- U-BOLT HOLES AND THEIR LOCATION SHALL BE SPECIFIED BASED ON U-BOLT DETAIL (SA-01).
4- a=RUN PIPE WALL THICKNESS.
5- ALLOWABLE LOAD OF U-BOLT SHALL BE CHECKED SEPARATELY.

SUPPORT DESCRIPTION:
BRACKET ON STRUCTURE
U-BOLT TYPE
SEMI ANCHOR
1/2" ~ 2"
SE-11

SHEET 1 / 1

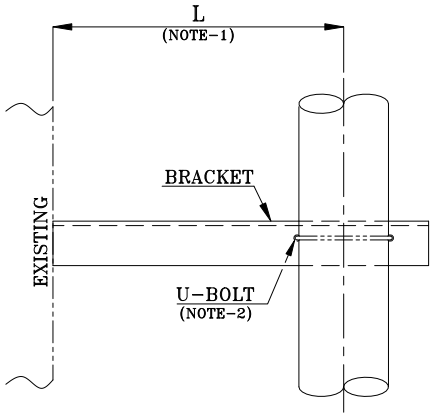
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

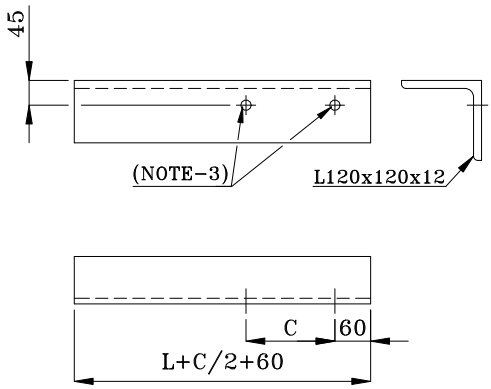
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

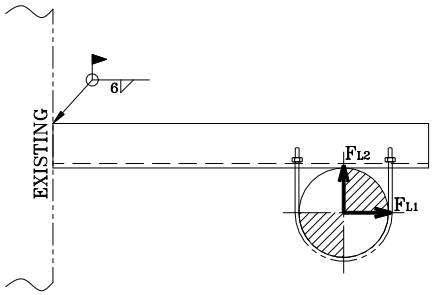
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 225 از 394





DETAIL OF BRACKET



ALLOW. LOAD(kg)-FL_2

SIZE \ LENGTH	200<L≤400	400<L≤600	600<L≤800
1/2"	200		
3/4"~1"	500	490	
1/2"~2"	700	490	

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE	C	ALLOW. LOAD(kg)-FL_1
0A	1/2"	34	70
0B	3/4"	40	130
01	1"	48	
1A	1+1/2"	66	270
02	2"	78	

LENGTH MARK:(2)

MARK	L
1	200
2	300
3	400
4	500
5	600
6	700
7	800

INDICATION:

SE-12-[ ][ ][ ]
(1) (2)

1-NPS MARK
2-LENGTH MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR U-BOLT (SA-01).

3- U-BOLT HOLES AND THEIR LOCATION SHALL BE SPECIFIED BASED ON U-BOLT DETAIL (SA-01).

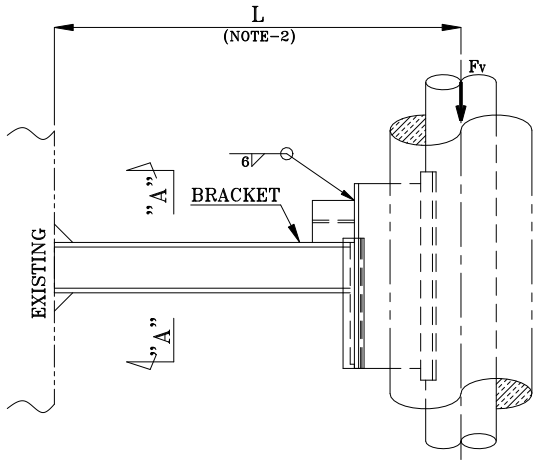
4- ALLOWABLE LOAD OF U-BOLT SHALL BE CHECKED SEPARATELY.

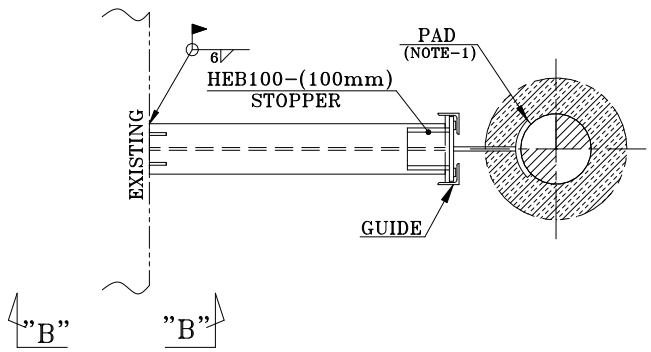
MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE U-BOLT TYPE DOUBLE GUIDE 1/2" ~ 2"	1
SE-12	1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 226 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	





INDICATION:

SE-13-□□-□-□
(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-HEIGHT MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHELL BE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT.

2- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

3- "H" INDICATES SHOE HEIGHT.

MATERIAL:

STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE SHOE TYPE SEMI ANCHOR 2" ~ 6"	1
SE-13	2

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

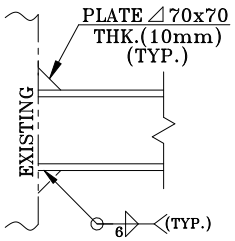
HIRGAN ENERGY

شماره پیمان:

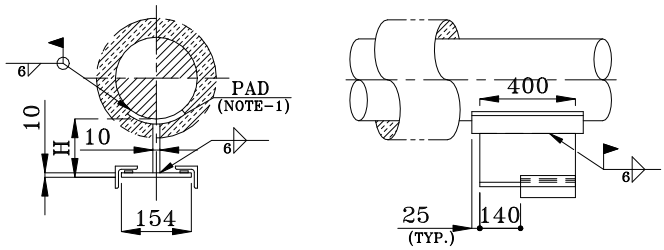
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

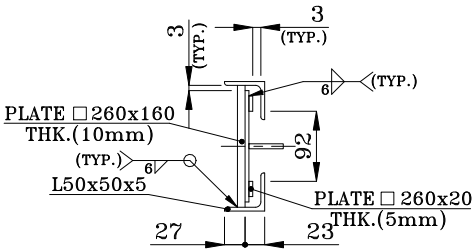
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

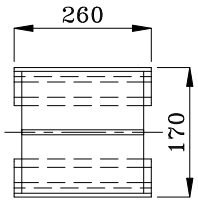


VIEW "B"~"B"

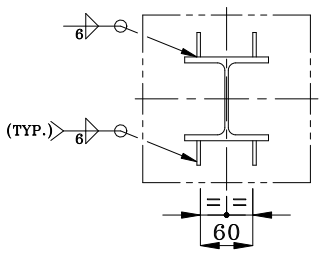


DETAIL OF PIPE SHOE

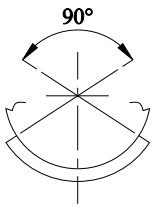




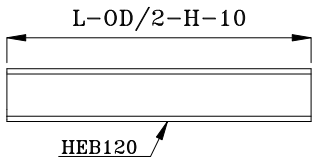
DETAIL OF GUIDE



VIEW "A"~"A"



DETAIL OF PAD



DETAIL OF BRACKET

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg)-Fv
1	500	700
2	600	
3	700	
4	800	
5	900	550
6	1000	
7	1100	

HEIGHT MARK:(3)

MARK	H	INSULATION THK.
1	100	UP TO 75mm
2	150	76mm TO 125mm
3	200	126mm TO 175mm
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED		

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
02	2"
03	3"
04	4"
06	6"

INDICATION:

SE-13-□□-□-□

(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-HEIGHT MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHELL BE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT.

2- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

3- "H" INDICATES SHOE HEIGHT.

MATERIAL:

STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:
BRACKET ON STRUCTURE
SHOE TYPE
SEMI ANCHOR
2" ~ 6"

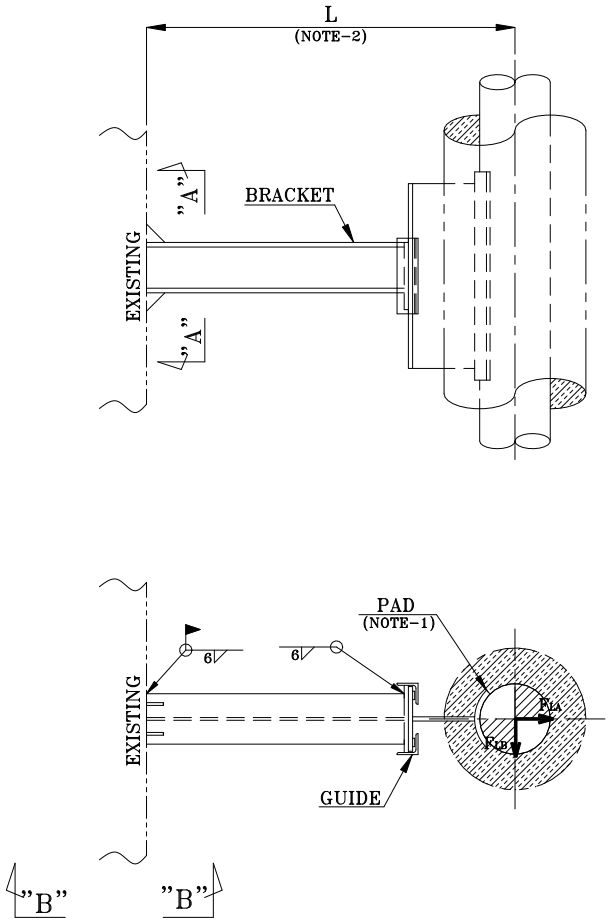
SE-13

SHEET 2 / 2

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 228 از 394



INDICATION:

SE-14-□□-□-□

(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-HEIGHT MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHELL BE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT.

2- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

3- "H" INDICATES SHOE HEIGHT.

MATERIAL:

STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE SHOE TYPE DOUBLE GUIDE 2" ~ 6"	1
SE-14	2

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

HIRGAN ENERGY

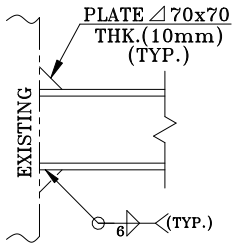
شماره پیمان:

053-073-9184

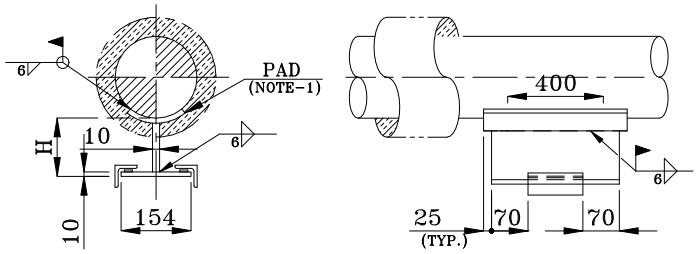
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

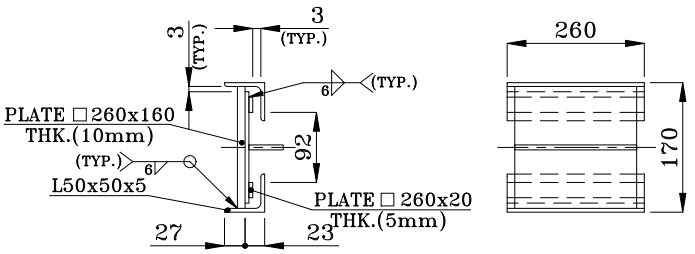
شماره صفحه: 229 از 394



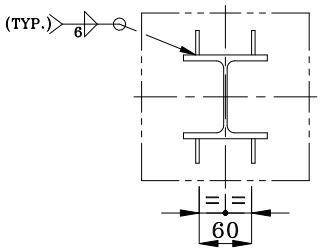
VIEW "B"~"B"



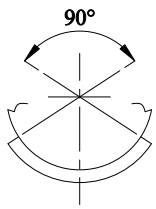
DETAIL OF PIPE SHOE



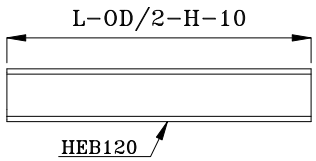
DETAIL OF GUIDE



VIEW "A"~"A"



DETAIL OF PAD



DETAIL OF BRACKET

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg) F_{LA}	ALLOW. LOAD(kg) F_{LB}
1	500	400	500
2	600		
3	700		
4	800		
5	900		
6	1000		
7	1100		

HEIGHT MARK:(3)

MARK	H	INSULATION THK.
1	100	UP TO 75mm
2	150	76mm TO 125mm
3	200	126mm TO 175mm
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED		

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
02	2"
03	3"
04	4"
06	6"

INDICATION:

SE-14-□□-□-□

(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-HEIGHT MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHELL BE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT.

2- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

3- "H" INDICATES SHOE HEIGHT.

MATERIAL:

STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:
BRACKET ON STRUCTURE
SHOE TYPE
DOUBLE GUIDE
2" ~ 6"

SE-14

SHEET 2 2

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

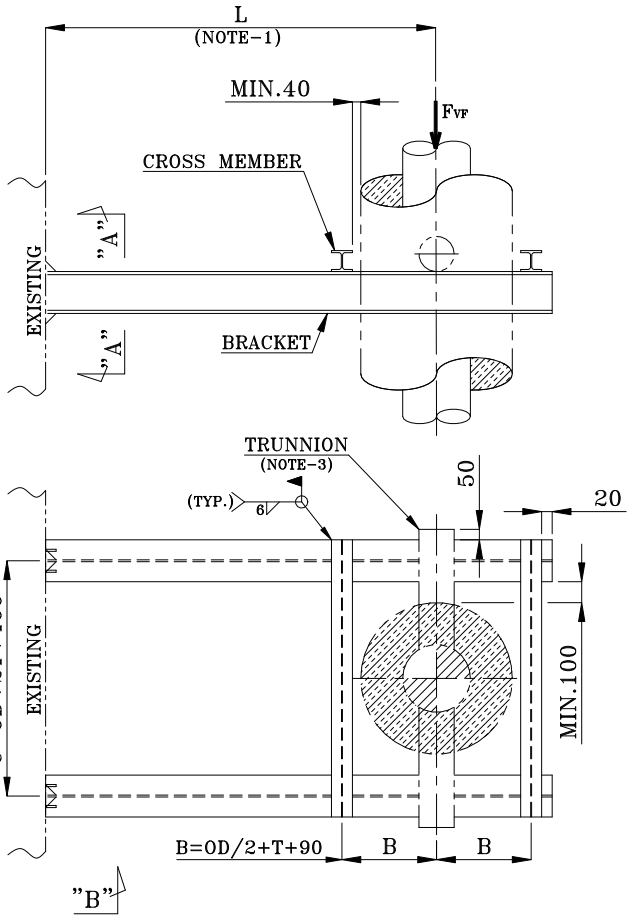
PEDCO
HIRGAN ENERGY

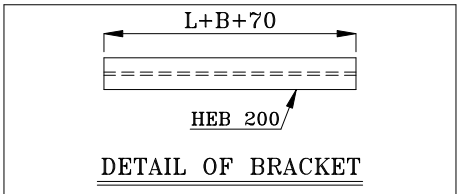
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

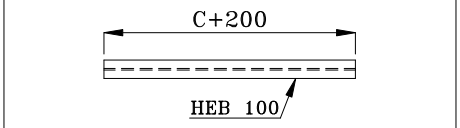
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 230 از 394

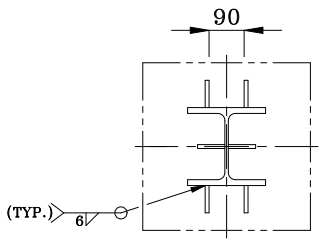




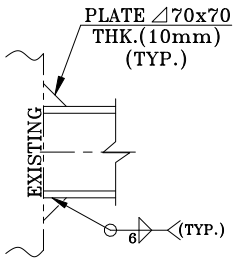
DETAIL OF BRACKET



DETAIL OF CROSS MEMBER



VIEW "A"~"A"



VIEW "B"~"B"

LENGTH
MARK:(2)

MARK	L	ALLOW. LOAD(kg) Fvf
01	600	5500
02	700	
03	800	
04	900	4300
05	1000	
06	1100	
07	1200	3400
08	1300	
09	1400	
10	1500	2800
11	1600	
12	1700	
13	1800	2300
14	1900	
15	2000	

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
08	8"
10	10"
12	12"

INSULATION THK. MARK:(3)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

INDICATION:

SE-15-[ ][ ][ ]-[ ]
(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

3- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION SHALL BE CHECKED SEPARATELY.

MATERIAL:

STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.B

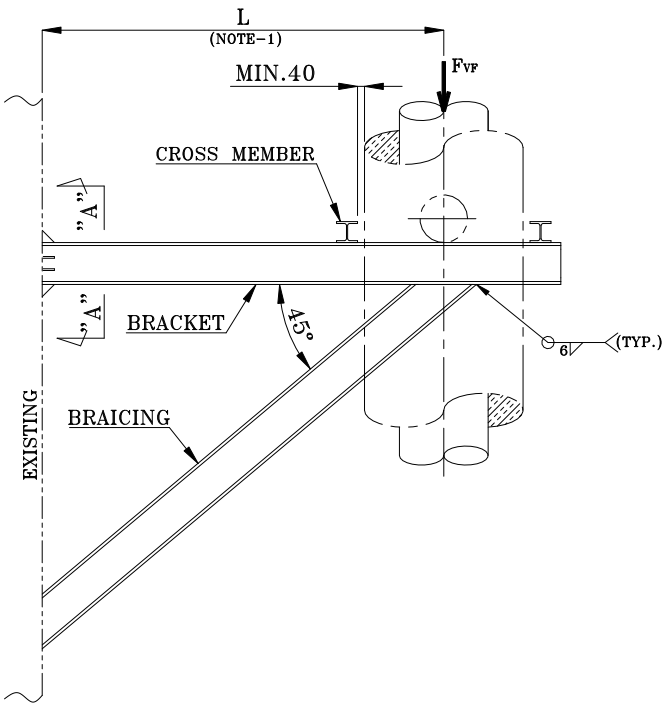
SUPPORT DESCRIPTION:
BRACKET ON STRUCTURE REST
8" ~ 12"

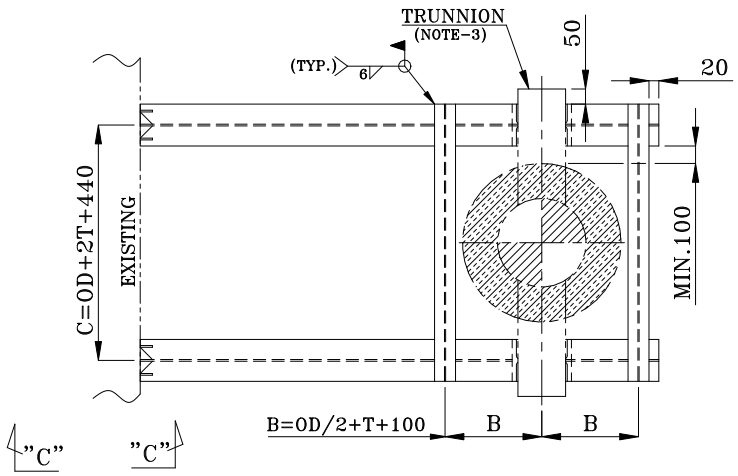
SE-15

SHEET
1
7

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 231 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	





INDICATION:

SE-15- [ ][ ][ ] - [ ]
(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

3- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION SHALL BE CHECKED SEPARATELY.

MATERIAL:

STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE REST 14" ~ 24"	2
SE-15	7

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

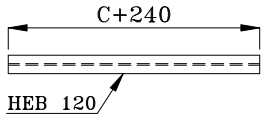
HIRGAN ENERGY

شماره پیمان:

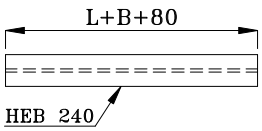
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

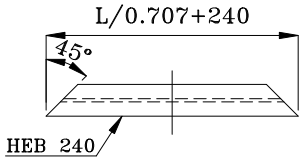
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



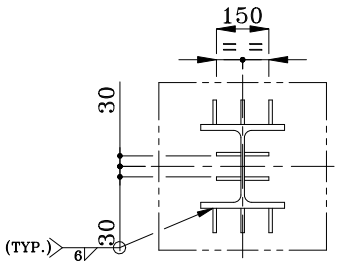
DETAIL OF CROSS MEMBER



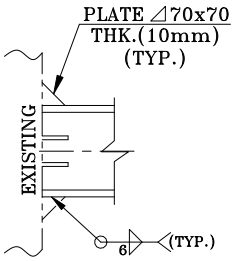
DETAIL OF BRACKET



DETAIL OF BRAICING



VIEW "A"~"A"



VIEW "C"~"C"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg) Fvf
01	800	18800
02	900	13800
03	1000	
04	1100	
05	1200	10000
06	1300	
07	1400	
08	1500	7700
09	1600	
10	1700	
11	1800	5900
12	1900	
13	2000	

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
14	14"
16	16"
18	18"
20	20"
22	22"
24	24"

INSULATION THK. MARK:(3)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

INDICATION:

SE-15-[ ][ ][ ]-[ ]

(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

3- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION SHALL BE CHECKED SEPARATELY.

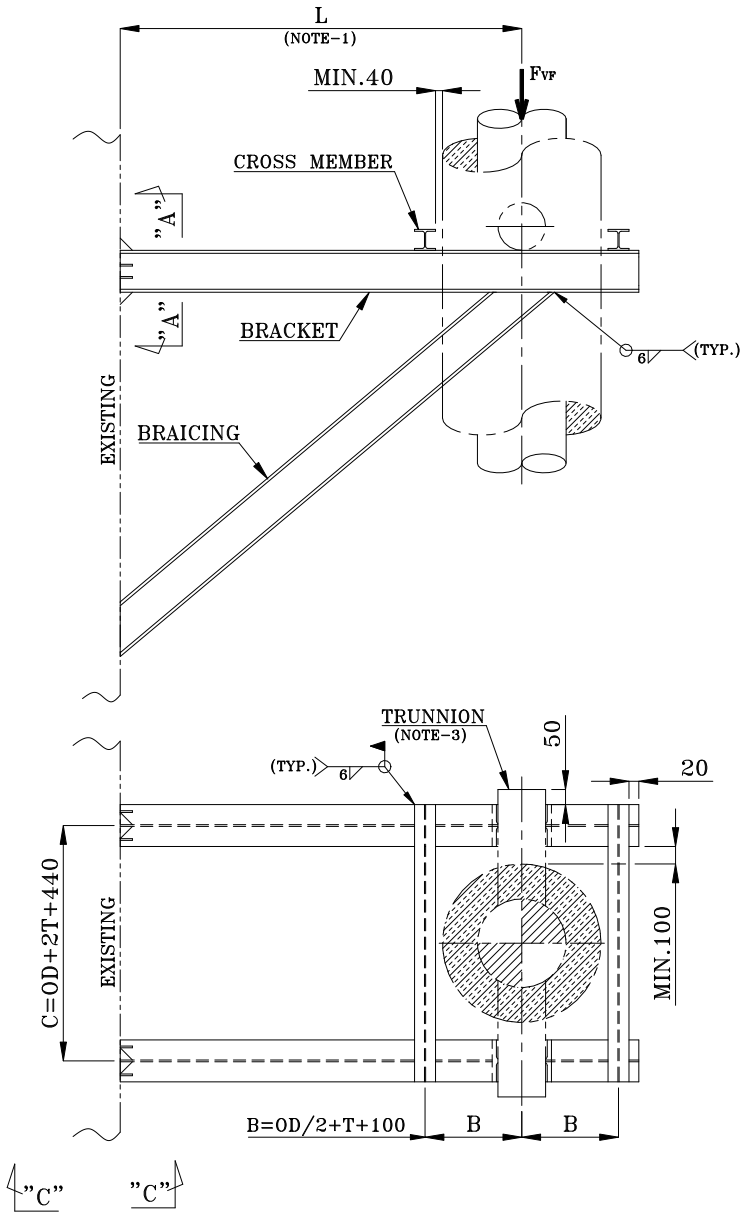
MATERIAL:

STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE REST 14" ~ 24"	3
SE-15	7

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 233 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	



INDICATION:

SE-15- (1) (2) - (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

3- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION SHALL BE CHECKED SEPARATELY.

MATERIAL:

STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE REST 26" ~ 42"	4
SE-15	7

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

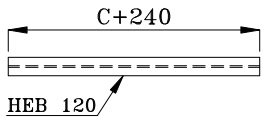
HIRGAN ENERGY

شماره پیمان:

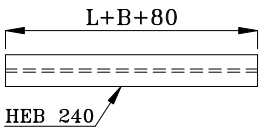
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

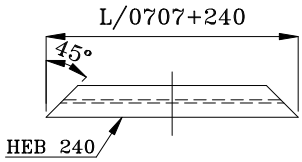
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



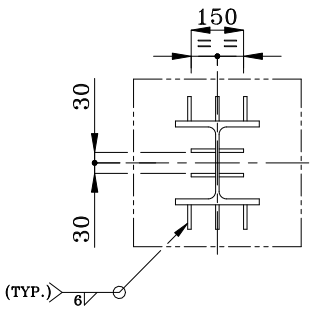
DETAIL OF CROSS MEMBER



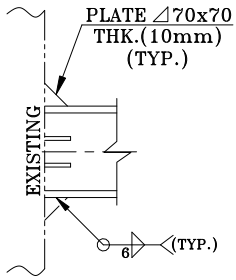
DETAIL OF BRACKET



DETAIL OF BRAICING



VIEW "A"~"A"



VIEW "C"~"C"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg) F_{VF}
01	1000	15500
02	1100	
03	1200	11400
04	1300	
05	1400	
06	1500	8600
07	1600	
08	1700	
09	1800	6600
10	1900	
11	2000	

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
26	26"
28	28"
30	30"
32	32"
34	34"
36	36"
38	38"
40	40"
42	42"

INSULATION THK. MARK:(3)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

INDICATION:

SE-15- □□□-□

(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

3- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION SHALL BE CHECKED SEPARATELY.

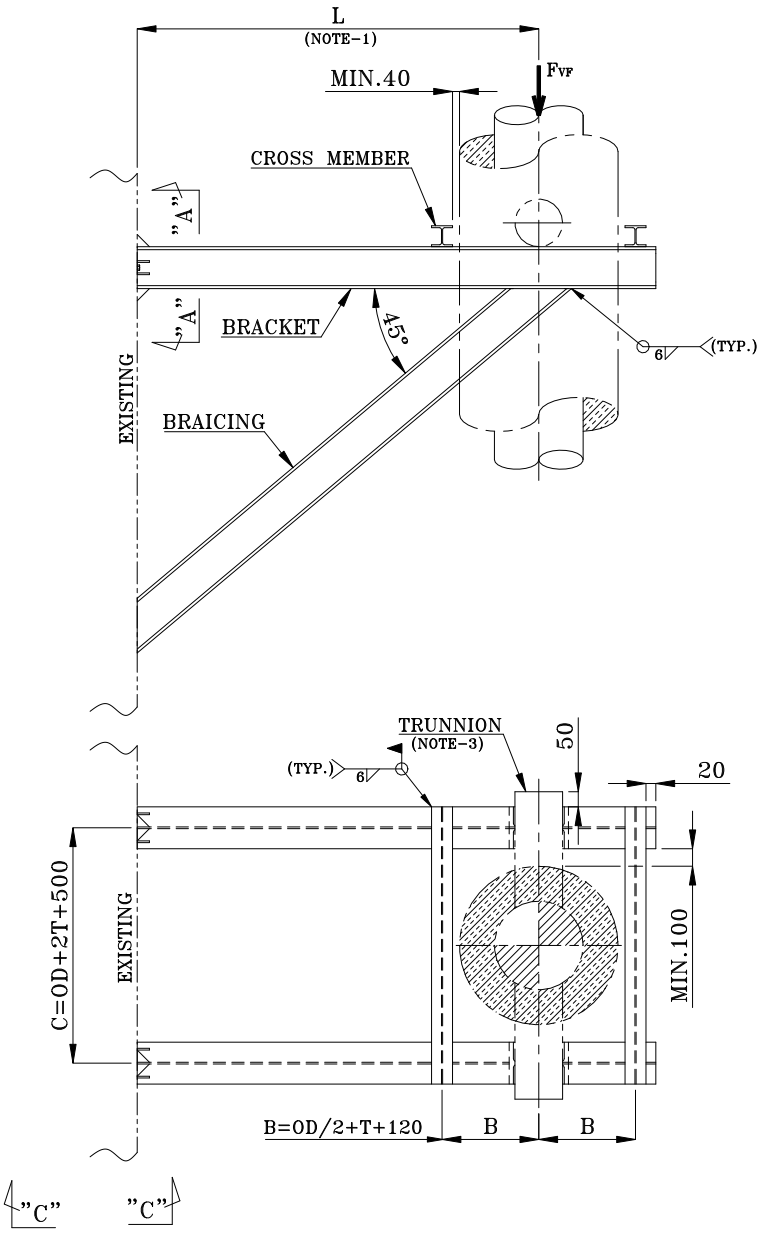
MATERIAL:

STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE REST 26" ~ 42"	5
SE-15	7

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 235 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	



INDICATION:

SE-15-[ ][ ][ ]-[ ]

(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

3- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION SHALL BE CHECKED SEPARATELY.

MATERIAL:

STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE REST 44" ~ 56"	6
SE-15	7

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

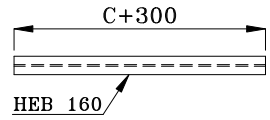
HIRGAN ENERGY

شماره پیمان:

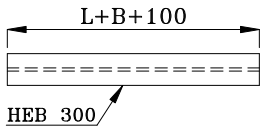
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

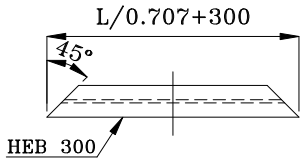
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



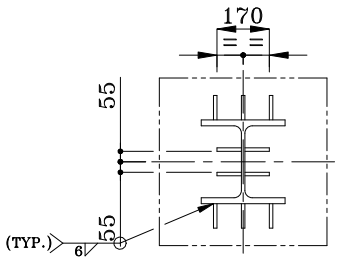
DETAIL OF CROSS MEMBER



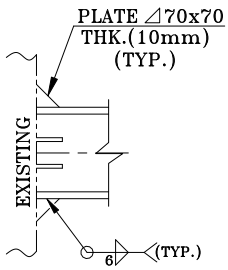
DETAIL OF BRACKET



DETAIL OF BRAICING



VIEW "A"~"A"



VIEW "C"~"C"

INSULATION THK. MARK:(3)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg) Fvf
01	1300	15600
02	1400	
03	1500	14000
04	1600	
05	1700	
06	1800	12500
07	1900	
08	2000	

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
44	44"
46	46"
48	48"
50	50"
52	52"
54	54"
56	56"

INDICATION:

SE-15-[ ][ ][ ]-[ ]

(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

3- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION SHALL BE CHECKED SEPARATELY.

MATERIAL:

STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE REST 44" ~ 56"	7
SE-15	7

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

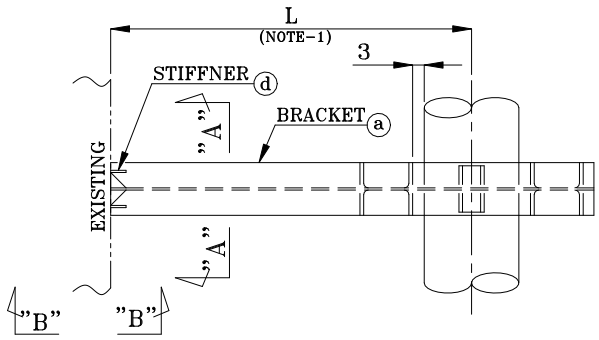
PEDCO
HIRGAN ENERGY

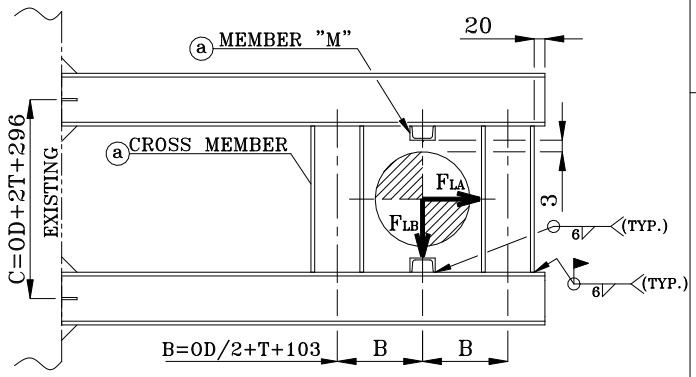
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

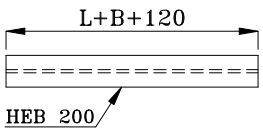
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 237 از 394

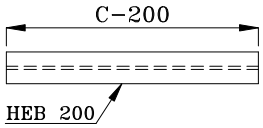




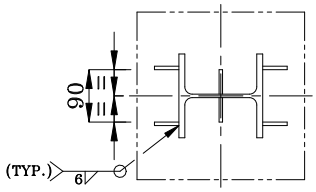
TYPE "A"
CARBON STEEL (BARE)



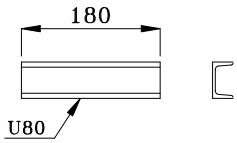
DETAIL OF BRACKET



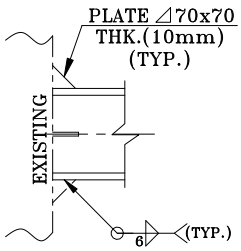
DETAIL OF CROSS MEMBER



VIEW "A"~"A"



DETAIL OF MEMBER "M"



VIEW "B"~"B"

LENGTH MARK:(4)

MARK	L	ALLOW. LOAD(kg) FLA	ALLOW. LOAD(kg) FLB
01	500	30000	6500
02	600		
03	700		
04	800		
05	900		4900
06	1000		
07	1100		
08	1200		3800
09	1300		
10	1400		
11	1500		3000
12	1600		
13	1700		
14	1800		2500
15	1900		
16	2000		

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE
08	8"
10	10"
12	12"

INSULATION THK. MARK:(5)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

MATERIAL MARK:(2)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	C
0°C TO 350°C ⓐ	ASTM A36	ASTM A36	ASTM A36
0°C TO 350°C ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
0°C TO 350°C ⓒ	A325	A325	A325
0°C TO 350°C ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SE-16-□□-□□□-□□□ (1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

SUPPORT DESCRIPTION:
BRACKET ON STRUCTURE
DOUBLE GUIDE
(TYPE A-CS)
8" ~ 12"
SE-16

SHEET 1 / 22

NOTE:
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

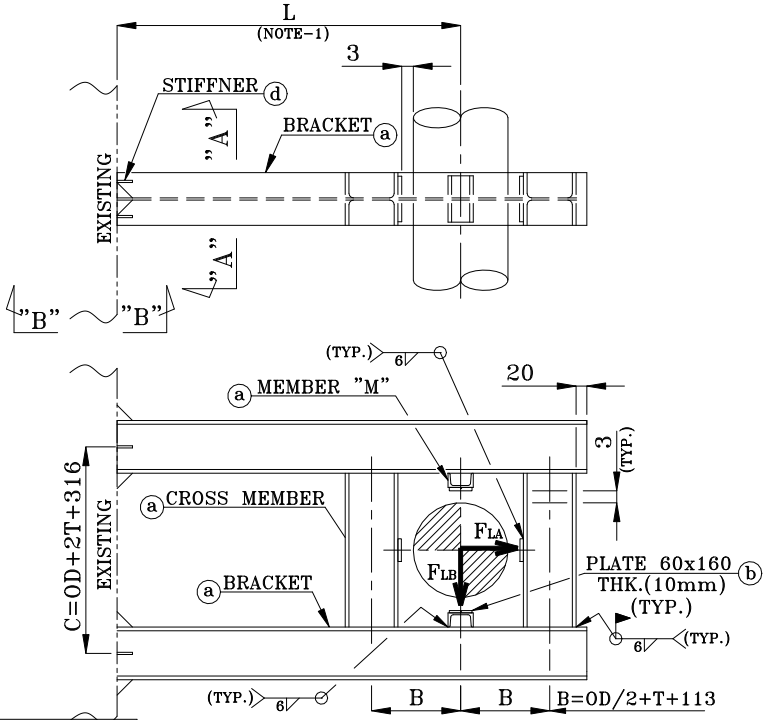
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

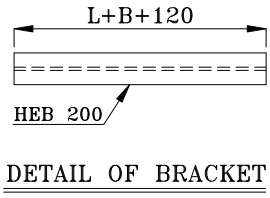
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

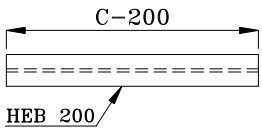
شماره صفحه: 238 از 394



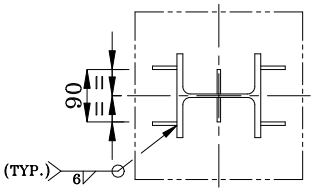
TYPE "B"
ALLOY STEEL OR STAINLESS STEEL (BARE)



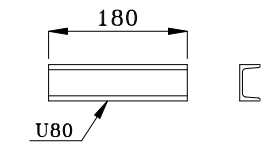
DETAIL OF BRACKET



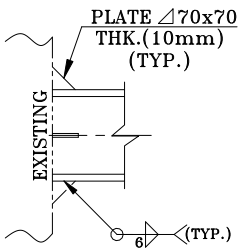
DETAIL OF CROSS MEMBER



VIEW "A"~"A"



DETAIL OF MEMBER "M"



VIEW "B"~"B"

LENGTH MARK:(4)

MARK	L	ALLOW. LOAD(kg) FLA	ALLOW. LOAD(kg) FLB
01	500	30000	6500
02	600		
03	700		
04	800		
05	900		4900
06	1000		
07	1100		
08	1200		3800
09	1300		
10	1400		
11	1500		3000
12	1600		
13	1700		
14	1800		2500
15	1900		
16	2000		

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE
08	8"
10	10"
12	12"

INSULATION THK. MARK:(5)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

MATERIAL MARK:(2)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	B	C
	a	ASTM A36	ASTM A36	ASTM A36
	b	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	c	A325	A325	A325
	d	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

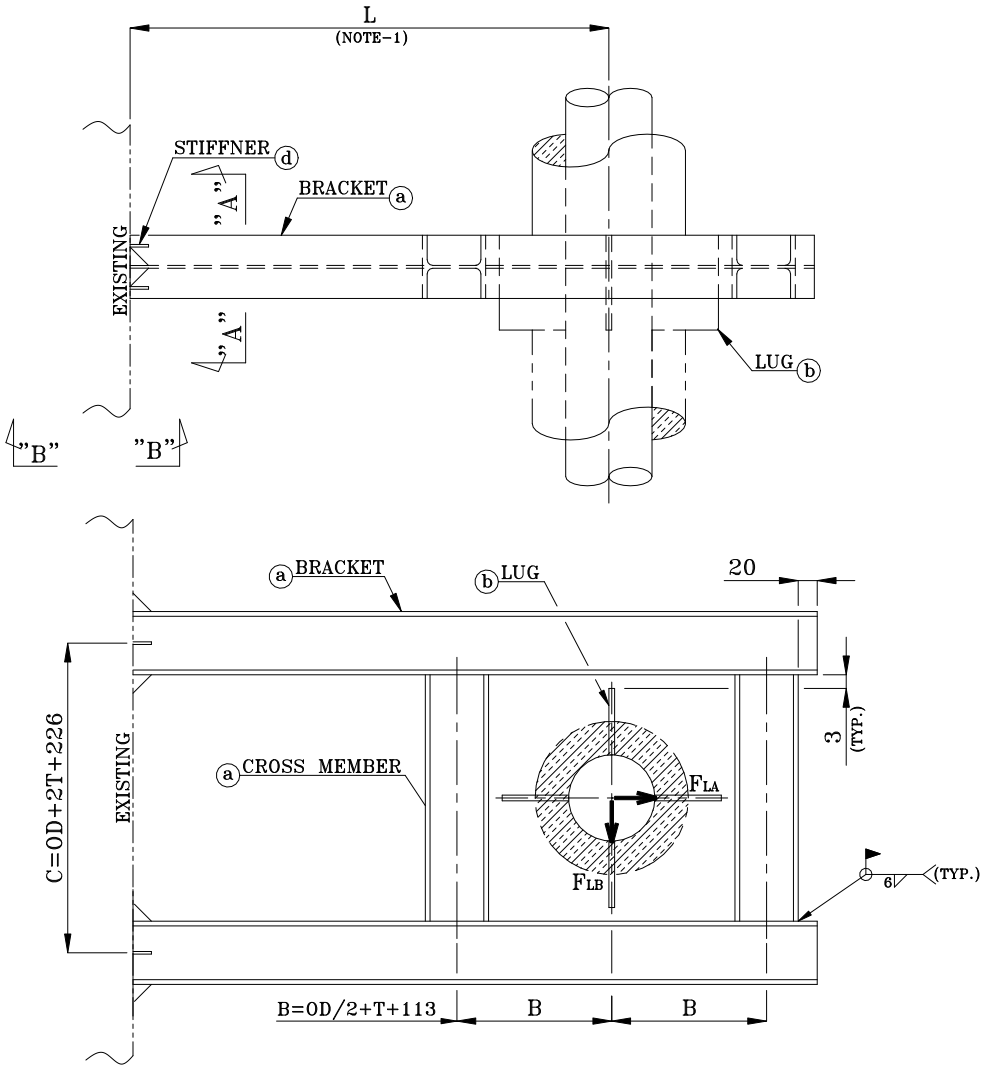
SE-16-□□-□□-□□□
(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

SUPPORT DESCRIPTION:
BRACKET ON STRUCTURE
DOUBLE GUIDE
(TYPE B-AS,SS)
8" ~ 12"
SE-16

SHEET 2 / 22

NOTE:
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.



TYPE "C"
CS, AS, OR SS (INSULATED)

INDICATION:

SE-16- □□ - □□□ - □□□□ (1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE DOUBLE GUIDE (TYPE C-CS,AS,SS) 8" ~ 12"	3
SE-16	22

NOTE:
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

NISOC

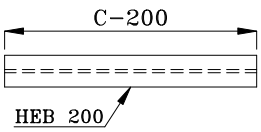
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO
HIRGAN ENERGY

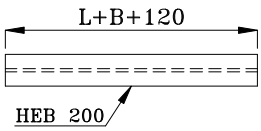
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

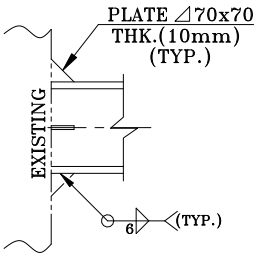
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



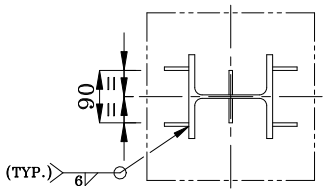
DETAIL OF CROSS MEMBER



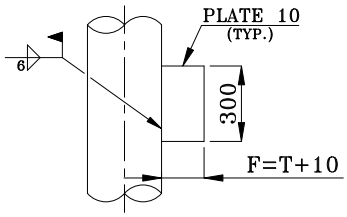
DETAIL OF BRACKET



VIEW "B"~"B"



VIEW "A"~"A"



DETAIL OF LUG

LENGTH MARK:(4)

MARK	L	ALLOW. LOAD(kg) F_{LA}	ALLOW. LOAD(kg) F_{LB}
01	700	30000	6500
02	800		
03	900		4900
04	1000		
05	1100		
06	1200		3800
07	1300		
08	1400		
09	1500		3000
10	1600		
11	1700		
12	1800		2500
13	1900		
14	2000		

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE
08	8"
10	10"
12	12"

TYPE "C"
CS, AS, OR SS (INSULATED)

INSULATION THK. MARK:(5)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

MATERIAL MARK:(2)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
	MARK	A	B	C
0°C TO 350°C	ⓐ	ASTM A36	ASTM A36	ASTM A36
	ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	A325	A325	A325
	ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

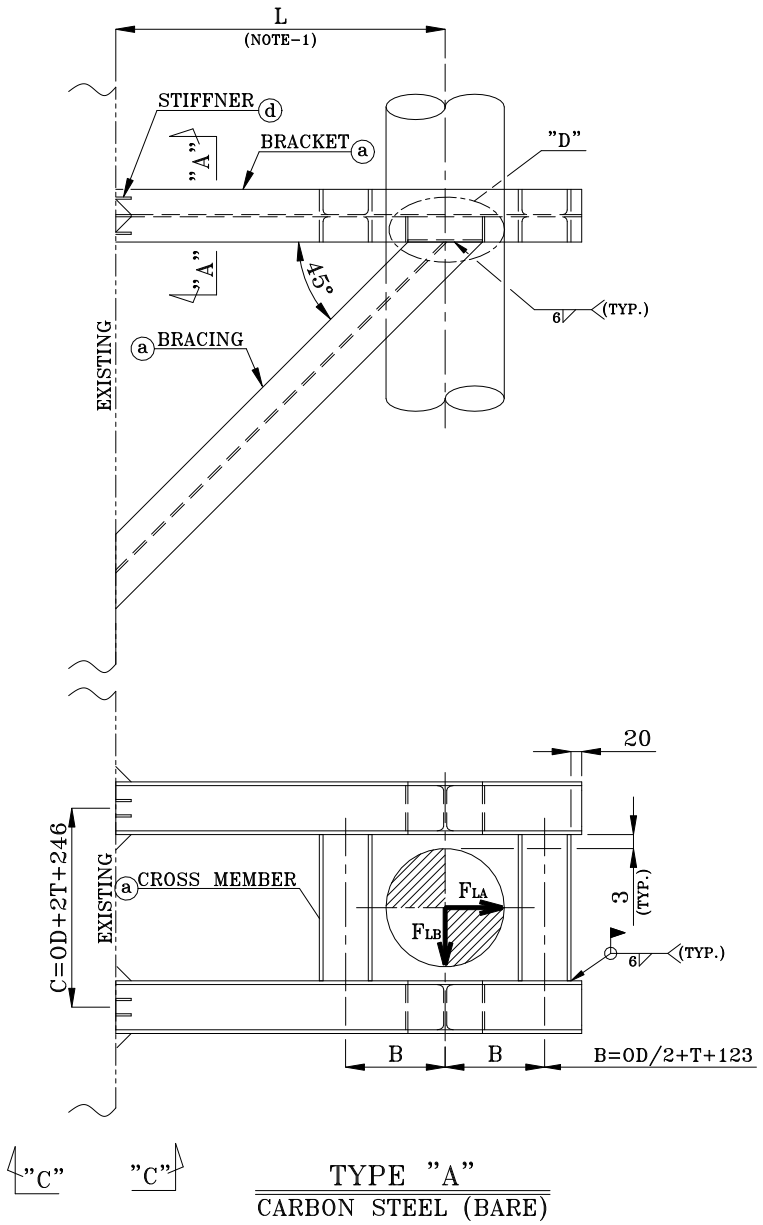
SE-16-□□-□□-□□□
(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

SUPPORT DESCRIPTION:
BRACKET ON STRUCTURE
DOUBLE GUIDE
(TYPE C-CS,AS,SS)
8" ~ 12"
SE-16

SHEET 4 / 22

NOTE:
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.



TYPE "A"
CARBON STEEL (BARE)

INDICATION:

SE-16-□□-□□□-□□□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE DOUBLE GUIDE (TYPE A-CS) 14" ~ 24"	5
SE-16	22

NOTE:
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

HIRGAN ENERGY

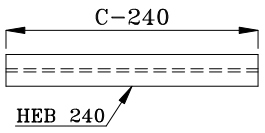
شماره پیمان:

053-073-9184

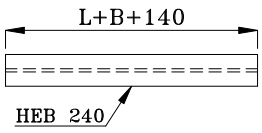
STANDARD PIPE SUPPORT DRAWINGS

شماره صفحه: 242 از 394

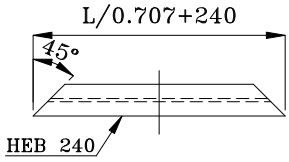
نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK



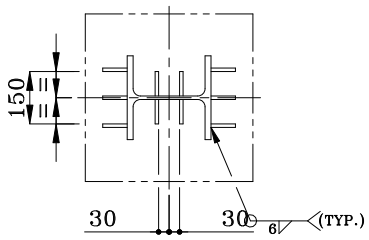
DETAIL OF CROSS MEMBER



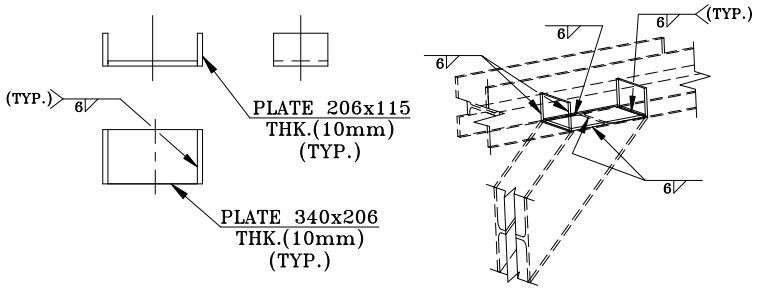
DETAIL OF BRACKET



DETAIL OF BRAICING



VIEW "A"~"A"



DETAIL "D"

LENGTH MARK:(4)

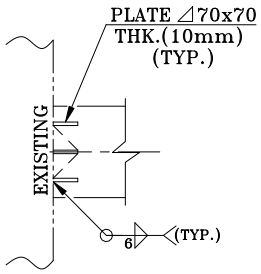
MARK	L	ALLOW. LOAD(kg) F_{LA}	ALLOW. LOAD(kg) F_{LB}
01	700	36000	7800
02	800		
03	900		
04	1000		
05	1100		
06	1200		5900
07	1300		
08	1400		
09	1500		4700
10	1600		
11	1700		
12	1800		3600
13	1900		
14	2000		

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE
14	14"
16	16"
18	18"
20	20"
22	22"
24	24"

TYPE "A"

CARBON STEEL (BARE)



VIEW "C"~"C"

INSULATION THK. MARK:(5)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

MATERIAL MARK:(2)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	C
0°C TO 350°C ⓐ	ASTM A36	ASTM A36	ASTM A36
0°C TO 350°C ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
0°C TO 350°C ⓒ	A325	A325	A325
0°C TO 350°C ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SE-16-□□-□□-□□□

(1) (2) (3) (4) (5)

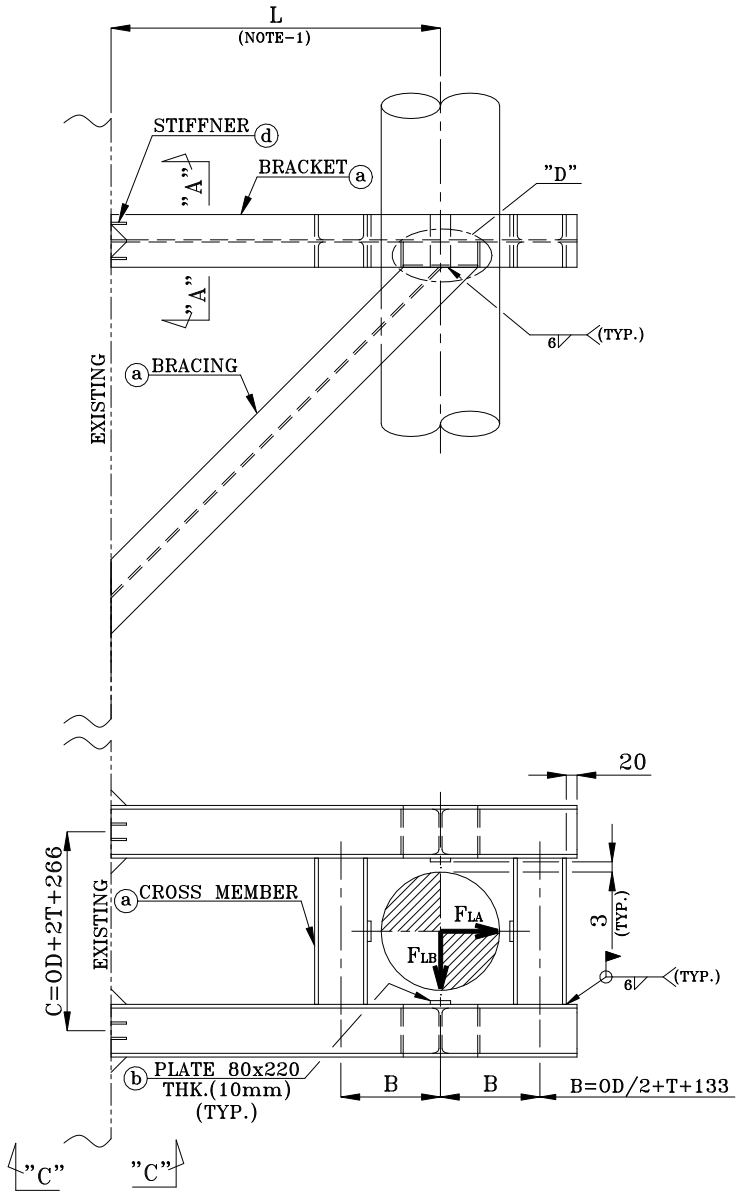
1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

SUPPORT DESCRIPTION:
BRACKET ON STRUCTURE
DOUBLE GUIDE
(TYPE A-CS)
14" ~ 24"
SE-16

SHEET
6
22

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.



TYPE "B"

ALLOY STEEL OR STAINLESS STEEL (BARE)

INDICATION:

SE-16-□□-□□-□□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE DOUBLE GUIDE (TYPE B AS,SS) 14" ~ 24"	7
SE-16	22

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

HIRGAN ENERGY

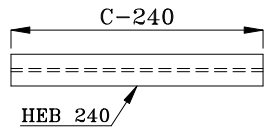
شماره پیمان:

053-073-9184

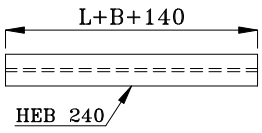
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

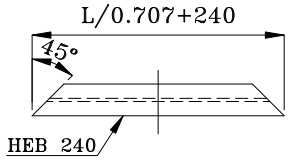
شماره صفحه: 244 از 394



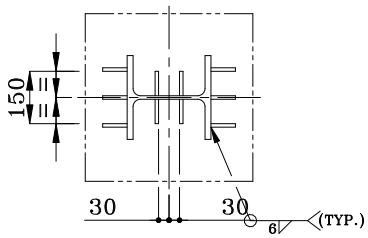
DETAIL OF CROSS MEMBER



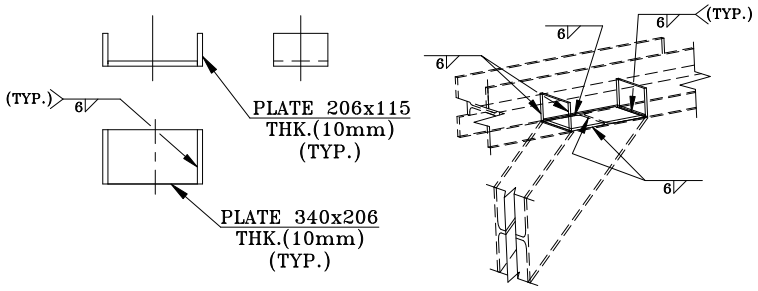
DETAIL OF BRACKET



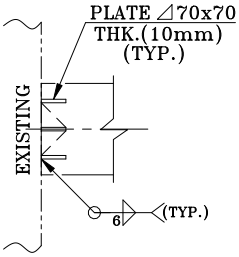
DETAIL OF BRAICING



VIEW "A"~"A"



DETAIL "D"



VIEW "C"~"C"

LENGTH MARK:(4)

MARK	L	ALLOW. LOAD(kg) F_{LA}	ALLOW. LOAD(kg) F_{LB}
01	700	36000	7800
02	800		
03	900		
04	1000		
05	1100		
06	1200		5900
07	1300		
08	1400		
09	1500		4700
10	1600		
11	1700		
12	1800		3600
13	1900		
14	2000		

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE
14	14"
16	16"
18	18"
20	20"
22	22"
24	24"

TYPE "B"

ALLOY STEEL OR STAINLESS STEEL (BARE)

INSULATION THK. MARK:(5)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

MATERIAL MARK:(2)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	B	C
	ⓐ	ASTM A36	ASTM A36	ASTM A36
	ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	A325	A325	A325
	ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SE-16-□□-□□-□□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

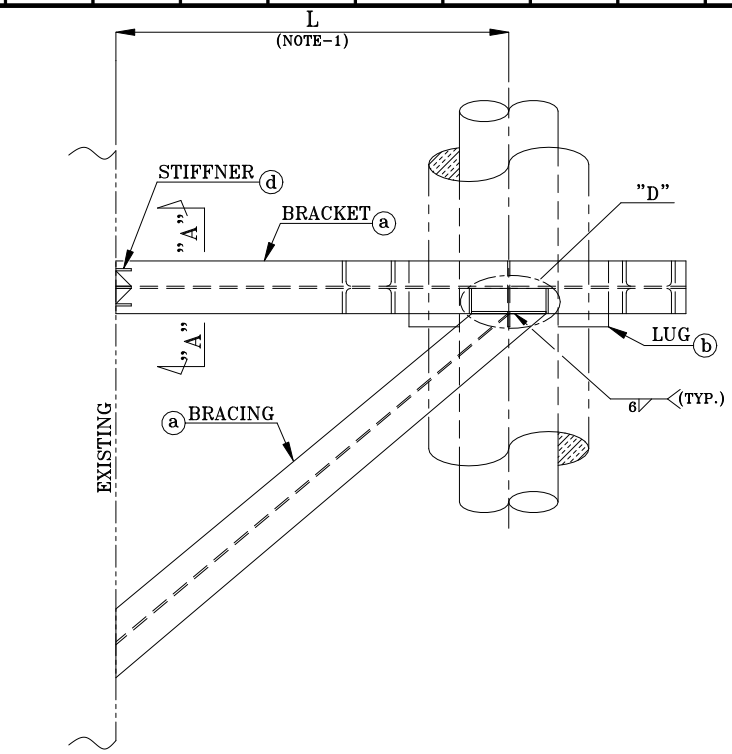
SUPPORT DESCRIPTION:

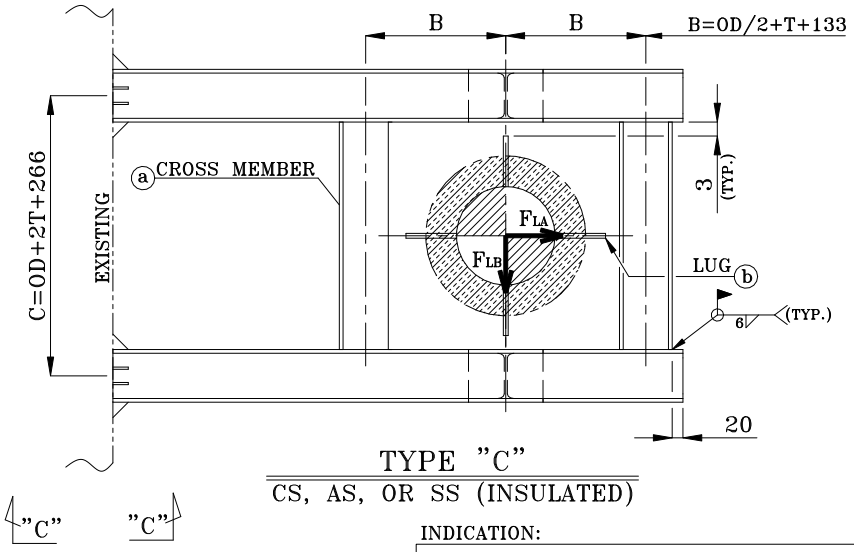
BRACKET ON STRUCTURE
DOUBLE GUIDE
(TYPE C AS,SS)
14" ~ 24"

SE-16

SHEET 8

22





"C" "C"

TYPE "C"
CS, AS, OR SS (INSULATED)

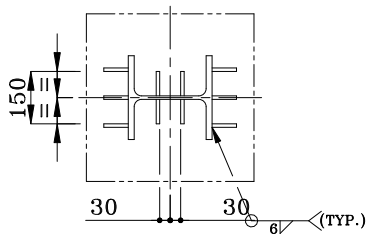
INDICATION:

SE-16- □□ - □□□ - □□□□
(1) (2) (3) (4) (5)

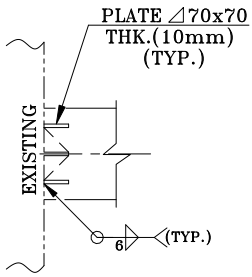
1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE DOUBLE GUIDE (TYPE C CS,AS,SS) 14" ~ 24"	9
SE-16	22

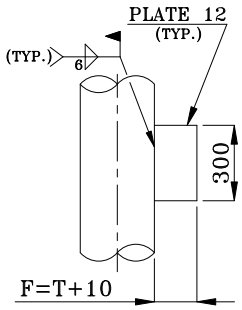
NOTE:
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.



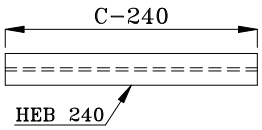
VIEW "A"~"A"



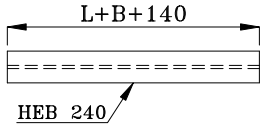
VIEW "C"~"C"



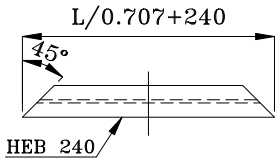
DETAIL OF LUG



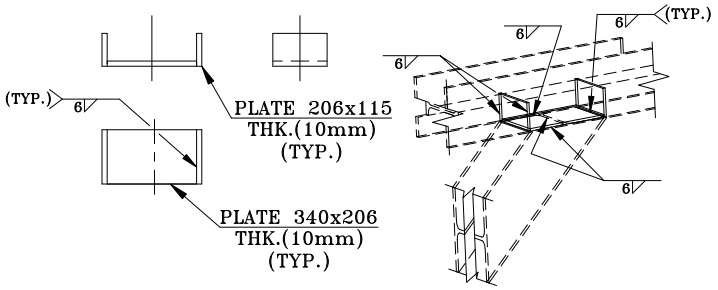
DETAIL OF CROSS MEMBER



DETAIL OF BRACKET



DETAIL OF BRAICING



DETAIL "D"

LENGTH MARK:(4)

MARK	L	ALLOW. LOAD(kg) F_{LA}	ALLOW. LOAD(kg) F_{LB}
01	900	36000	7800
02	1000		
03	1100		
04	1200		5900
05	1300		
06	1400		
07	1500		4700
08	1600		
09	1700		
10	1800		3600
11	1900		
12	2000		

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE
14	14"
16	16"
18	18"
20	20"
22	22"
24	24"

TYPE "C"
CS, AS, OR SS (INSULATED)

INSULATION THK. MARK:(5)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

MATERIAL MARK:(2)

DES. TEMP	MATERIAL OF MEMBER / RUN PIPE	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	B	C
	ⓐ	ASTM A36	ASTM A36	ASTM A36
	ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	A325	A325	A325
	ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SE-16-□□-□□□-□□□ (1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

SUPPORT DESCRIPTION:
BRACKET ON STRUCTURE
DOUBLE GUIDE
(TYPE C CS,AS,SS)
14" ~ 24"
SE-16

SHEET 10 / 22

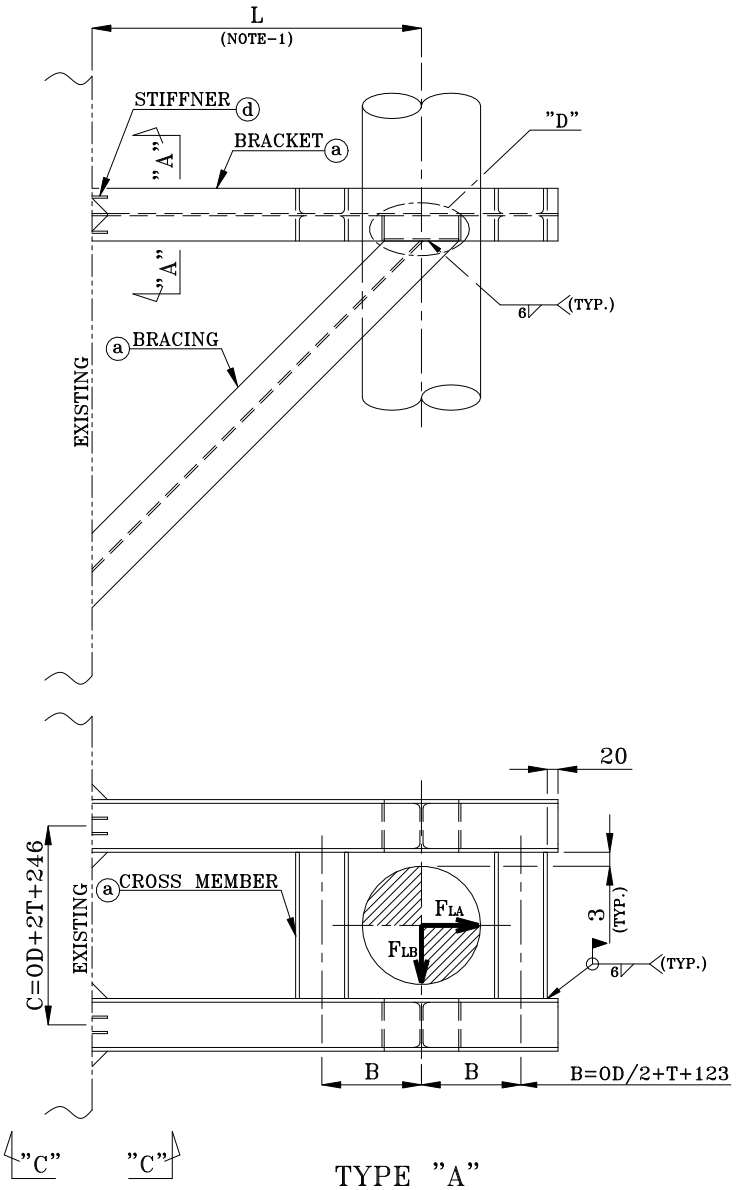
NOTE:
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



TYPE "A"
CARBON STEEL (BARE)

INDICATION:

SE-16- □□ - □□□ - □□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE DOUBLE GUIDE (TYPE A-CS) 26" ~ 42"	11
SE-16	22

NOTE:
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

HIRGAN ENERGY

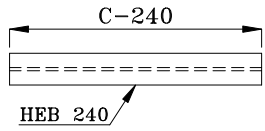
شماره پیمان:

053-073-9184

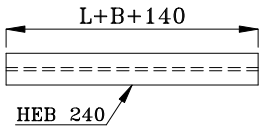
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

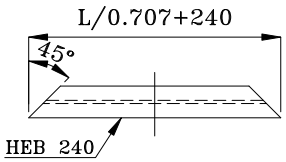
شماره صفحه: 248 از 394



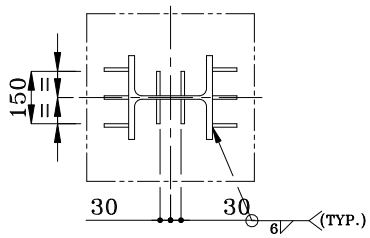
DETAIL OF CROSS MEMBER



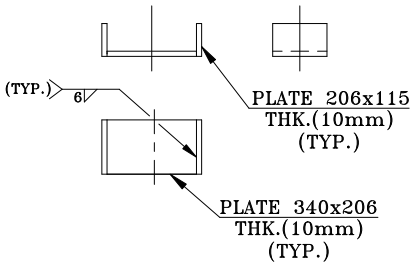
DETAIL OF BRACKET

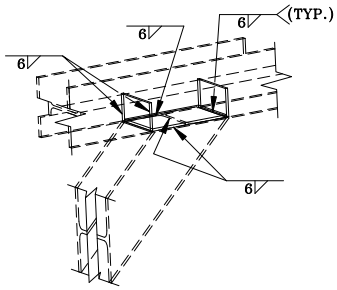


DETAIL OF BRAICING



VIEW "A"~"A"





DETAIL "D"

LENGTH MARK:(4)

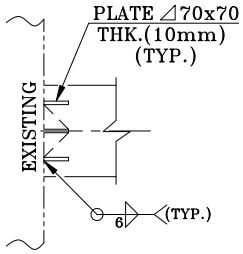
MARK	L	ALLOW. LOAD(kg) F_{LA}	ALLOW. LOAD(kg) F_{LB}
01	900	27000	9200
02	1000		
03	1100		
04	1200		7000
05	1300		
06	1400		
07	1500		5500
08	1600		
09	1700		
10	1800		4300
11	1900		
12	2000		

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE
26	26"
28	28"
30	30"
32	32"
34	34"
36	36"
38	38"
40	40"
42	42"

TYPE "A"

CARBON STEEL (BARE)



VIEW "C"~"C"

INSULATION THK. MARK:(5)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

MATERIAL MARK:(2)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER	MARK	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	ⓐ	ASTM A36	ASTM A36	ASTM A36
	ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	A325	A325	A325
	ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SE-16-□□-□□□-□□□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

SUPPORT DESCRIPTION:

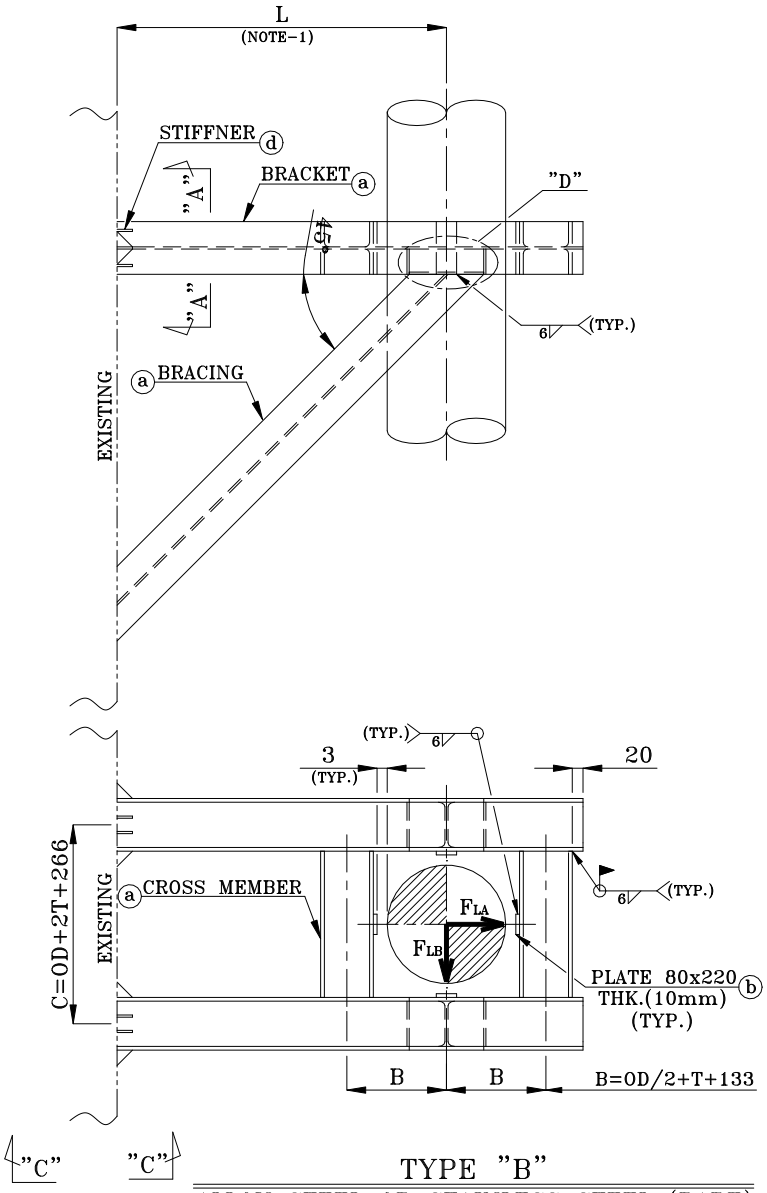
BRACKET ON STRUCTURE
DOUBLE GUIDE
(TYPE A-CS)
26" ~ 42"

SE-16

SHEET 12 / 22

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.



TYPE "B"

ALLOY STEEL OR STAINLESS STEEL (BARE)

INDICATION:

SE-16-□□-□□□-□□□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE DOUBLE GUIDE (TYPE B-AS,SS) 26" ~ 42"	13
SE-16	22

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

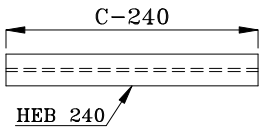
PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

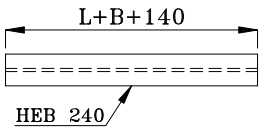
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

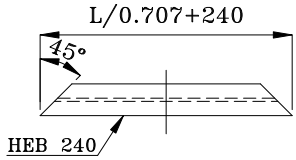
شماره صفحه: 250 از 394



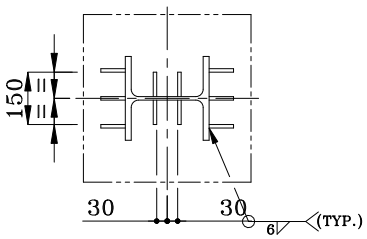
DETAIL OF CROSS MEMBER



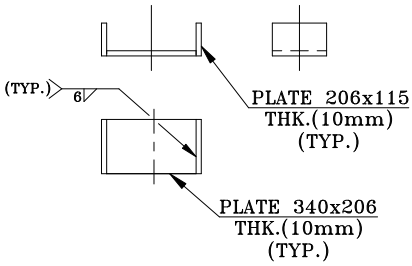
DETAIL OF BRACKET

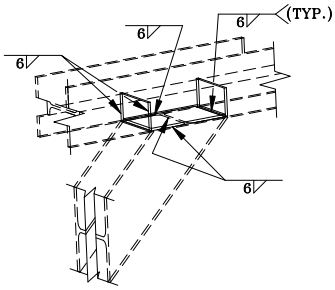


DETAIL OF BRACING

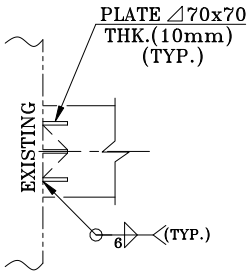


VIEW "A"~"A"





DETAIL "D"



VIEW "C"~"C"

LENGTH MARK:(4)

MARK	L	ALLOW. LOAD(kg) F_{LA}	ALLOW. LOAD(kg) F_{LB}
01	900	27000	9200
02	1000		
03	1100		
04	1200		7000
05	1300		
06	1400		
07	1500		5500
08	1600		
09	1700		
10	1800		4300
11	1900		
12	2000		

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE
26	26"
28	28"
30	30"
32	32"
34	34"
36	36"
38	38"
40	40"
42	42"

TYPE "B"
ALLOY STEEL OR STAINLESS STEEL (BARE)

INSULATION THK. MARK:(5)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

MATERIAL MARK:(2)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER	MARK	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C		A	B	C
	ⓐ	ASTM A36	ASTM A36	ASTM A36
	ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	A325	A325	A325
	ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SE-16-□□-□□□-□□□□
(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

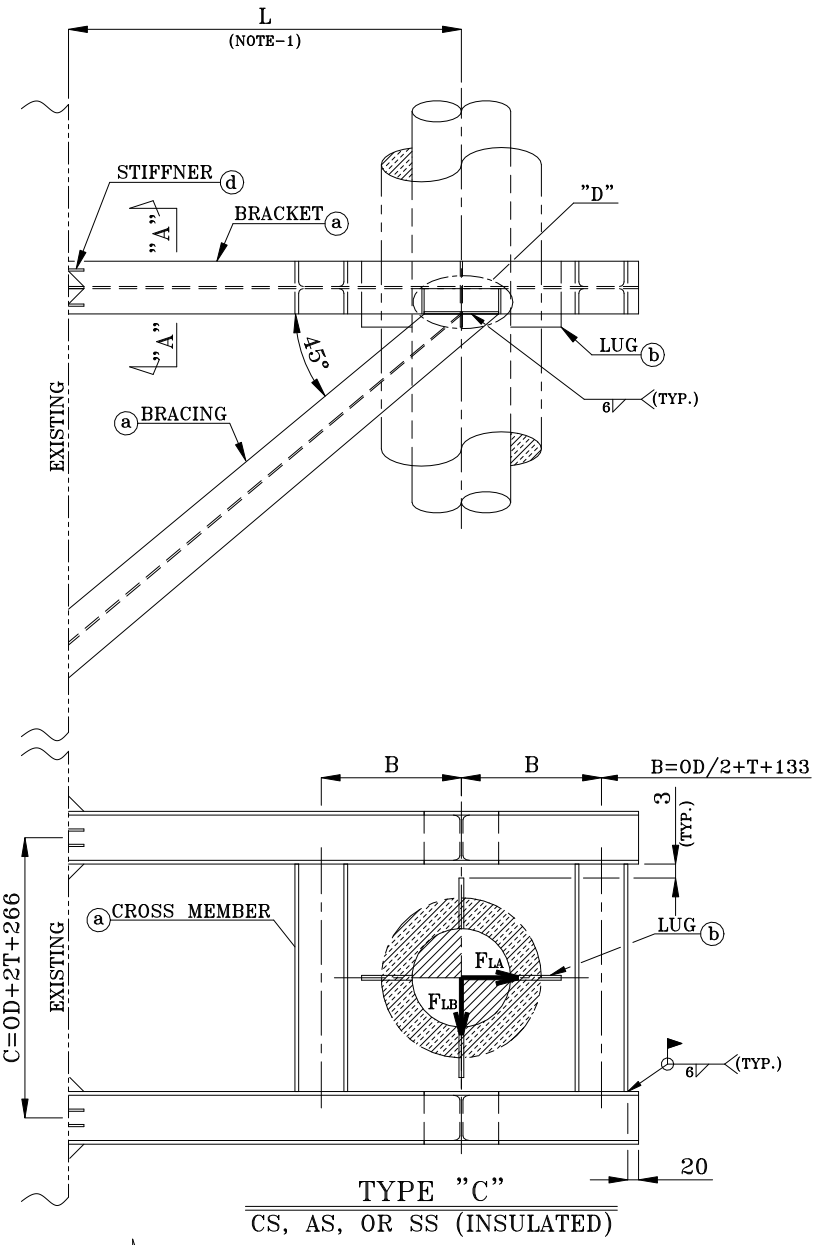
SUPPORT DESCRIPTION:
BRACKET ON STRUCTURE
DOUBLE GUIDE
(TYPE B AS,SS)
26" ~ 42"
SE-16

SHEET 14 / 22

NOTE:
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 251 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02



INDICATION:

SE-16- □□ (1) (2) - □□□ (3) - □□□ □ (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE DOUBLE GUIDE (TYPE C CS,AS,SS) 26" ~ 42"	15
SE-16	22

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

NISOC

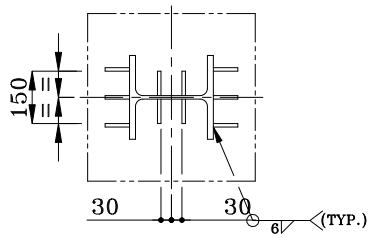
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO
HIRGAN ENERGY

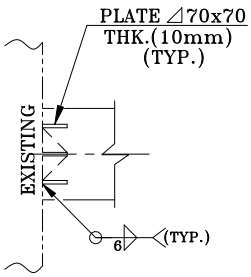
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

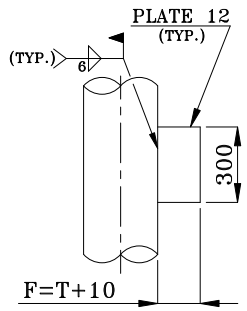
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



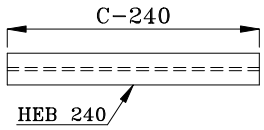
VIEW "A"~"A"



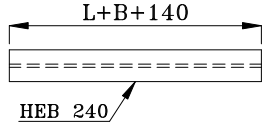
VIEW "C"~"C"



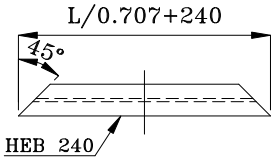
DETAIL OF LUG



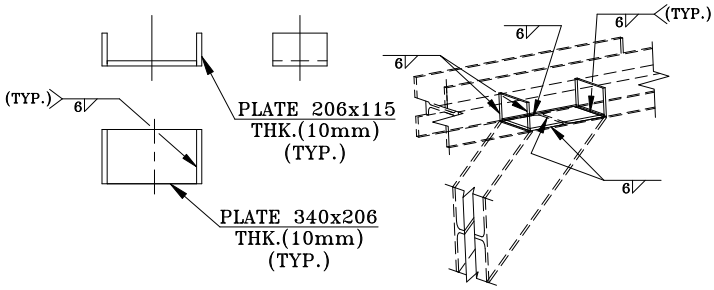
DETAIL OF CROSS MEMBER



DETAIL OF BRACKET



DETAIL OF BRAICING



DETAIL "D"

LENGTH MARK:(4)

MARK	L	ALLOW. LOAD(kg) F_{LA}	ALLOW. LOAD(kg) F_{LB}
01	1100	27000	9200
02	1200		7000
03	1300		
04	1400		
05	1500		5500
06	1600		
07	1700		
08	1800		4300
09	1900		
10	2000		

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE
26	26"
28	28"
30	30"
32	32"
34	34"
36	36"
38	38"
40	40"
42	42"

TYPE "C"
CS, AS, OR SS (INSULATED)

INSULATION THK. MARK:(5)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

MATERIAL MARK:(2)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER	MARK	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C		A	B	C
	ⓐ	ASTM A36	ASTM A36	ASTM A36
	ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	A325	A325	A325
	ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

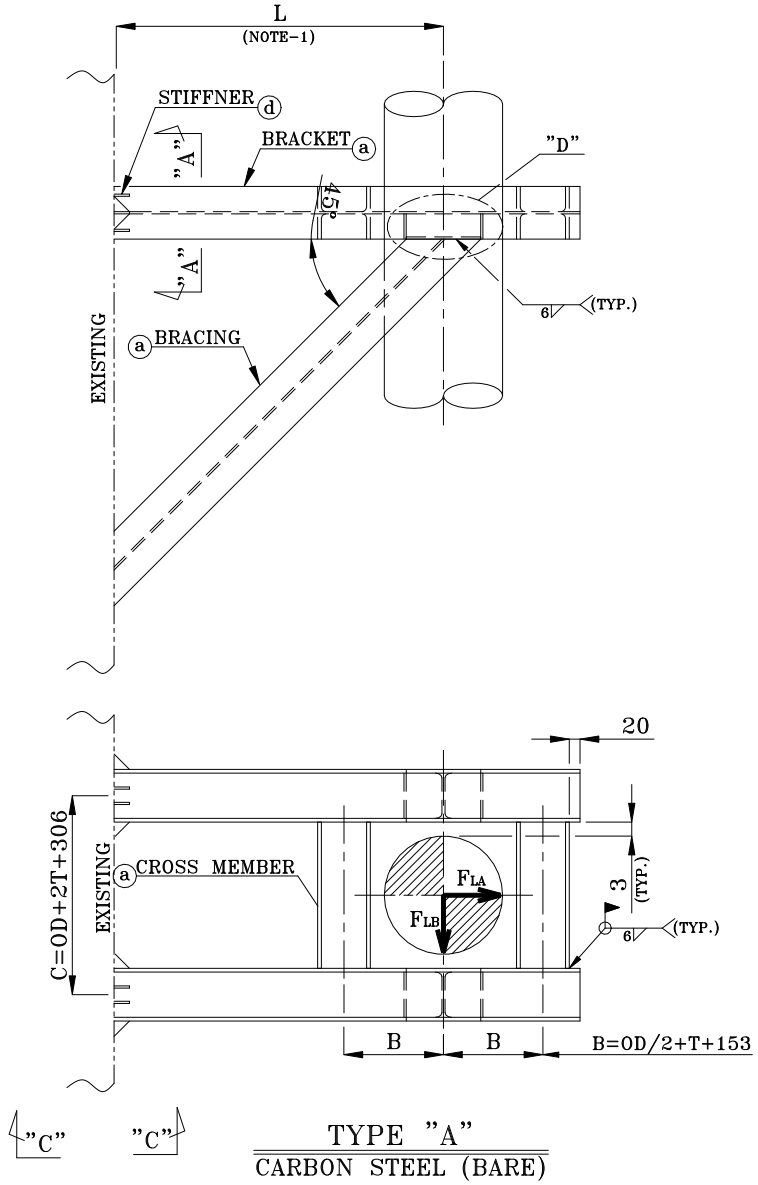
SE-16-□□-□□□-□□□□□
(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

SUPPORT DESCRIPTION:
BRACKET ON STRUCTURE
DOUBLE GUIDE
(TYPE C CS,AS,SS)
26" ~ 42"
SE-16

SHEET
16
22

NOTE:
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.



TYPE "A"
CARBON STEEL (BARE)

INDICATION:

SE-16- □□ - □□ - □□□ (1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE DOUBLE GUIDE (TYPE A-CS) 44" ~ 56"	17
SE-16	22

NOTE:
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

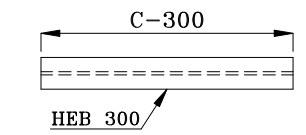
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

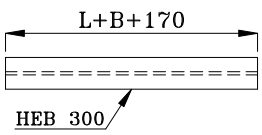
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

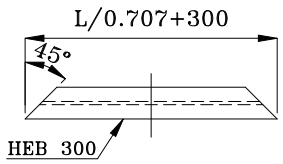
شماره صفحه: 254 از 394



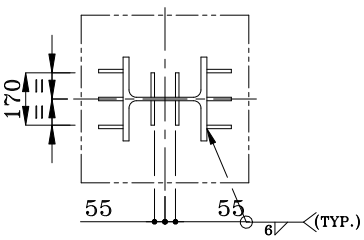
DETAIL OF CROSS MEMBER



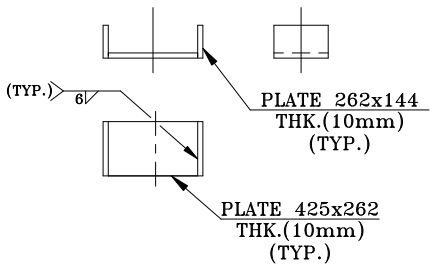
DETAIL OF BRACKET

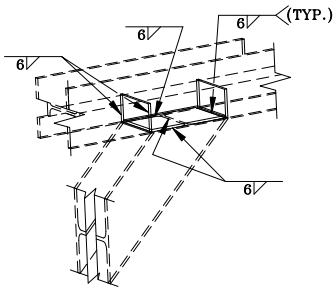


DETAIL OF BRACING



VIEW "A"~"A"





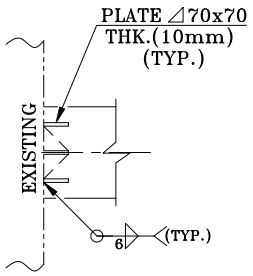
DETAIL "D"

LENGTH MARK:(4)

MARK	L	ALLOW. LOAD(kg) F_{LA}	ALLOW. LOAD(kg) F_{LB}
01	1200	32000	10000
02	1300		
03	1400		8200
04	1500		
05	1600		
06	1700		
07	1800		6400
08	1900		
09	2000		

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE
44	44"
46	46"
48	48"
50	50"
52	52"
54	54"
56	56"



VIEW "C"~"C"

TYPE "A"
CARBON STEEL (BARE)

INSULATION THK. MARK:(5)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

MATERIAL MARK:(2)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER	MARK	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	ⓐ	ASTM A36	ASTM A36	ASTM A36
	ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	A325	A325	A325
	ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SE-16-□□-□□□-□□□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

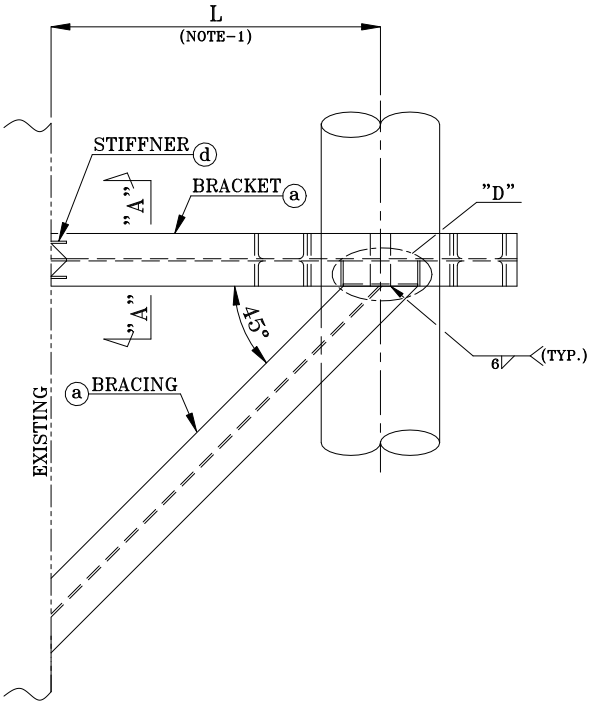
SUPPORT DESCRIPTION:
BRACKET ON STRUCTURE
DOUBLE GUIDE
(TYPE A-CS)
44" ~ 56"
SE-16

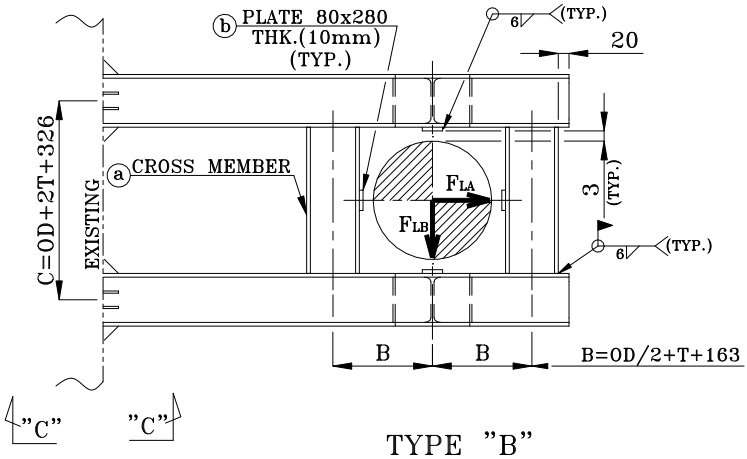
SHEET 18 / 22

NOTE:
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 255 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	





TYPE "B"

ALLOY STEEL OR STAINLESS STEEL (BARE)

INDICATION:

SE-16- □□ - □□□ - □□□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE DOUBLE GUIDE (TYPE B-AS,SS) 44" ~ 56"	19
SE-16	22

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

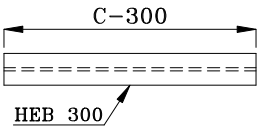
PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

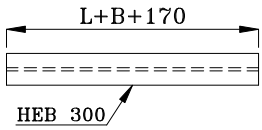
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

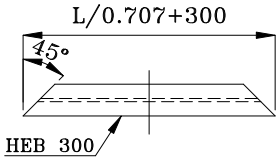
شماره صفحه: 256 از 394



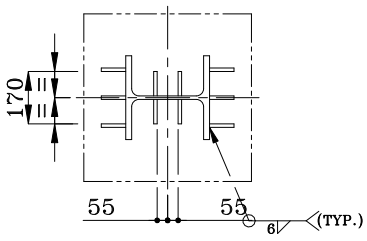
DETAIL OF CROSS MEMBER



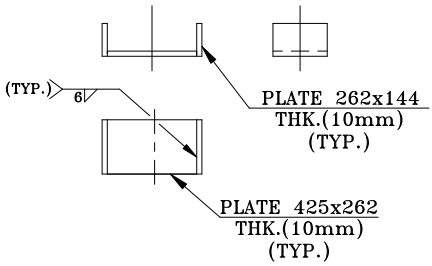
DETAIL OF BRACKET

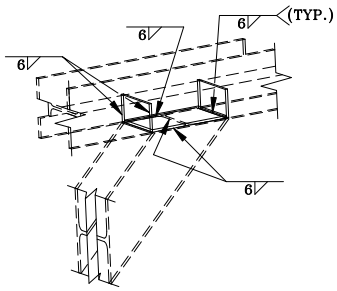


DETAIL OF BRAICING



VIEW "A"~"A"





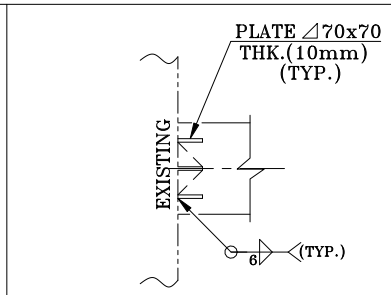
DETAIL "D"

LENGTH MARK:(4)

MARK	L	ALLOW. LOAD(kg) F_{LA}	ALLOW. LOAD(kg) F_{LB}
01	1200	32000	10000
02	1300		
03	1400		
04	1500		8200
05	1600		
06	1700		
07	1800		6400
08	1900		
09	2000		

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE
44	44"
46	46"
48	48"
50	50"
52	52"
54	54"
56	56"



VIEW "C"~"C"

INSULATION THK. MARK:(5)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

TYPE "B"
ALLOY STEEL OR STAINLESS STEEL (BARE)

MATERIAL MARK:(2)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER	MARK	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	ⓐ	ASTM A36	ASTM A36	ASTM A36
	ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	A325	A325	A325
	ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SE-16-□□-□□□-□□□□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

NOTE:
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE DOUBLE GUIDE (TYPE B AS,SS) 44" ~ 56"	20
SE-16	22

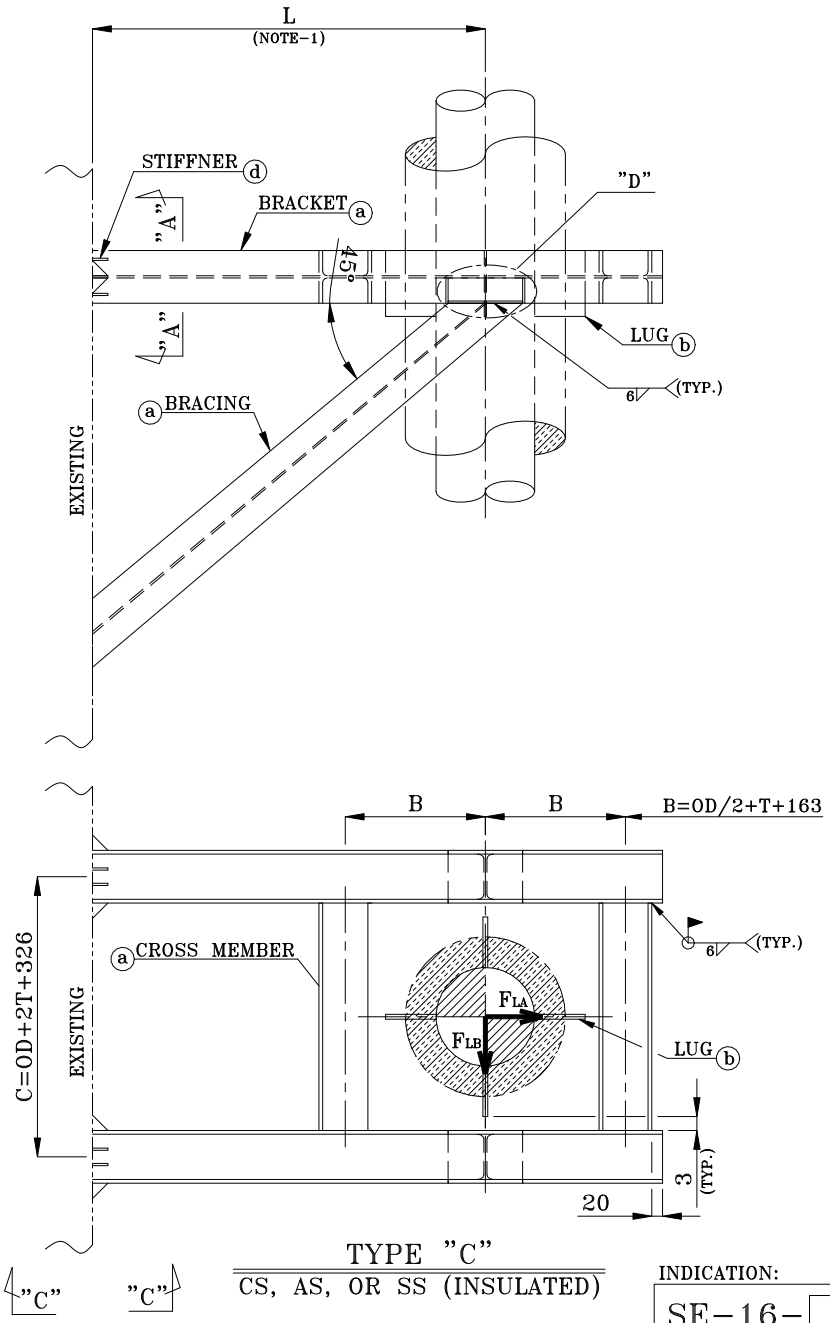
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 257 از 394



TYPE "C"
CS, AS, OR SS (INSULATED)

INDICATION:

SE-16-□□-□□-□□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE DOUBLE GUIDE (TYPE C CS,AS,SS) 44" ~ 56"	21
SE-16	22

NOTE:
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

NISOC

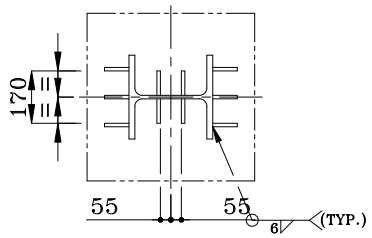
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO
HIRGAN ENERGY

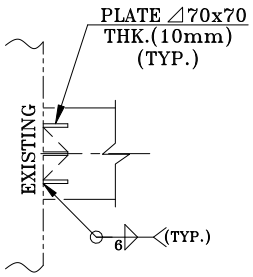
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

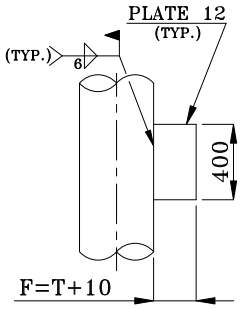
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



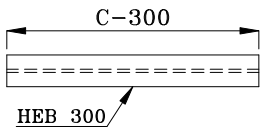
VIEW "A"~"A"



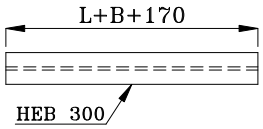
VIEW "C"~"C"



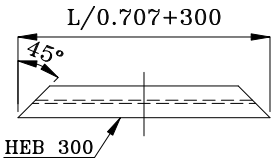
DETAIL OF LUG



DETAIL OF CROSS MEMBER



DETAIL OF BRACKET



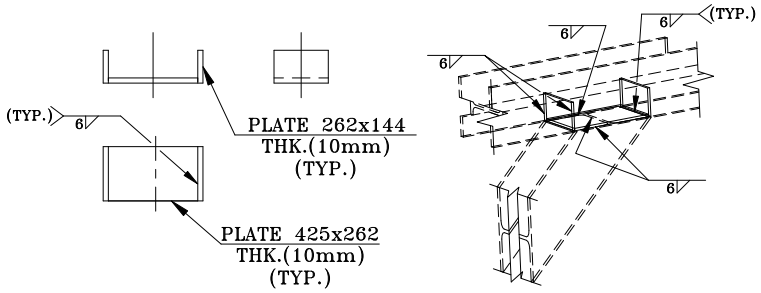
DETAIL OF BRAICING

LENGTH MARK:(4)

MARK	L	ALLOW. LOAD(kg) F_{LA}	ALLOW. LOAD(kg) F_{LB}
01	1400		10000
02	1500		
03	1600		8200
04	1700	32000	
05	1800		
06	1900		6400
07	2000		

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE
44	44"
46	46"
48	48"
50	50"
52	52"
54	54"
56	56"



DETAIL "D"

INSULATION THK. MARK:(5)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

TYPE "C"
CS, AS, OR SS (INSULATED)

MATERIAL MARK:(2)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER	MARK	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	ⓐ	ASTM A36	ASTM A36	ASTM A36
	ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	A325	A325	A325
	ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SE-16-□□-□□-□□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

NOTE:
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE DOUBLE GUIDE (TYPE C CS,AS,SS) 44" ~ 56"	22
SE-16	22

NISOC

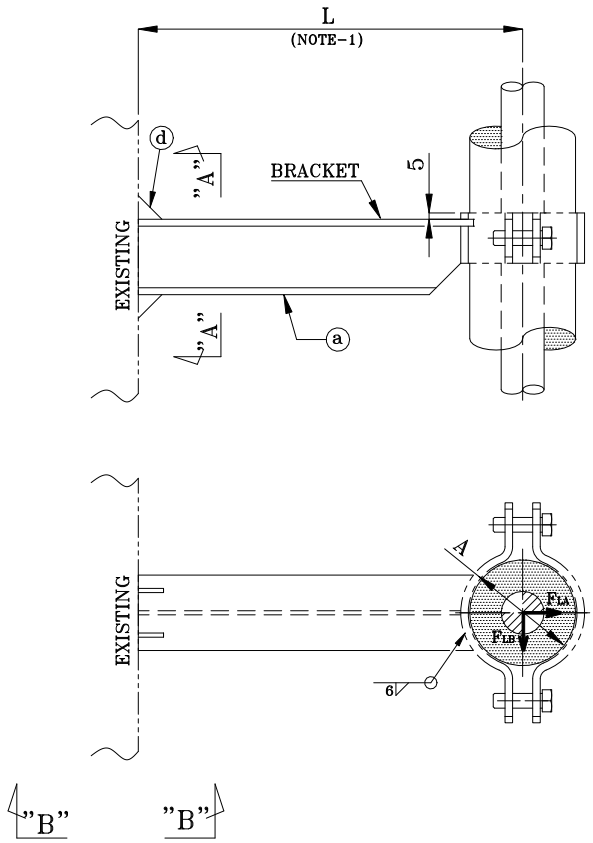
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

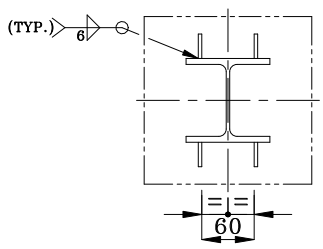
PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

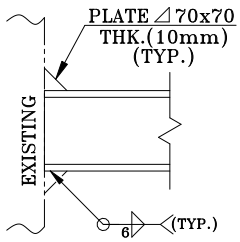
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

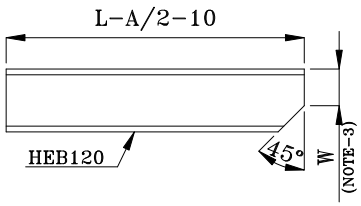




VIEW "A"~"A"



VIEW "B"~"B"



DETAIL OF BRACKET

NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	2"	2 1/2"	3"	4"	5"	6"
			02	2A	03	04	05	06
			A (FOR EACH PIPE SIZE)					
1	25-50	T=50	163	192	192	224	251	274
2	51-100	T=100	274	279	292	324	351	374
3	101-150	T=150	374	392	392	430	451	474
4	151-200	T=200	474	492	492	530	548	578
5	201-250	T=250	–	–	–	–	–	–
6	251-300	T=300	–	–	–	–	–	–

LENGTH MARK:(4)

MARK	L	ALLOW.LOAD(kg) F_{LA}	ALLOW.LOAD(kg) F_{LB}
1	700	600	500
2	800		
3	900		
4	1000		
5	1100		

MATERIAL MARK:(1)

DES. TEMP	MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	B	C
	ⓐ	ASTM A36	ASTM A36	ASTM A36
	ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	A325	A325	A325
	ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SE-17-□□□-□□
(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-INSULATION MARK
4-LENGTH MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- SEPARATED TAG IS REQUIRED FOR COLD INSULATION PIPE CLAMP (SK-03).
3- W IS EQUAL TO CLAMP WIDE.
4- ALLOWABLE LOAD OF CLAMP SHALL BE CHECKED SEPARATELY.

SUPPORT DESCRIPTION:
BRACKET ON STRUCTURE CLAMP TYPE,DOUBLE GUIDE (COLD INSULATION)
2" ~ 6"
SE-17

SHEET 1 / 1

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

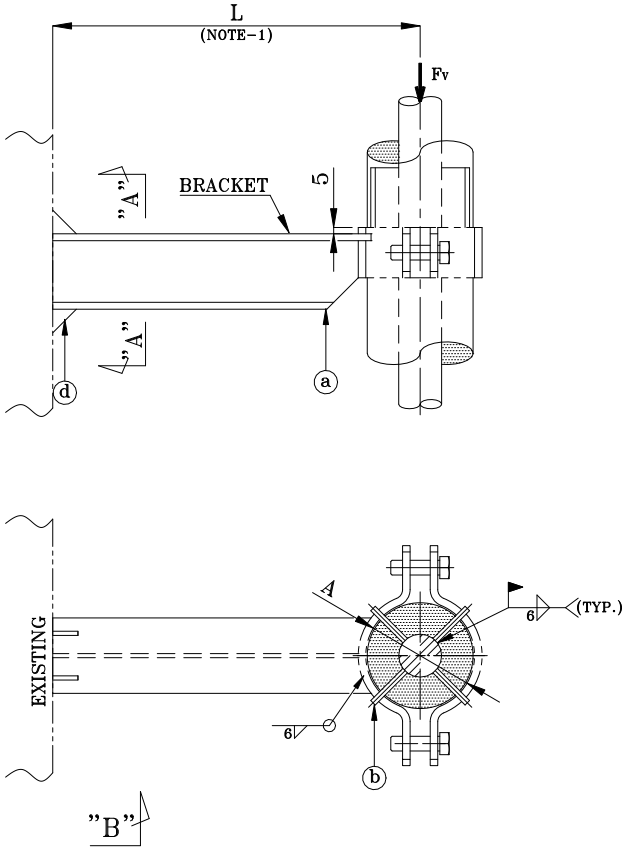
HIRGAN ENERGY

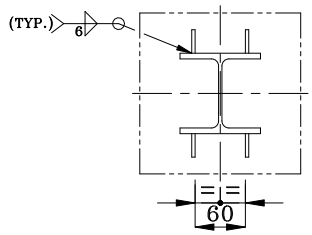
شماره پیمان:

053-073-9184

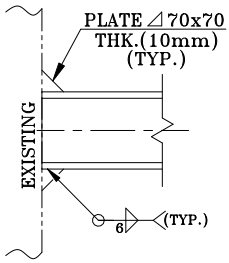
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

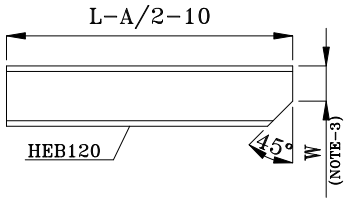




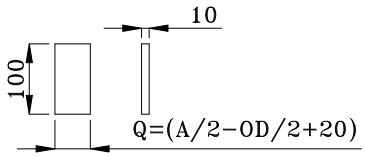
VIEW "A"~"A"



VIEW "B"~"B"



DETAIL OF BRACKET



DETAIL OF LUG

NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	2"	2 1/2"	3"	4"	5"	6"
			02	2A	03	04	05	06
			A (FOR EACH PIPE SIZE)					
1	25-50	T=50	163	192	192	224	251	274
2	51-100	T=100	274	279	292	324	351	374
3	101-150	T=150	374	392	392	430	451	474
4	151-200	T=200	474	492	492	530	548	578
5	201-250	T=250	–	–	–	–	–	–
6	251-300	T=300	–	–	–	–	–	–

LENGTH MARK:(4)

MARK	L	ALLOW.LOAD(kg) Fv
1	600	720
2	700	
3	800	
4	900	560
5	1000	
6	1100	

MATERIAL MARK:(1)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER	MARK	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	ⓐ	ASTM A36	ASTM A36	ASTM A36
	ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	A325	A325	A325
	ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SE-18-□□□-□□ (1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-INSULATION MARK
4-LENGTH MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR COLD INSULATION PIPE CLAMP (SK-03).

3- W IS EQUAL TO CLAMP WIDE.

4- ALLOWABLE LOAD OF CLAMP SHALL BE CHECKED SEPARATELY.

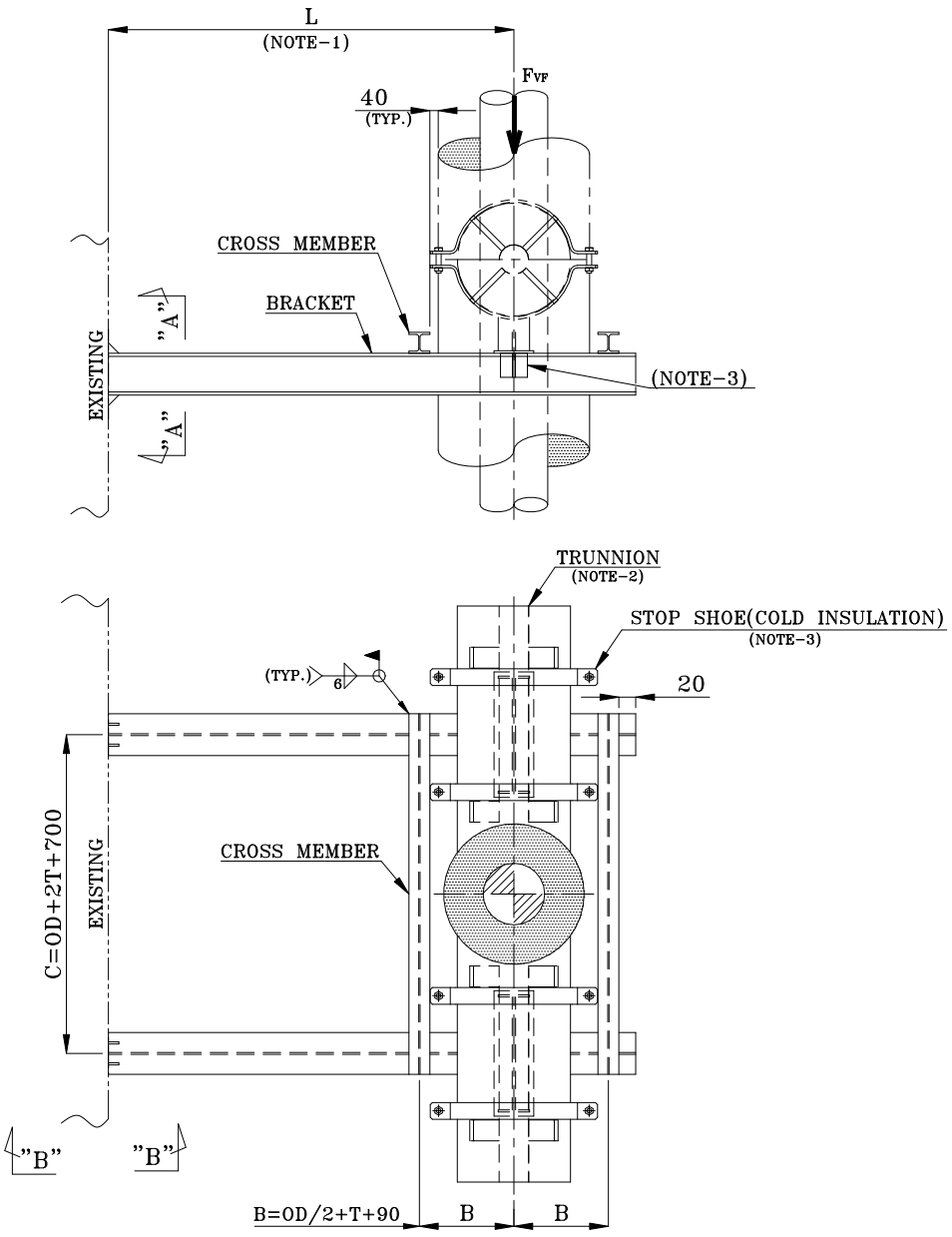
SUPPORT DESCRIPTION:
BRACKET ON STRUCTURE
CLAMP TYPE,SEMI ANCHOR
(COLD INSULATION)
2" ~ 6"

SE-18

SHEET 1 1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 261 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	



INDICATION:

SE-19- [ ][ ] - [ ][ ][ ]
(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

3- SEPARATED TAG IS REQUIRED FOR STOP SHOE (SB-13) STOP SHOE SHALL BE INSTALLED WITHOUT STOPPER.

4- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION AND STOP SHOE SHALL BE CHECKED SEPARATELY.

MATERIAL: STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

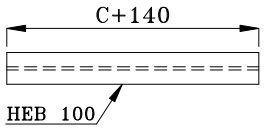
SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE REST (COLD INSULATION) 2" ~ 6"	1
SE-19	8

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

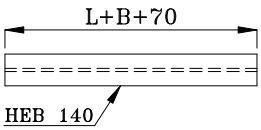
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

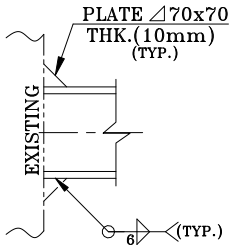
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



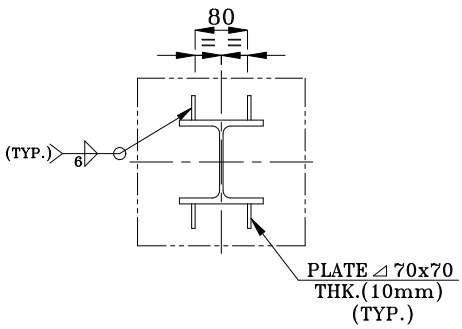
DETAIL OF CROSS MEMBER



DETAIL OF BRACKET



VIEW "B"~"B"



VIEW "A"~"A"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg) Fvf
01	600	1200
02	700	
03	800	
04	900	900
05	1000	
06	1100	
07	1200	650
08	1300	
09	1400	
10	1500	600
11	1600	
12	1700	
13	1800	400
14	1900	
15	2000	

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
02	2"
04	4"
06	6"

INSULATION THK. MARK:(3)

COLD INSULATION THK.	25-50	51-100	101-150	151-200
CRADLE THK.	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4

INDICATION:

SE-19-[ ][ ]-[ ][ ][ ]
(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

3- SEPARATED TAG IS REQUIRED FOR STOP SHOE (SB-13) STOP SHOE SHALL BE INSTALLED WITHOUT STOPPER.

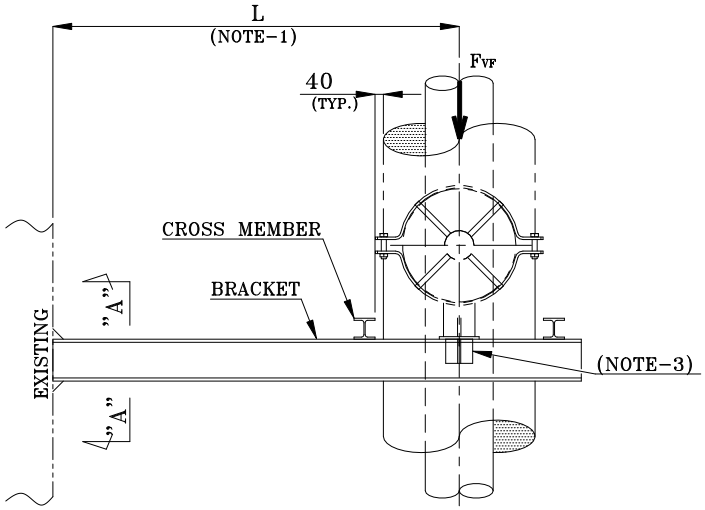
4- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION AND STOP SHOE SHALL BE CHECKED SEPARATELY.

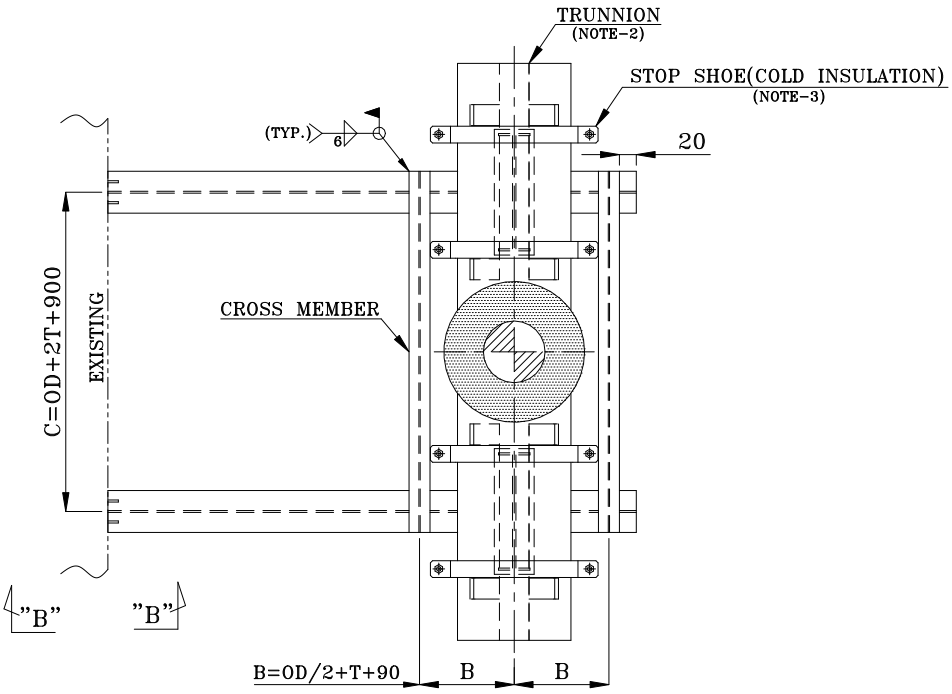
MATERIAL: STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE REST (COLD INSULATION) 2" ~ 6"	2
SE-19	8

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 263 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	





INDICATION:

SE-19- [ ][ ] - [ ][ ][ ]
(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

3- SEPARATED TAG IS REQUIRED FOR STOP SHOE (SB-13) STOP SHOE SHALL BE INSTALLED WITHOUT STOPPER.

4- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION AND STOP SHOE SHALL BE CHECKED SEPARATELY.

MATERIAL: STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

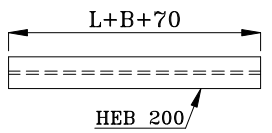
SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE REST (COLD INSULATION) 8" ~ 12"	3
SE-19	8

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

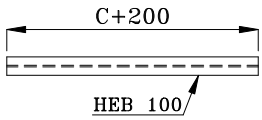
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

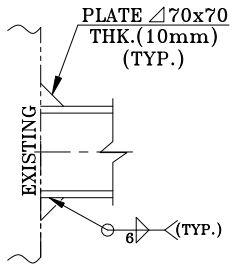
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



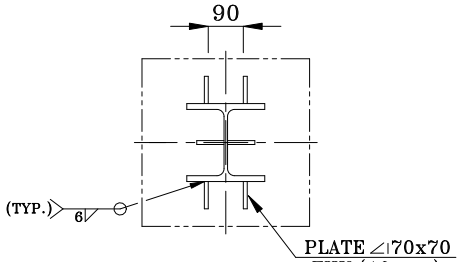
DETAIL OF BRACKET



DETAIL OF CROSS MEMBER



VIEW "B"~"B"



VIEW "A"~"A"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg) Fvf
01	700	5500
02	800	
03	900	
04	1000	4300
05	1100	
06	1200	
07	1300	3400
08	1400	
09	1500	
10	1600	2800
11	1700	
12	1800	
13	1900	2300
14	2000	

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
08	8"
10	10"
12	12"

INSULATION THK. MARK:(3)

COLD INSULATION THK.	25-50	51-100	101-150	151-200	201-250
CRADLE THK.	T=50	T=100	T=150	T=200	T=250
INSULATION THK. MARK	1	2	3	4	5

INDICATION:

SE-19-□□(1)-□□□(2)(3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

3- SEPARATED TAG IS REQUIRED FOR STOP SHOE (SB-13) STOP SHOE SHALL BE INSTALLED WITHOUT STOPPER.

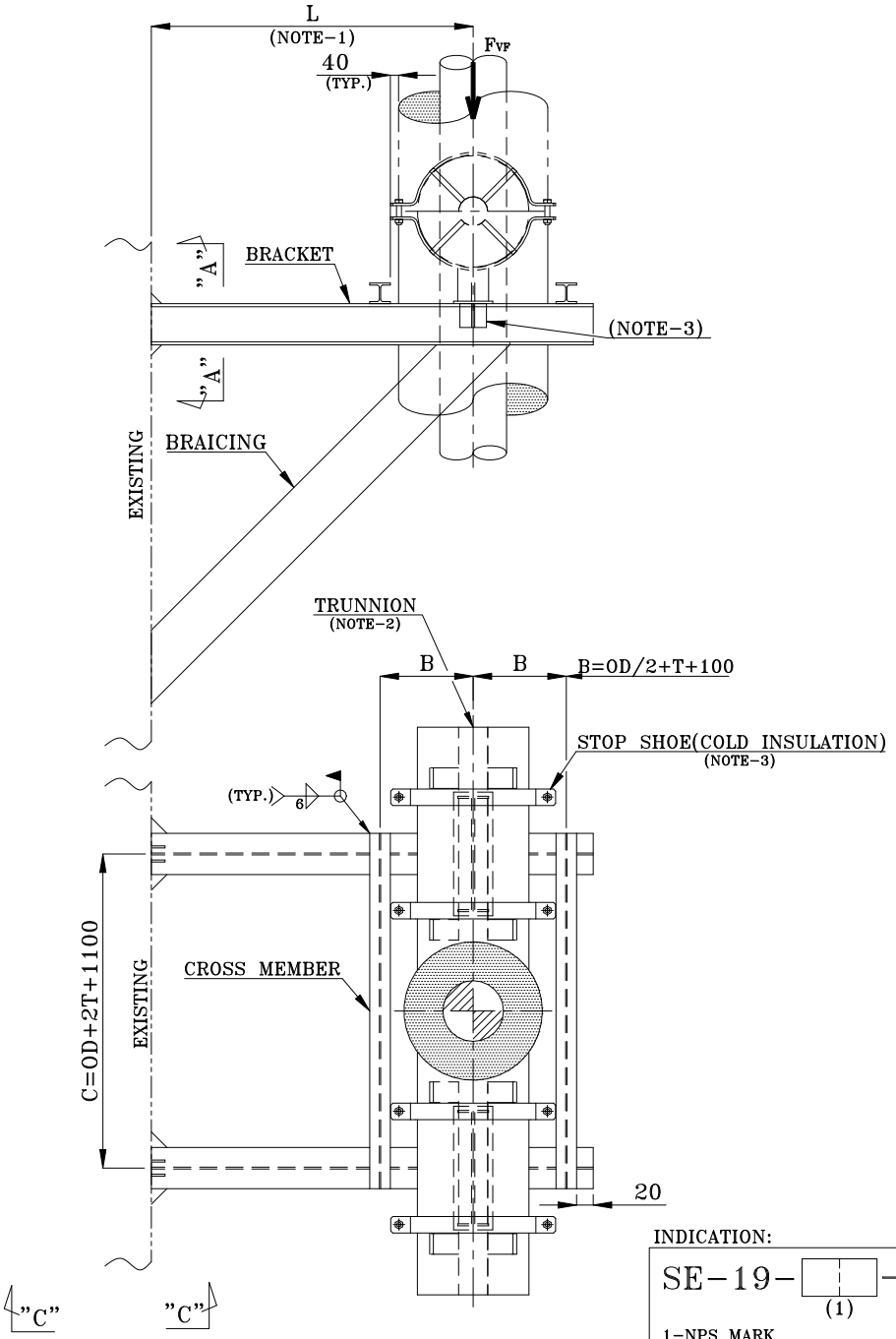
4- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION AND STOP SHOE SHALL BE CHECKED SEPARATELY.

MATERIAL: STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE REST (COLD INSULATION) 8" ~ 12"	4
SE-19	8

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 265 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	



INDICATION:

SE-19-□□-□□□

(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

3- SEPARATED TAG IS REQUIRED FOR STOP SHOE (SB-13) STOP SHOE SHALL BE INSTALLED WITHOUT STOPPER.

4- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION AND STOP SHOE SHALL BE CHECKED SEPARATELY.

MATERIAL: STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE REST (COLD INSULATION) 14" ~ 24"	5
SE-19	8

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

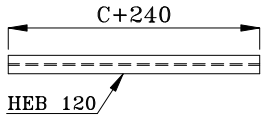
HIRGAN ENERGY

شماره پیمان:

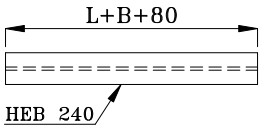
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

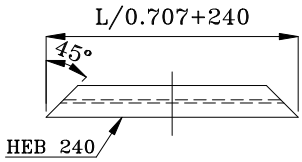
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



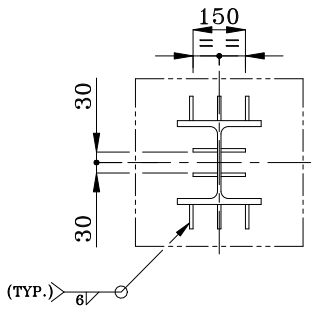
DETAIL OF CROSS MEMBER



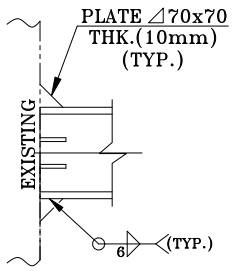
DETAIL OF BRACKET



DETAIL OF BRAICING



VIEW "A"~"A"



VIEW "C"~"C"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg) Fvf
01	900	18800
02	1000	13800
03	1100	
04	1200	
05	1300	10000
06	1400	
07	1500	
08	1600	7700
09	1700	
10	1800	
11	1900	5900
12	2000	

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
14	14"
16	16"
18	18"
20	20"
22	22"
24	24"

INSULATION THK. MARK:(3)

COLD INSULATION THK.	25-50	51-100	101-150	151-200	201-250	251-300
CRADLE THK.	T=50	T=100	T=150	T=200	T=250	T=300
INSULATION THK. MARK	1	2	3	4	5	6

INDICATION:

SE-19-[ ][ ][ ]

(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

3- SEPARATED TAG IS REQUIRED FOR STOP SHOE (SB-13) STOP SHOE SHALL BE INSTALLED WITHOUT STOPPER.

4- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION AND STOP SHOE SHALL BE CHECKED SEPARATELY.

MATERIAL: STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:
BRACKET ON STRUCTURE REST
(COLD INSULATION)
14" ~ 24"
SE-19

SHEET 6 8

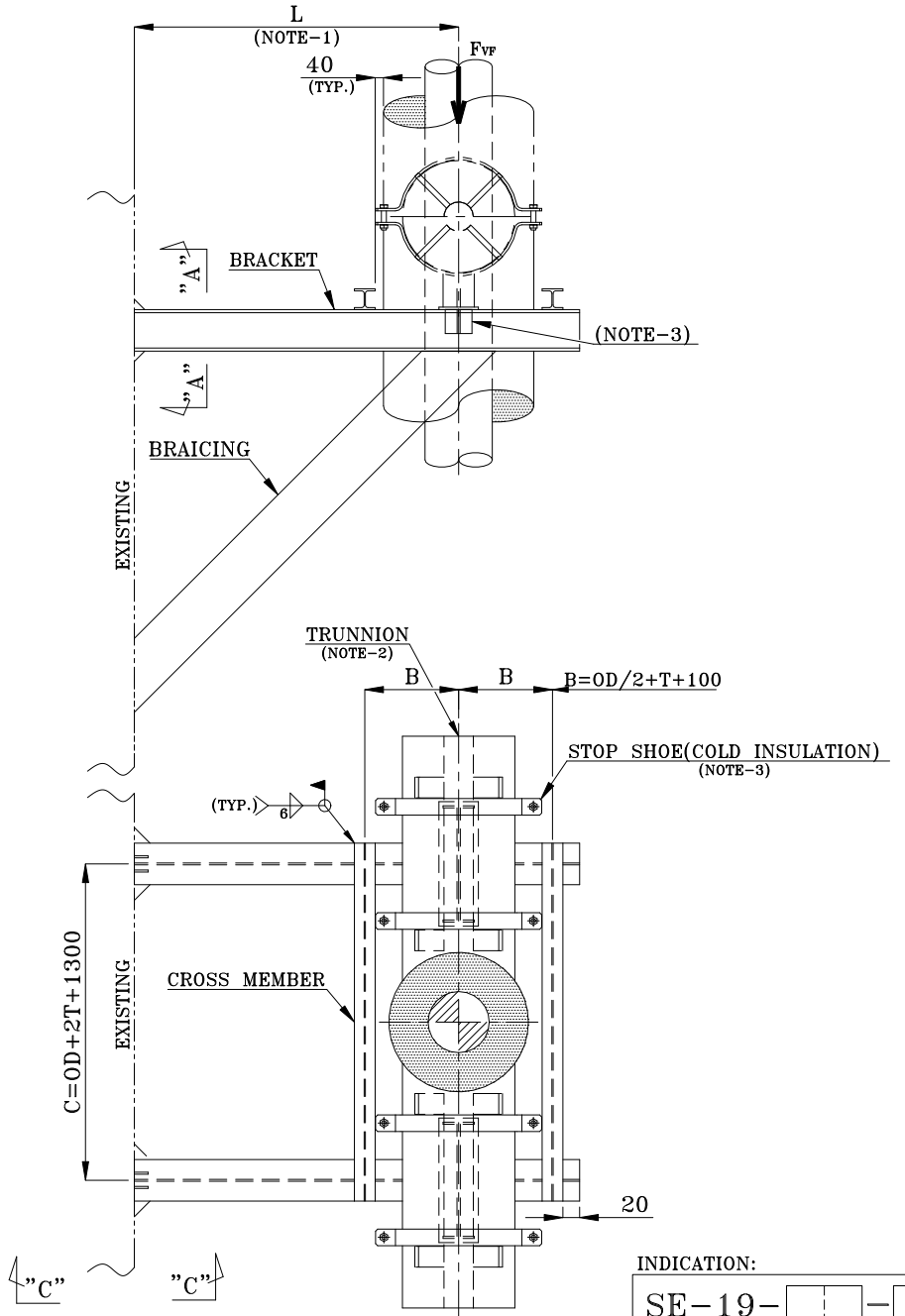
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 267 از 394



INDICATION:

SE-19-□□-□□□

(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

3- SEPARATED TAG IS REQUIRED FOR STOP SHOE (SB-13) STOP SHOE SHALL BE INSTALLED WITHOUT STOPPER.

4- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION AND STOP SHOE SHALL BE CHECKED SEPARATELY.

MATERIAL: STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE REST (COLD INSULATION) 26" ~ 42"	7
SE-19	8

NISOC

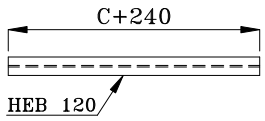
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO
HIRGAN ENERGY

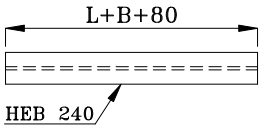
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

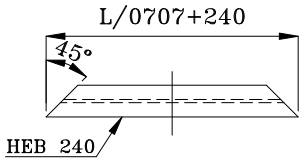
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



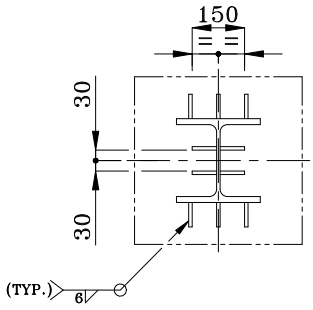
DETAIL OF CROSS MEMBER



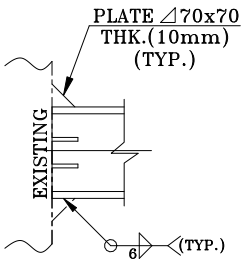
DETAIL OF BRACKET



DETAIL OF BRAICING



VIEW "A"~"A"



VIEW "C"~"C"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg) Fvf
01	1100	15500
02	1200	
03	1300	11400
04	1400	
05	1500	
06	1600	8600
07	1700	
08	1800	
09	1900	6600
10	2000	

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
26	26"
28	28"
30	30"
32	32"
34	34"
36	36"
38	38"
40	40"
42	42"

INSULATION THK. MARK:(3)

COLD INSULATION THK.	25-50	51-100	101-150	151-200	201-250	251-300
CRADLE THK.	T=50	T=100	T=150	T=200	T=250	T=300
INSULATION THK. MARK	1	2	3	4	5	6

INDICATION:

SE-19-□□-□□□
(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

3- SEPARATED TAG IS REQUIRED FOR STOP SHOE (SB-13) STOP SHOE SHALL BE INSTALLED WITHOUT STOPPER.

4- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION AND STOP SHOE SHALL BE CHECKED SEPARATELY.

MATERIAL: STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:
BRACKET ON STRUCTURE REST
(COLD INSULATION)
26" ~ 42"
SE-19

SHEET 8 / 8

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

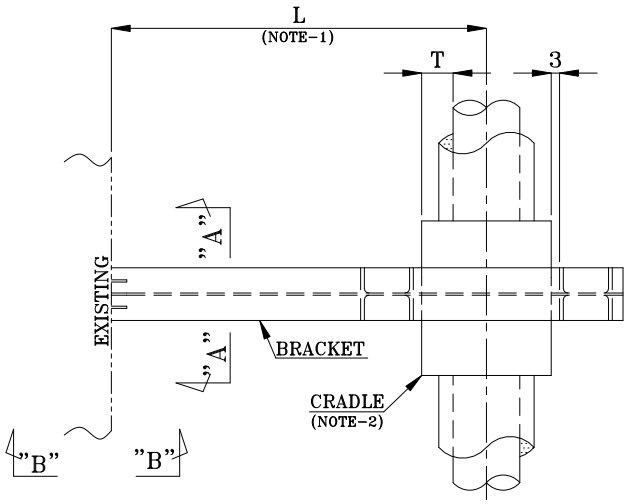
HIRGAN ENERGY

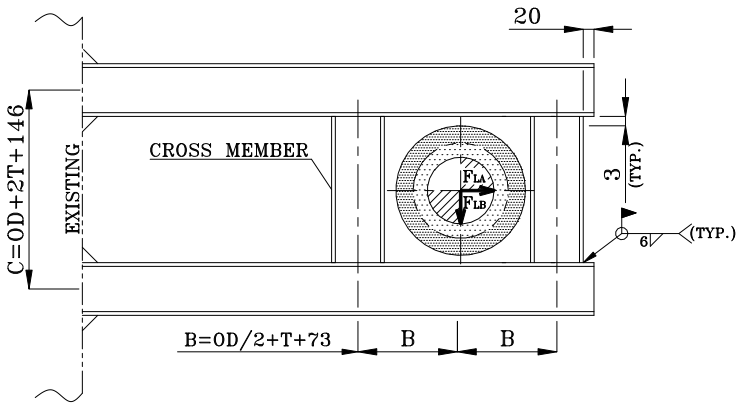
شماره پیمان:

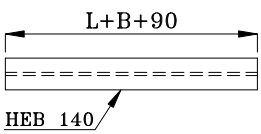
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

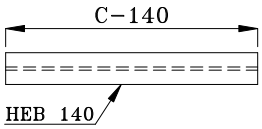
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



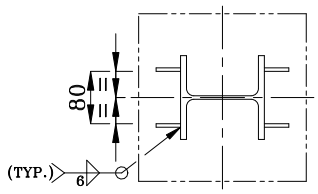




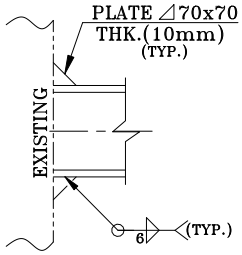
DETAIL OF BRACKET



DETAIL OF CROSS MEMBER



VIEW "A"~"A"



VIEW "B"~"B"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg) FLA	ALLOW. LOAD(kg) FLB
01	600	16000	3300
02	700		
03	800		
04	900		
05	1000		2500
06	1100		
07	1200		
08	1300		1900
09	1400		
10	1500		
11	1600		1500
12	1700		
13	1800		
14	1900		1200
15	2000		

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
02	2"
04	4"
06	6"

INSULATION THK. MARK:(3)

COLD INSULATION THK.	25-50	51-100	101-150	151-200
CRADLE THK.	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4

INDICATION:

SE-20-□□-□□□ (1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CRADLE SEE (G-04).

MATERIAL:

STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.B

SUPPORT DESCRIPTION:
BRACKET ON STRUCTURE
DOUBLE GUIDE
(COLD INSULATION)
2" ~ 6"

SE-20

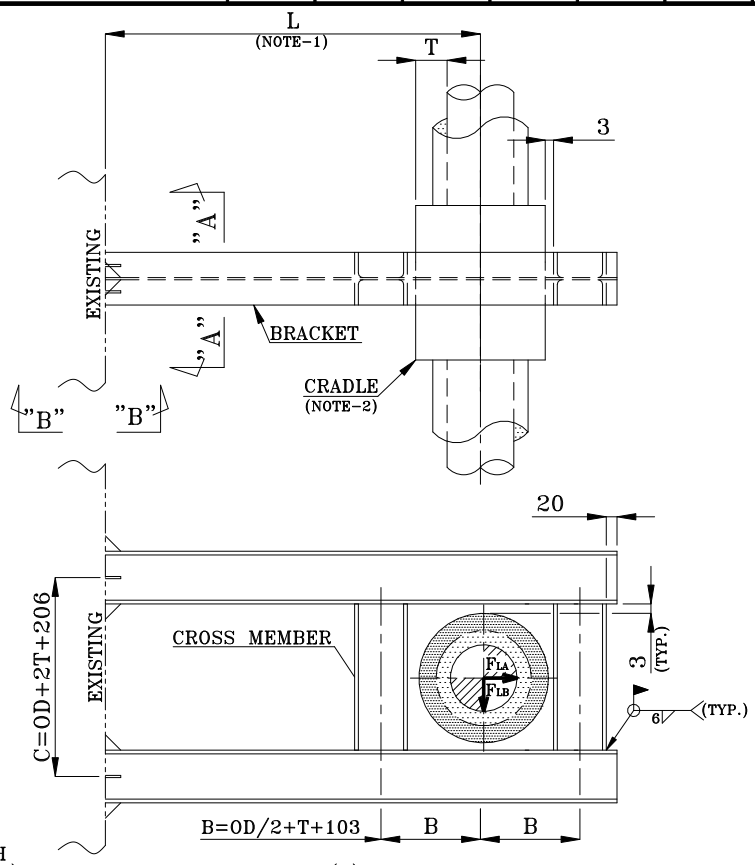
SHEET 1

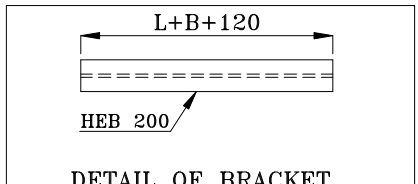
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NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

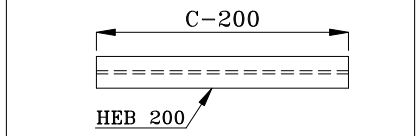
شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 270 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

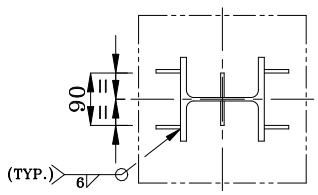




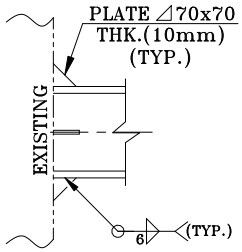
DETAIL OF BRACKET



DETAIL OF CROSS MEMBER



VIEW "A"~"A"



VIEW "B"~"B"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg) FLA	ALLOW. LOAD(kg) FLB
01	600	30000	6500
02	700		
03	800		
04	900		
05	1000		4900
06	1100		
07	1200		
08	1300		3800
09	1400		
10	1500		
11	1600		3000
12	1700		
13	1800		
14	1900		2500
15	2000		

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
08	8"
10	10"
12	12"

INDICATION:

SE-20- (1) - (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

INSULATION THK. MARK:(3)

COLD INSULATION THK.	25-50	51-100	101-150	151-200	201-250
CRADLE THK.	T=50	T=100	T=150	T=200	T=250
INSULATION THK. MARK	1	2	3	4	5

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CRADLE SEE (G-04).

MATERIAL:

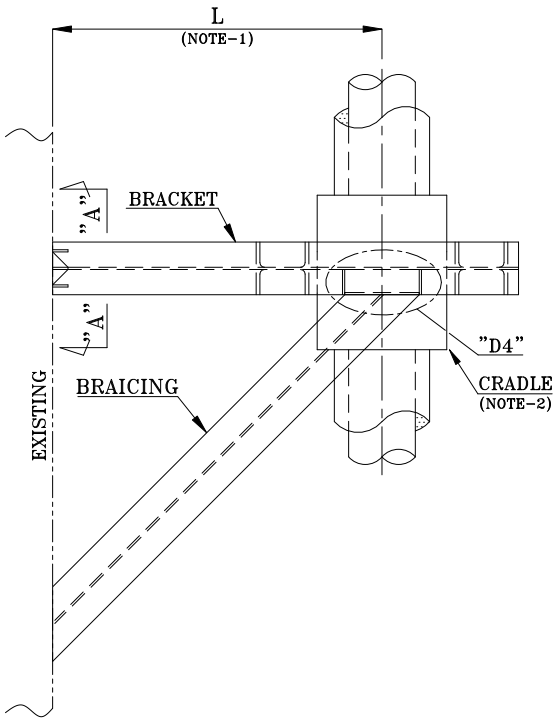
STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.B

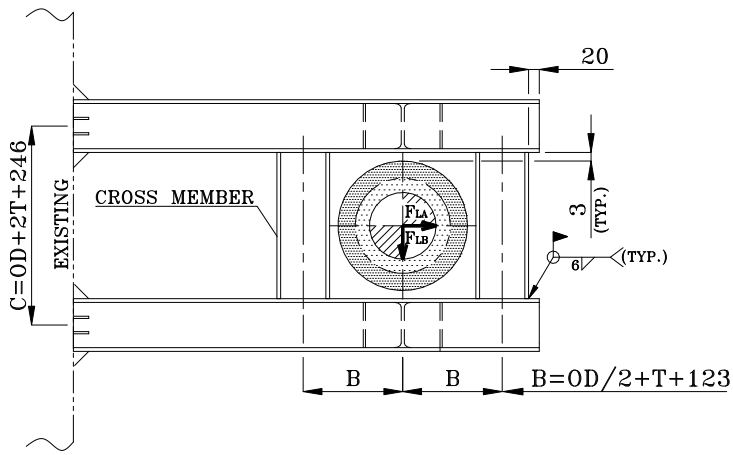
SUPPORT DESCRIPTION: BRACKET ON STRUCTURE DOUBLE GUIDE (COLD INSULATION) 8" ~ 12" SE-20	SHEET 2 / 6

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 271 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02





"C" "C"

INDICATION:

SE-20-□□-□□□

(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CRADLE SEE (G-04).

MATERIAL:

STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.B

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE DOUBLE GUIDE (COLD INSULATION) 14" ~ 24"	3
SE-20	6

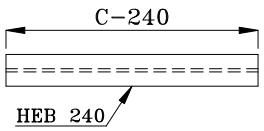
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

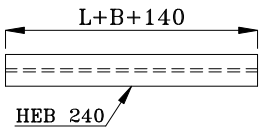
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

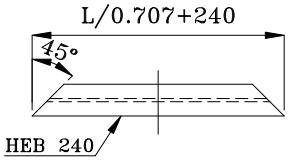
شماره صفحه: 272 از 394



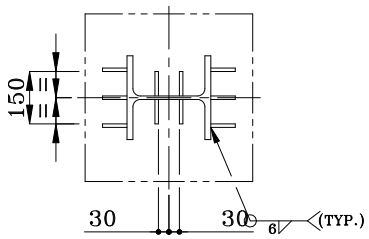
DETAIL OF CROSS MEMBER



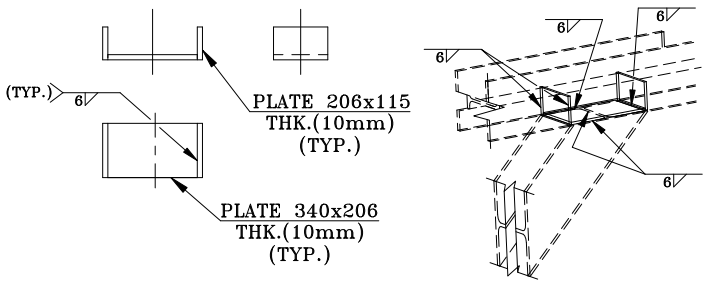
DETAIL OF BRACKET



DETAIL OF BRAICING



VIEW "A"~"A"



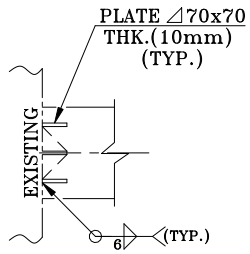
DETAIL "D"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg) F_{LA}	ALLOW. LOAD(kg) F_{LB}
01	800	36000	7800
02	900		
03	1000		
04	1100		
05	1200		
06	1300		5900
07	1400		
08	1500		
09	1600		4700
10	1700		
11	1800		
12	1900		3600
13	2000		

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
14	14"
16	16"
18	18"
20	20"
22	22"
24	24"



VIEW "C"~"C"

INDICATION:

SE-20- [ ] (1) [ ] (2) [ ] (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

INSULATION THK. MARK:(3)

COLD INSULATION THK.	25-50	51-100	101-150	151-200	201-250	251-300
CRADLE THK.	T=50	T=100	T=150	T=200	T=250	T=300
INSULATION THK. MARK	1	2	3	4	5	6

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CRADLE SEE (G-04).

MATERIAL:

STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.B

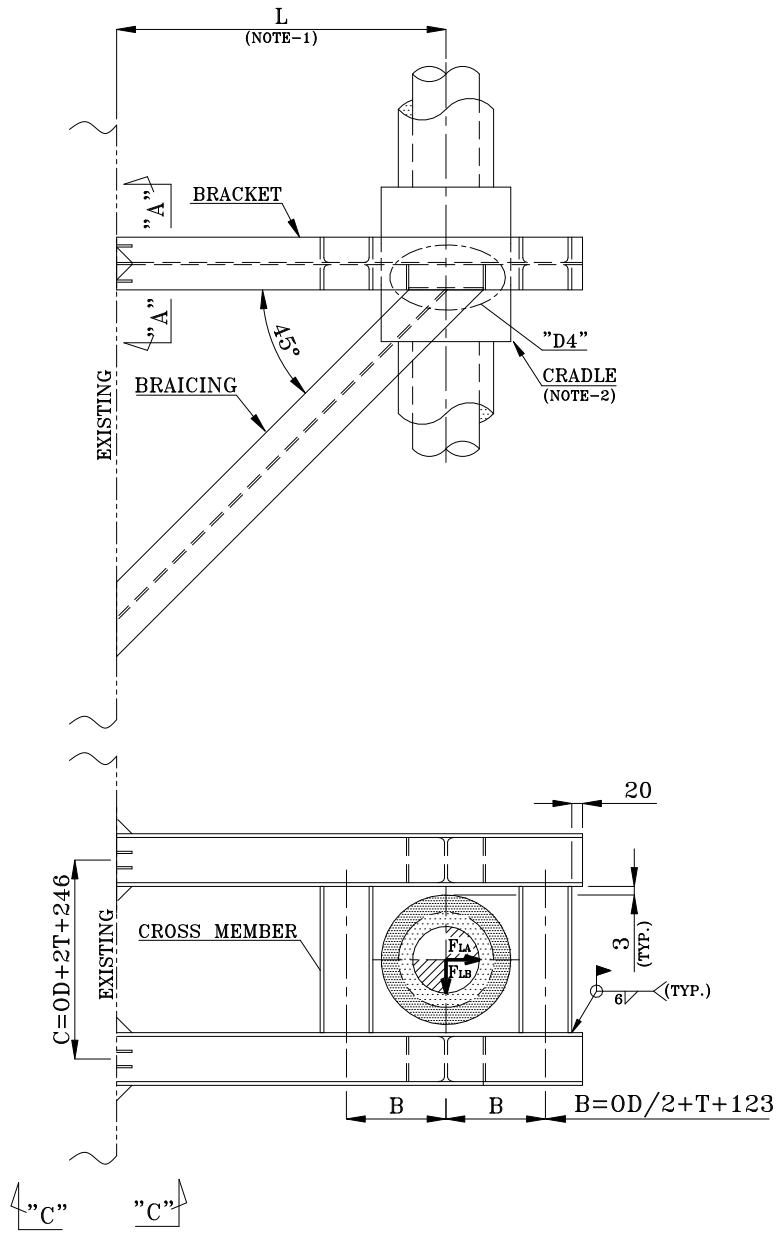
SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE DOUBLE GUIDE (COLD INSULATION) 14" ~ 24"	4
SE-20	6

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



INDICATION:

SE-20- □□ - □□□
(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CRADLE SEE (G-04).

MATERIAL:

STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.B

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE DOUBLE GUIDE (COLD INSULATION) 26" ~ 42"	5
SE-20	6

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

HIRGAN ENERGY

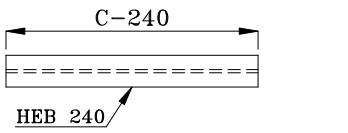
شماره پیمان:

053-073-9184

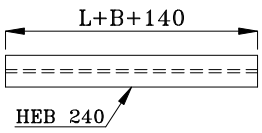
STANDARD PIPE SUPPORT DRAWINGS

شماره صفحه: 274 از 394

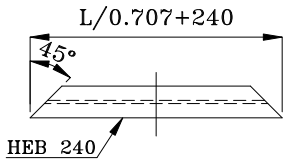
نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK



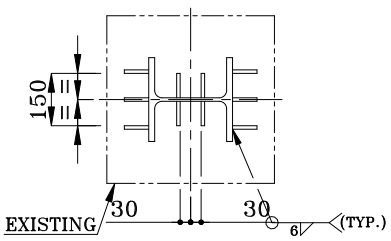
DETAIL OF CROSS MEMBER



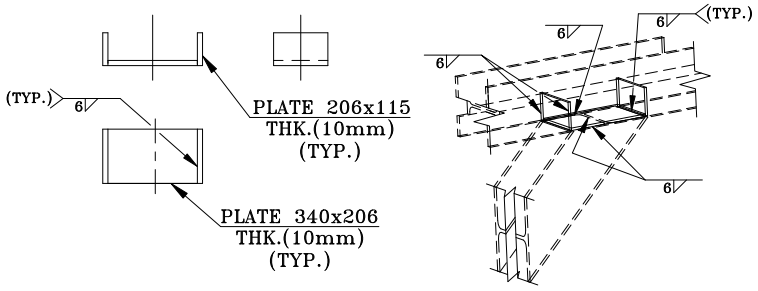
DETAIL OF BRACKET



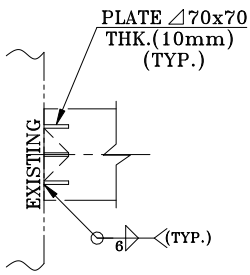
DETAIL OF BRAICING



VIEW "A"~"A"



DETAIL "D"



VIEW "C"~"C"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg) F_{LA}	ALLOW. LOAD(kg) F_{LB}
01	1000	27000	9200
02	1100		
03	1200		
04	1300		7000
05	1400		
06	1500		
07	1600		5500
08	1700		
09	1800		
10	1900		4300
11	2000		

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
26	26"
28	28"
30	30"
32	32"
34	34"
36	36"
38	38"
40	40"
42	42"

INSULATION THK. MARK:(3)

COLD INSULATION THK.	25-50	51-100	101-150	151-200	201-250	251-300
CRADLE THK.	T=50	T=100	T=150	T=200	T=250	T=300
INSULATION THK. MARK	1	2	3	4	5	6

INDICATION:

SE-20-[ ][ ]-[ ][ ][ ]

(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CRADLE SEE (G-04).

MATERIAL:

STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.B

SUPPORT DESCRIPTION:	SHEET
BRACKET ON STRUCTURE DOUBLE GUIDE (COLD INSULATION) 26" ~ 42"	6
SE-20	6

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

HIRGAN ENERGY

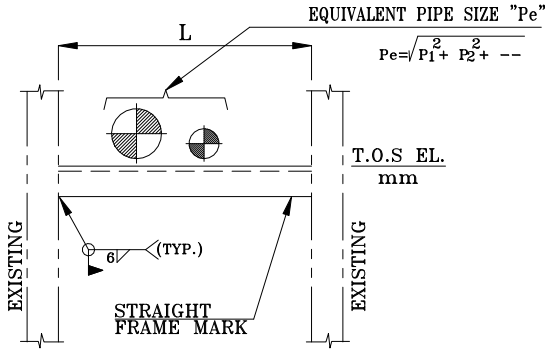
شماره پیمان:

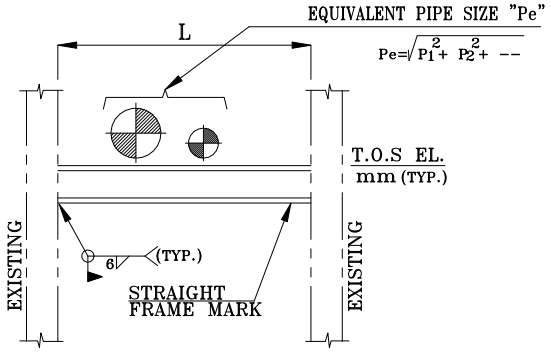
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 275 از 394





UNIT (mm)

SIZE MARK	EQUIV. PIPE SIZE "Pe"	L < 500		500< L ≤1000		1000< L ≤1500	
		FRAME SIZE	ALLOW. LOAD(kg)	FRAME SIZE	ALLOW. LOAD(kg)	FRAME SIZE	ALLOW. LOAD(kg)
02	2"	A70x70x7	400	A70x70x7	200	A70x70x7	150
03	3"	A70x70x7	400	A70x70x7	200	A70x70x7	250
04	4"	A70x70x7	800	A70x70x7	400	A100x100x10	500
06	6"	A100x100x10	1400	A100x100x10	700	A100x100x10	500
08	8"	A100x100x10	1400	A100x100x10	700	CHANNEL 140	1500
10	10"	CHANNEL 100	2800	CHANNEL 100	1400	CHANNEL 140	1500
12	12"	CHANNEL 100	2800	CHANNEL 100	1400	CHANNEL 160	2800

SIZE MARK	EQUIV. PIPE SIZE "Pe"	L < 500		500 < L ≤1000		1000< L ≤1500		1500< L ≤2000	
		FRAME SIZE	ALLOW. LOAD(kg)	FRAME SIZE	ALLOW. LOAD(kg)	FRAME SIZE	ALLOW. LOAD(kg)	FRAME SIZE	ALLOW. LOAD(kg)
14	14"	CHANNEL 140	5000	CHANNEL 140	2400	CHANNEL 160	2800	CHANNEL 160	2000
16	16"	–	–	CHANNEL 160	4000	CHANNEL 160	2800	CHANNEL 160	2000
18	18"	–	–	CHANNEL 160	4000	CHANNEL 160	2800	CHANNEL 160	2000
20	20"	–	–	CHANNEL 160	4000	HEB 140	5000	HEB 160	4000
22	24"	–	–	HEB 140	8000	HEB 140	5000	HEB 160	4000

LEGHT MARK:(2)

MARK	L
01	400
02	500
03	600
04	700
05	800
06	900
07	1000
08	1100
09	1200
10	1300
11	1400
12	1500
13	1600
14	1700
15	1800
16	1900
17	2000

INDICATION:

SE-21-□□-□□

(1) (2)

1-SIZE MARK
2-LENGHT MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- INSTALLATION ELEVATION SHALL BE SPECIFIED WITH A NOTE IN SUPPORT TAG.

EX: SE-21-14-11 (EL: 326100)

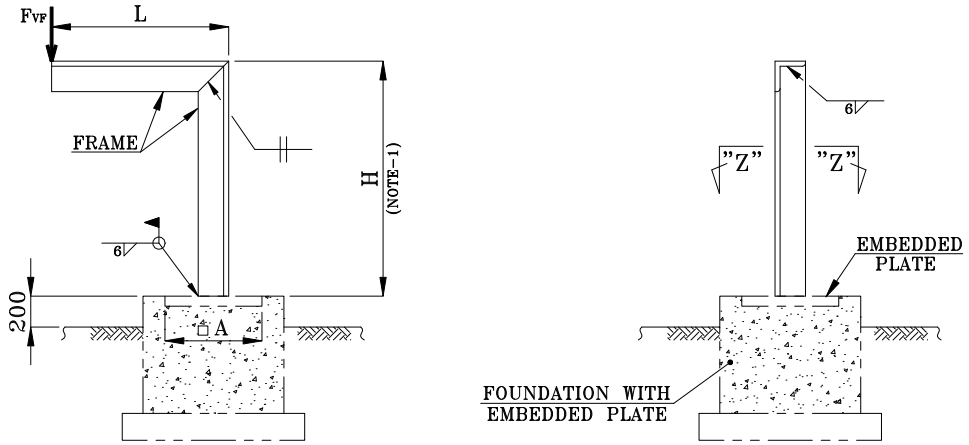
MATERIAL:

STANDARD PROFILE: ASTM A36.

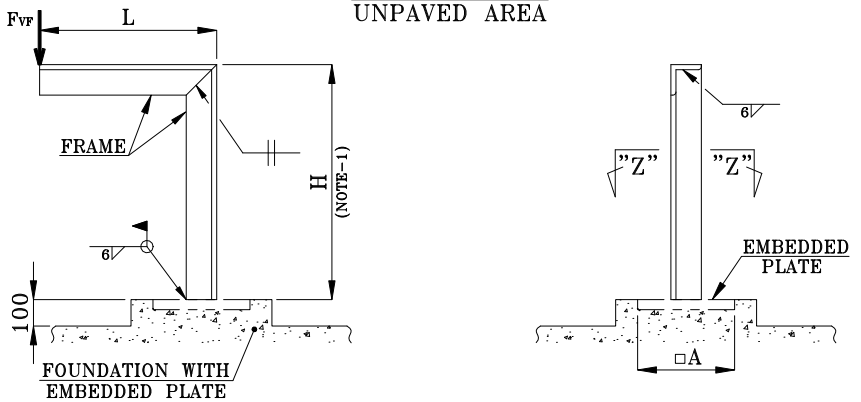
SUPPORT DESCRIPTION:	SHEET
STRAIGHT FRAME FOR MULTI PIPE	1
SE-21	1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

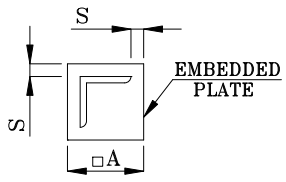
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 276 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	



TYPE "A"
UNPAVED AREA



TYPE "B"
PAVED AREA



VIEW "Z"~"Z"

INDICATION:

SF-01- [ ][ ][ ] - [ ][ ]
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- ALLOWABLE VERTICAL LOAD F_{VF} HAS BEEN CALCULATED BASED ON μ=0.3 WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
L-TYPE SUPPORT (ANGLE) AT GRADE	1
SF-01	2

HEIGHT & LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) FVF
01	300	01	200	ANGLE 50x50x5	30
02	400				
03	500	02	300		
04	600				
05	700				
06	800	03	400		
07	900				
08	300	04	500		25
09	400				
10	500				
11	600				
12	700				
13	800				
14	900				
15	300	05	600		20
16	400				
17	500				
18	600	06	700		
19	700				
20	800				
21	900				

HEIGHT & LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) FVF
22	300	07	200	ANGLE 70x70x7	110
23	400				
24	500	08	300		
25	600	09	400		
26	700				
27	800	10	500		
28	900				
29	300	11	600		85
30	400				
31	500				
32	600				
33	700				
34	800				
35	900				
36	300	12	700		70
37	400				
38	500				
39	600				
40	700	13	800		
41	800				
42	900				

FRAME	S	A
L50x50x5	20	90
L70x70x7	25	120

INDICATION:

SF-01- [ ][ ][ ] - [ ][ ]
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

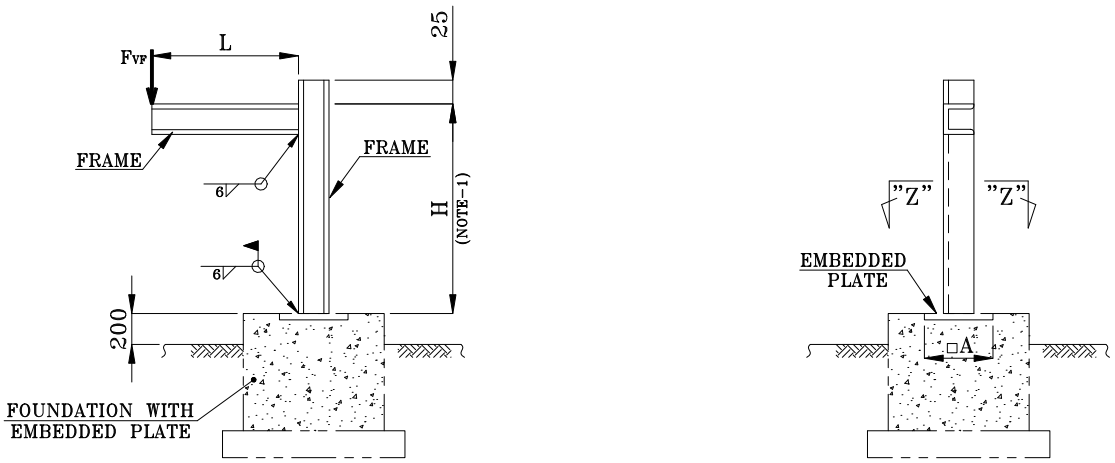
3- ALLOWABLE VERTICAL LOAD F_{VF} HAS BEEN CALCULATED BASED ON μ=0.3 WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

MATERIAL:
STANDARD PROFILE: ASTM A36

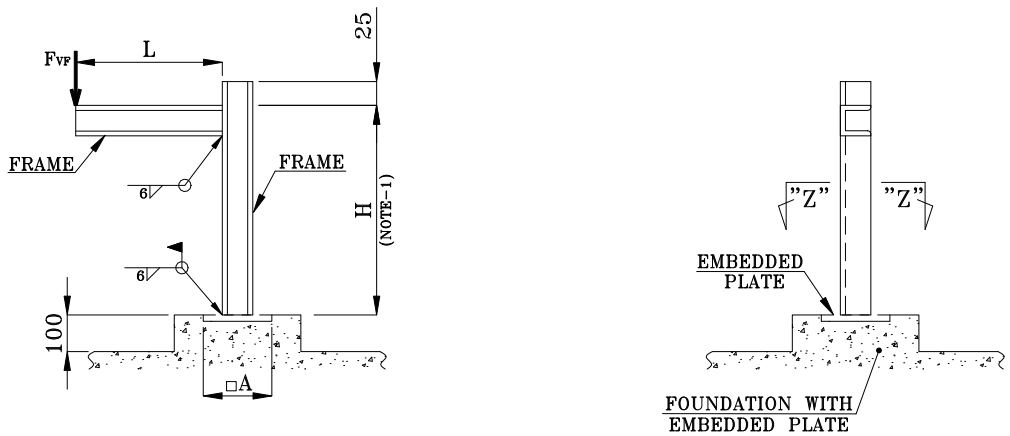
SUPPORT DESCRIPTION:	SHEET
L-TYPE SUPPORT (ANGLE) AT GRADE	2
SF-01	2

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

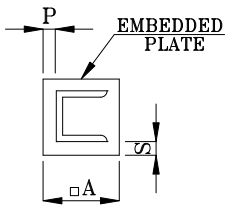
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 278 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	



TYPE "A"
UNPAVED AREA



TYPE "B"
PAVED AREA



INDICATION:

SF-02- [ ][ ] - [ ]
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- ALLOWABLE VERTICAL LOAD F_{VF} HAS BEEN CALCULATED BASED ON μ=0.3 WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
L-TYPE SUPPORT (CHANNEL) AT GRADE	1
SF-02	2

HEIGHT & LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
01	400	01	200	CHANNEL 140	210
02	500				
03	600	02	300		
04	700				
05	800				
06	900	03	450		
07	1000				
08	400	04	500		160
09	500				
10	600				
11	700	05	600		
12	800				
13	900				
14	1000				
15	400	06	700		120
16	500				
17	600				
18	700	07	800		
19	800				
20	900				
21	1000				

HEIGHT & LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
22	500	08	200	CHANNEL 180	260
23	600				
24	700	09	300		
25	800				
26	900	10	400		
27	1000	11	500		
28	1100				
29	500	12	600		210
30	600				
31	700				
32	800	13	700		
33	900				
34	1000				
35	1100				
36	500	14	850		180
37	600				
38	700				
39	800				
40	900				
41	1000				
42	1100				

FRAME	P	S	A
U140	70	30	200
U180	90	35	250

INDICATION:

SF-02- [ ][ ][ ] - [ ][ ]
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- ALLOWABLE VERTICAL LOAD Fvf HAS BEEN CALCULATED BASED ON μ=0.3 WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

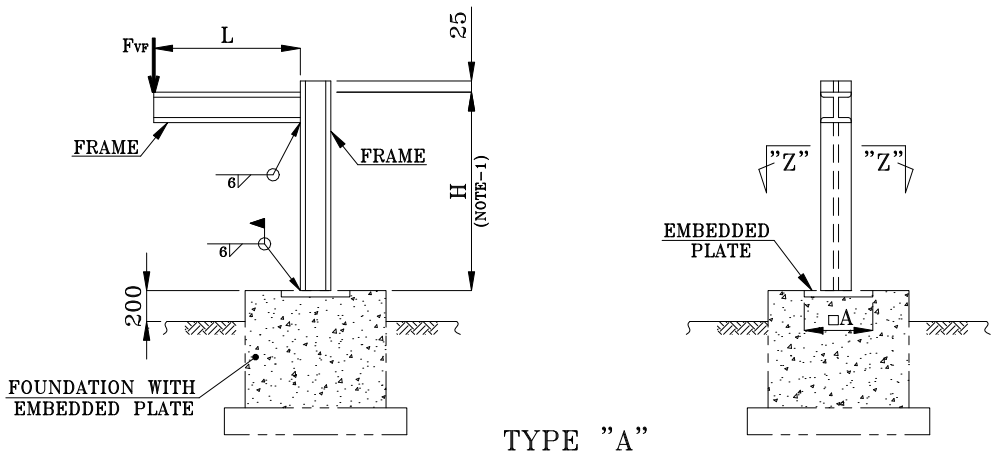
MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
L-TYPE SUPPORT (CHANNEL) AT GRADE	2
SF-02	2

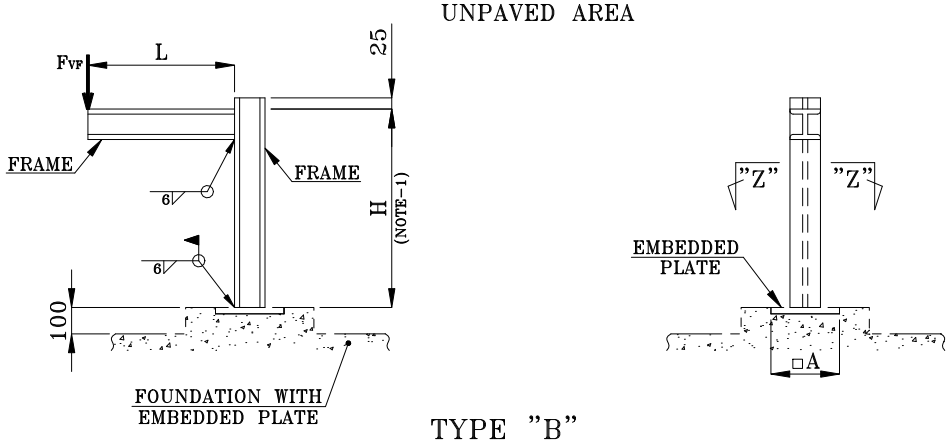
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02

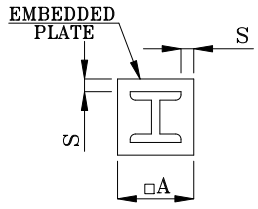
شماره صفحه: 280 از 394



TYPE "A"
UNPAVED AREA



TYPE "B"
PAVED AREA



VIEW "Z"~"Z"

INDICATION:

SF-03-□□□-□□
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- ALLOWABLE VERTICAL LOAD Fvf HAS BEEN CALCULATED BASED ON μ=0.3 WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

MATERIAL:

SUPPORT DESCRIPTION:	SHEET
L-TYPE SUPPORT (HEB) AT GRADE	1
SF-03	2

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

HEIGHT & LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
01	600	01	200	HEB140	780
02	700				
03	800	02	300		
04	900				
05	1000	03	400		
06	1100	04	500		
07	1200				
08	600	05	600		640
09	700				
10	800				
11	900	06	700		
12	1000				
13	1100				
14	1200				
15	600	07	800		530
16	700				
17	800				
18	900	08	900		
19	1000				
20	1100				
21	1200				

HEIGHT & LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
22	600	09	200	HEB180	1100
23	700	10	300		
24	800				
25	900	11	400		
26	1000	12	500		
27	1100				
28	1200	13	600		
29	600	14	700		900
30	700				
31	800				
32	900	15	800		
33	1000				
34	1100				
35	1200				
36	600	16	900		760
37	700				
38	800				
39	900	17	1000		
40	1000				
41	1100				
42	1200				

FRAME	S	A
HEB140	80	300
HEB180	100	380

INDICATION:

SF-03- [ ][ ][ ] - [ ][ ]
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- ALLOWABLE VERTICAL LOAD Fvf HAS BEEN CALCULATED BASED ON μ=0.3 WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

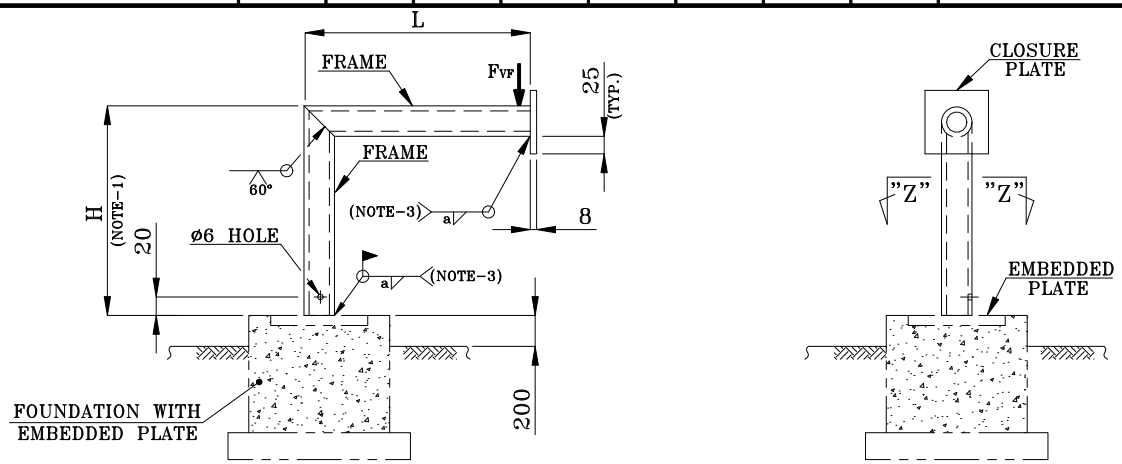
MATERIAL:

SUPPORT DESCRIPTION:	SHEET
L-TYPE SUPPORT (HEB) AT GRADE	2
SF-03	2

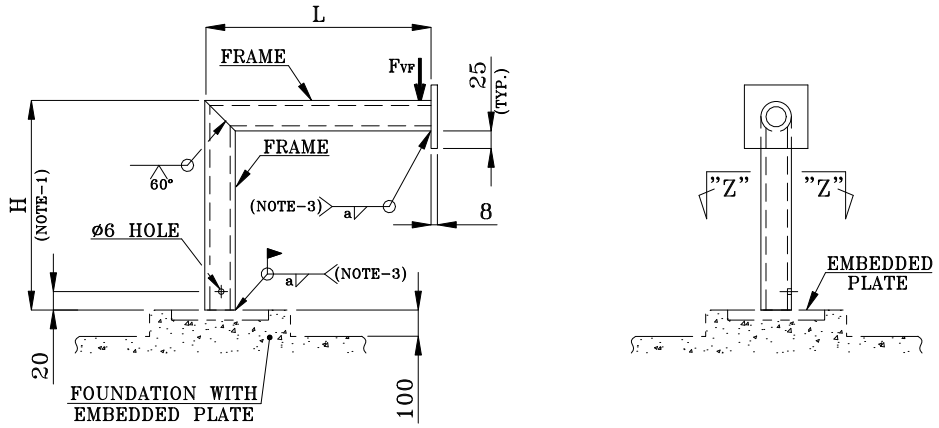
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02

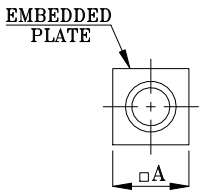
شماره صفحه: 282 از 394



TYPE "A"
UNPAVED AREA



TYPE "B"
PAVED AREA



VIEW "Z"~"Z"

INDICATION:

SF-04- [ ][ ][ ] - [ ][ ]
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- a= FRAME WALL THICHNESS.

4- ALLOWABLE VERTICAL LOAD F_{VF} HAS BEEN CALCULATED BASED ON μ=0.3 WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

MATERIAL:
PLATE: A283 Gr.C, PIPE: A53 Gr.B

SUPPORT DESCRIPTION:	SHEET
L-TYPE SUPPORT (PIPE) AT GRADE	1
SF-04	2

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

HEIGHT & LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	A	ALLOWABLE LOAD (kg) Fvf
01	400	01	200	PIPE 2", STD	140	90
02	500					
03	600	02	300			
04	700					
05	800	03	400			
06	900	04	500			
07	1000					
08	400	05	600			70
09	500					
10	600					
11	700	06	700			
12	800					
13	900					
14	1000					
15	400	07	800			60
16	500					
17	600					
18	700	08	900			
19	800					
20	900					
21	1000					

HEIGHT & LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	A	ALLOWABLE LOAD (kg) Fvf
22	500	09	200	PIPE 4", STD	170	410
23	600	10	300			
24	700					
25	800	11	400			
26	900	12	500			
27	1000					
28	1100	13	650			
29	500	14	700			350
30	600					
31	700					
32	800	15	800			
33	900					
34	1000					
35	1100					
36	500	16	900			260
37	600					
38	700	17	1000			
39	800					
40	900	18	1100			
41	1000	19	1200			
42	1100					

INDICATION:

SF-04-□□□-□□

(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- a= FRAME WALL THICHNESS.

4- ALLOWABLE VERTICAL LOAD F_{VF} HAS BEEN CALCULATED BASED ON μ=0.3 WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

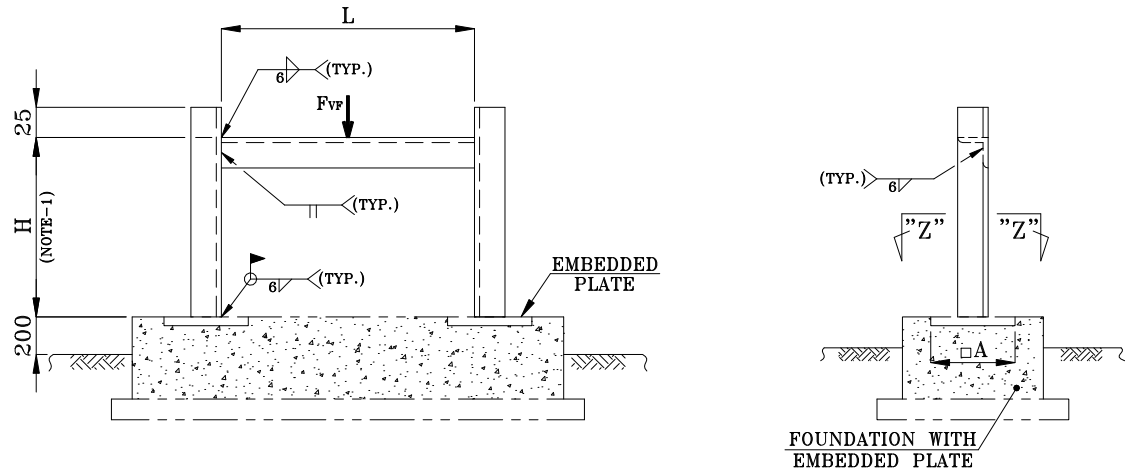
MATERIAL:
PLATE: A283 Gr.C, PIPE: A53 Gr.B

SUPPORT DESCRIPTION:	SHEET
L-TYPE SUPPORT (PIPE) AT GRADE SF-04	2 2

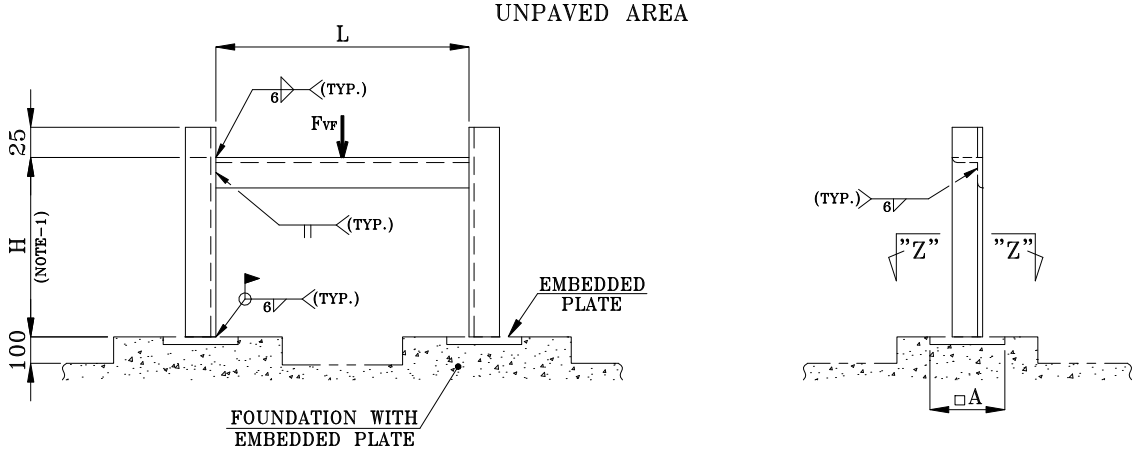
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02

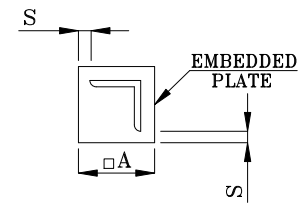
شماره صفحه: 284 از 394



TYPE "A"
UNPAVED AREA



TYPE "B"
PAVED AREA



VIEW "Z"~"Z"

INDICATION:

SF-05- [ ][ ][ ] - [ ][ ]
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- ALLOWABLE VERTICAL LOAD Fvf HAS BEEN CALCULATED BASED ON μ=0.3 WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
U-TYPE SUPPORT (ANGLE) AT GRADE	1
SF-05	2

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

HIRGAN ENERGY

شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

HEIGHT & LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
01	600	01	300	ANGLE 50x50x5	170
02	700	02	400		
03	800	03	500		
04	900	04	600		
05	1000				
06	1100	05	700		
07	1200	06	800		
08	600	07	900		160
09	700				
11	800				
12	900	08	1000		
13	1000				
14	1100				
15	1200				
16	600	09	1100		140
17	700				
18	800				
19	900	10	1200		
20	1000				
21	1100				
22	1200				
23	600	11	300	ANGLE 70x70x7	470
24	700	12	400		
25	800				
26	900	13	500		
27	1000	14	600		
28	1100				
29	1200	15	700		
30	600	16	800		440
31	700				
32	800				
33	900	17	900		
34	1000				
35	1100				
36	1200				
37	600	18	1000		400
38	700				
39	800				
40	900	19	1100		
41	1000				
42	1100				
43	1200				

HEIGHT & LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
44	600	20	1200	ANGLE 70x70x7	350
45	700				
46	800				
47	900	21	1300		
48	1000				
49	1100				
50	1200				
51	600	22	300	ANGLE 100x100x10	1100
52	700	23	400		
53	800	24	500		
54	900				
55	1000	25	600		
56	1100	26	700		
57	1200	27	800		
58	600	28	900		1000
59	700				
60	800				
61	900	29	1000		
62	1000				
63	1100				
64	1200				
65	600	30	1100		1000
66	700				
67	800				
68	900	31	1200		
69	1000				
70	1100				
71	1200				
72	600	32	1300		900
73	700				
74	800				
75	900	33	1400		
76	1000				
77	1100				
78	1200				

FRAME	S	A
L50x50x5	20	90
L70x70x7	25	120
L100x100x10	35	170

INDICATION:

SF-05- [ ][ ][ ] - [ ][ ]

(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- ALLOWABLE VERTICAL LOAD Fvf HAS BEEN CALCULATED BASED ON μ=0.3 WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

MATERIAL:

STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:

U-TYPE SUPPORT
(ANGLE)
AT GRADE

SF-05

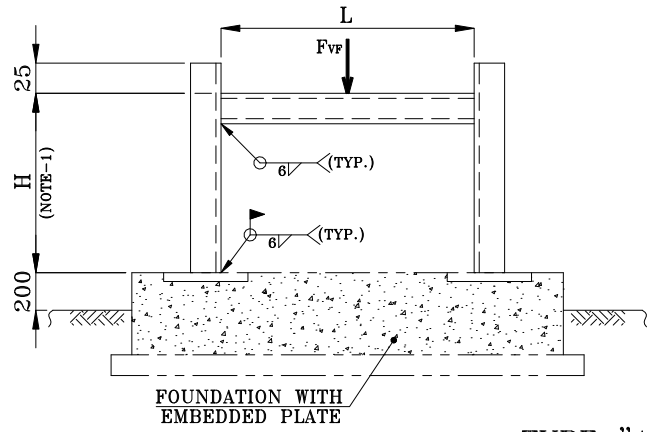
SHEET 2 2

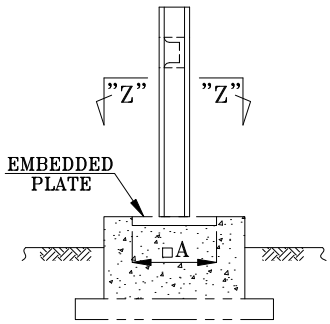
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

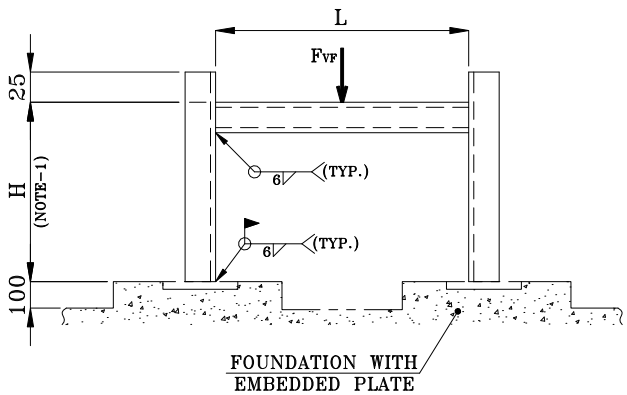
STANDARD PIPE SUPPORT DRAWINGS

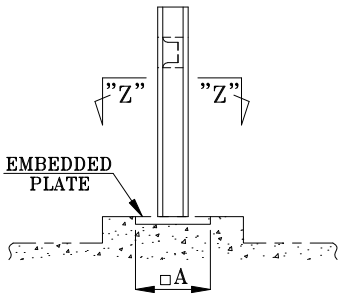
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



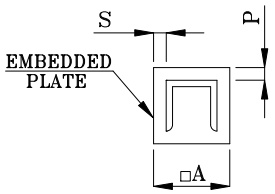


TYPE "A"
UNPAVED AREA





TYPE "B"
PAVED AREA



VIEW "Z"~"Z"

INDICATION:

SF-06- (1)(2) - (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- ALLOWABLE VERTICAL LOAD F_{VF} HAS BEEN CALCULATED BASED ON μ=0.3 WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
U-TYPE SUPPORT (CHANNEL) AT GRADE	1
SF-06	2

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

HIRGAN ENERGY

شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

HEIGHT & LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
01	600	01	300	CHANNEL 100	800
02	700				
03	800	02	400		
04	900				
05	1000	03	500		
06	1100	04	600		
07	1200				
08	600	05	700		730
09	700				
10	800				
11	900	06	800		
12	1000				
13	1100				
14	1200				
15	600	07	900		
16	700				
17	800				
18	900	08	1000		
19	1000				
20	1100				
21	1200				
22	600	09	1100		700
23	700				
24	800				
25	900	10	1200		
26	1000				
27	1100				
28	1200				
29	600	11	300	CHANNEL 140	1400
30	700	12	400		
31	800				
32	900	13	500		
33	1000	14	600		
34	1100				
35	1200	15	700		
36	600	16	800		1300
37	700				
38	800				
39	900	17	900		
40	1000				
41	1100				
42	1200				
43	600	18	1000		
44	700				
45	800				
46	900	19	1100		
47	1000				
48	1100				
49	1200				

HEIGHT & LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
50	600	20	1200	CHANNEL 140	1200
51	700				
52	800				
53	900	21	1300		
54	1000				
55	1100				
56	1200				
57	600	22	300	CHANNEL 160	1700
58	700	23	400		
59	800	24	500		
60	900				
61	1000	25	600		
62	1100	26	700		
63	1200	27	800		
64	600	28	900		1500
65	700				
66	800				
67	900	29	1000		
68	1000				
69	1100				
70	1200				
71	600	30	1100		
72	700				
73	800				
74	900	31	1200		
75	1000				
76	1100				
77	1200				
78	600	32	1300		1400
79	700				
80	800				
81	900	33	1400		
82	1000				
83	1100				
84	1200				

FRAME	S	P	A
U100	20	45	140
U140	30	70	200
U160	35	80	230

INDICATION:

SF-06-[ ][ ][ ]-[ ][ ]

(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- ALLOWABLE VERTICAL LOAD Fvf HAS BEEN CALCULATED BASED ON μ=0.3 WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

MATERIAL:

STANDARD PROFILE: ASTM A36

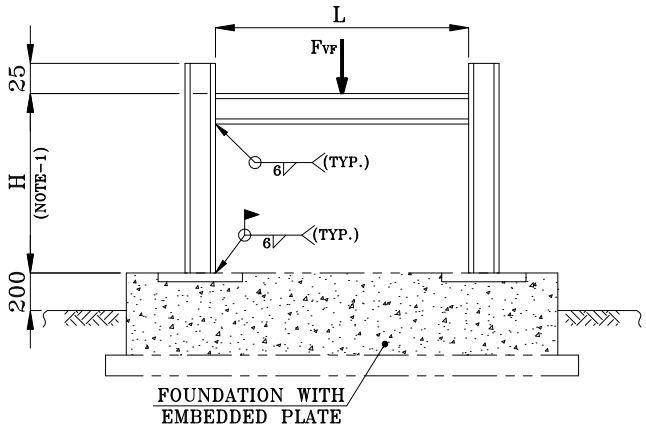
SUPPORT DESCRIPTION:	SHEET
U-TYPE SUPPORT (CHANNEL) AT GRADE	2
SF-06	2

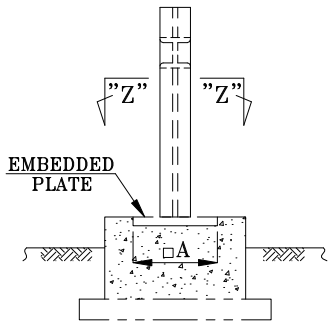
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

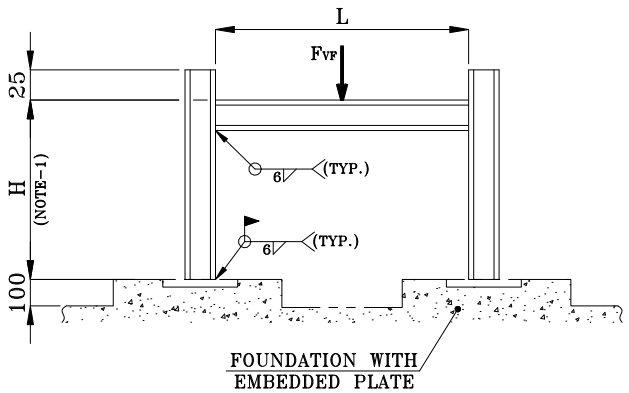
STANDARD PIPE SUPPORT DRAWINGS

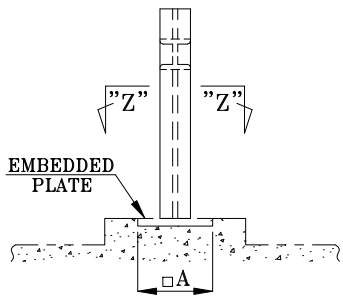
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



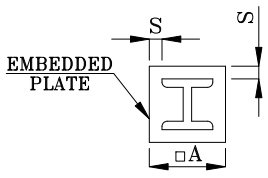


TYPE "A"
UNPAVED AREA





TYPE "B"
PAVED AREA



VIEW "Z"~"Z"

INDICATION:

SF-07- [ ][ ][ ] - [ ][ ]
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- ALLOWABLE VERTICAL LOAD F_{VF} HAS BEEN CALCULATED BASED ON μ=0.3 WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
U-TYPE SUPPORT (HEB) AT GRADE	1
SF-07	3

HEIGHT & LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
01	700	01	400	HEB100	1300
02	800				
03	900	02	500		
04	1000	03	600		
05	1100				
06	1200	04	700		
07	1300				
08	1400	05	800		
09	1500	06	900		
10	700	07	1000		1200
11	800				
12	900	08	1100		
13	1000				
14	1100	09	1200		
15	1200				
16	1300	10	1300		
17	1400	11	1400		
18	1500				
19	700	12	400	HEB140	2400
20	800	13	500		
21	900	14	600		
22	1000	15	700		
23	1100	16	800		
24	1200	17	900		
25	1300	18	1000		
26	1400	19	1100		
27	1500	20	1200		
28	700	21	1300		2300
29	800				
30	900				
31	1000	22	1400		
32	1100				
33	1200				
34	1300	23	1500		
35	1400				
36	1500				

HEIGHT & LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
37	700	24	1600	HEB140	2200
38	800				
39	900	25	1700		
40	1000				
41	1100	26	1800		
42	1200				
43	1300	27	1900		
44	1400	28	2000		
45	1500				
46	700	29	400	HEB200	4600
47	800	30	500		
48	900				
49	1000	31	600		
50	1100	32	700		
51	1200	33	800		
52	1300	34	900		
53	1400				
54	1500	35	1000		

INDICATION:

SF-07-[ ][ ][ ]-[ ][ ]
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- ALLOWABLE VERTICAL LOAD Fvf HAS BEEN CALCULATED BASED ON μ=0.3 WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
U-TYPE SUPPORT (HEB) AT GRADE	2
SF-07	3

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

HEIGHT & LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOWABLE LOAD (kg) Fvf
55	700	36	1100	HEB200	4500
56	800				
57	900	37	1200		
58	1000				
59	1100	38	1300		
60	1200				
61	1300	39	1400		
62	1400	40	1500		
63	1500				
64	700	41	1600		4400
65	800				
66	900	42	1700		
67	1000				
68	1100	43	1800		
69	1200				
70	1300	44	1900		
71	1400	45	2000		
72	1500				
73	700	46	2100		3900
74	800				
75	900	47	2200		
76	1000				
77	1100	48	2300		
78	1200				
79	1300	49	2400		
80	1400	50	2500		
81	1500				

FRAME	S	A
HEB100	60	220
HEB140	80	300
HEB200	100	400

INDICATION:

SF-07- [ ][ ][ ] - [ ][ ]
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- ALLOWABLE VERTICAL LOAD Fvf HAS BEEN CALCULATED BASED ON μ=0.3 WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

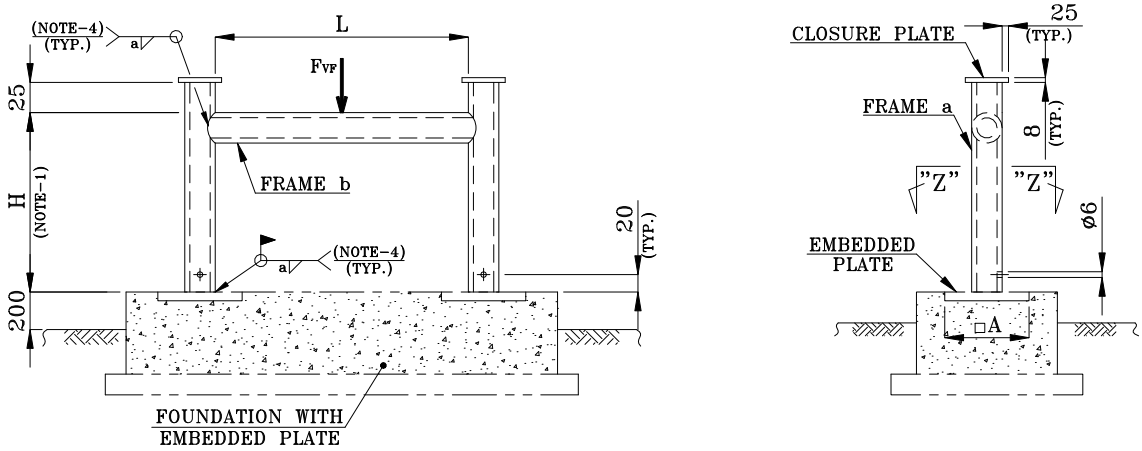
MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:	SHEET
U-TYPE SUPPORT (HEB) AT GRADE	3
SF-07	3

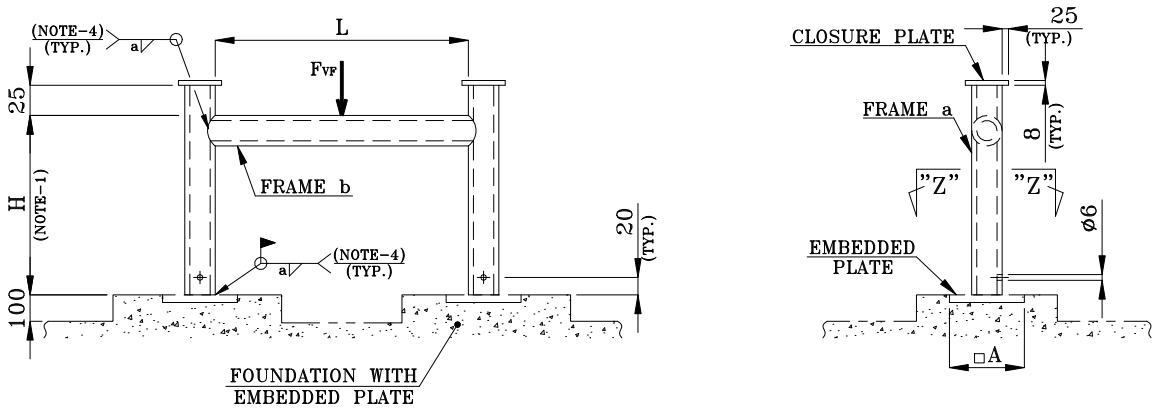
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 291 از 394

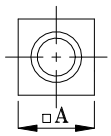
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



TYPE "A"
UNPAVED AREA



TYPE "B"
PAVED AREA



VIEW "Z"~"Z"

INDICATION:

SF-08-□□□-□□

(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- DIMENSIONS "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- ALLOWABLE VERTICAL LOAD F_{VF} HAS BEEN CALCULATED BASED ON μ=0.3 WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

4- FOR FRAME SIZE ≤4", a=FRAME WALL THICKNESS, FOR FRAME SIZE >4", a=6mm.

MARERIAL:
PIPE: A53 Gr.B, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
U-TYPE SUPPORT (PIPE) AT GRADE	1
SF-08	2

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

HIRGAN ENERGY

شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

HEIGHT & LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME a	FRAME b	A	ALLOWABLE LOAD (kg) Fvf
01	600	01	400	PIPE 3", STD	PIPE 2", STD	140	580
02	700						
03	800	02	500				
04	900						
05	1000	03	600				
06	1100	04	700				
07	1200						
08	600	05	800				500
09	700						
10	800						
11	900	06	900				
12	1000						
13	1100						
14	1200						
15	600	07	1000				440
16	700						
17	800						
18	900	08	1100				
19	1000						
20	1100						
21	1200						
22	600	09	1200				390
23	700						
24	800						
25	900	10	1300				
26	1000						
27	1100						
28	1200						
29	600	11	400	PIPE 4", STD	PIPE 3", STD	170	1500
30	700	12	500				
31	800	13	600				
32	900						
33	1000	14	700				
34	1100	15	800				
35	1200	16	900				
36	600	17	1000				1300
37	700						
38	800						
39	900	18	1100				
40	1000						
41	1100						
42	1200						
43	600	19	1200				1100
44	700						
45	800						
46	900	20	1300				
47	1000						
48	1100						
49	1200						

HEIGHT & LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME a	FRAME b	A	ALLOWABLE LOAD (kg) Fvf
50	600	21	1400	PIPE 4", STD	PIPE 3", STD	170	1000
51	700						
52	800						
53	900	22	1500				
54	1000						
55	1100						
56	1200						
57	600	23	400	PIPE 8", STD	PIPE 6", STD	270	4700
58	700	34	500				
59	800	25	600				
60	900	26	700				
61	1000	27	800				
62	1100	28	900				
63	1200	29	1000				
64	600	30	1100				4100
65	700	31	1200				
66	800						
67	900	32	1300				
78	1000						
89	1100						
70	1200						
71	600	33	1400				3600
72	700						
73	800						
74	900	34	1500				
75	1000						
76	1100						
77	1200						
78	600	35	1600				3200
79	700						
80	800						
81	900	36	1700				
82	1000						
83	1100						
84	1200						

INDICATION:

SF-08- [ ][ ][ ] - [ ][ ]

(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- DIMENSIONS "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- ALLOWABLE VERTICAL LOAD Fvf HAS BEEN CALCULATED BASED ON μ=0.3 WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

4- FOR FRAME SIZE ≤4", a=FRAME WALL THICKNESS, FOR FRAME SIZE >4", a=6mm.

MARERIAL:

PIPE: A53 Gr.B, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
U-TYPE SUPPORT (PIPE) AT GRADE	2
SF-08	2

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

HIRGAN ENERGY

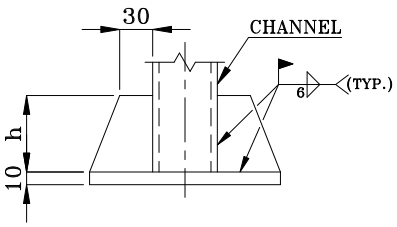
شماره پیمان:

053-073-9184

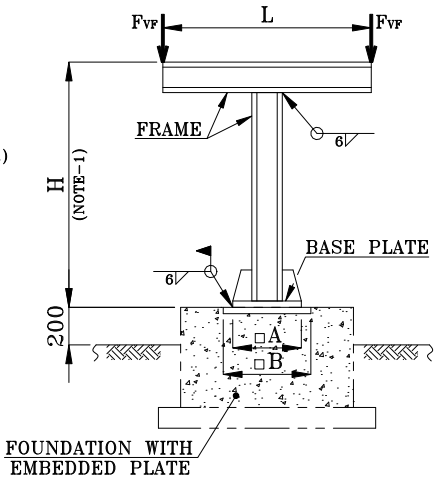
STANDARD PIPE SUPPORT DRAWINGS

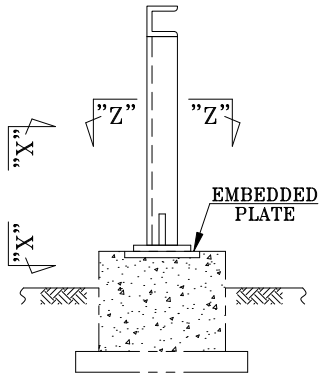
شماره صفحه: 293 از 394

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK



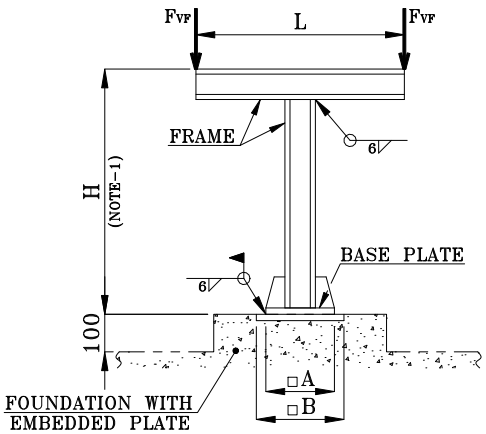
VIEW "X"~"X"

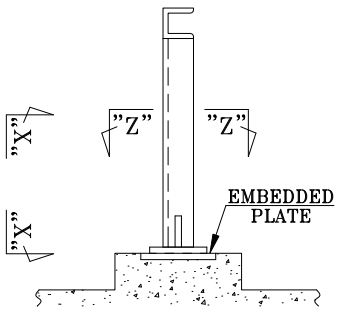




TYPE "A"

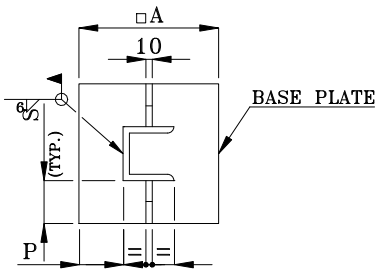
UNPAVED AREA





TYPE "B"

PAVED AREA



VIEW "Z"~"Z"

INDICATION:

SF-09- □□ - □□□□

(1) (2) (3) (4)

1-TYPE MARK
2-SIZE MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- ALLOWABLE VERTICAL LOAD Fvf HAS BEEN CALCULATED BASED ON μ=0.3 WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

4- ALLOWABLE LOAD HAS BEEN CALCULATED BASED ON HORIZONTAL FORCES IN ONE DIRECTION.

5- ALLOWABLE LOAD HAS BEEN CALCULATED BASED ON VICE VERSA HORIZONTAL FORCES.

MATERIAL: STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
T-TYPE SUPPORT (CHANNEL)	1
SF-09	2

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 294 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

053-073-9184

SIZE MARK:(2)

MARK	FRAME	A	B	S	P	h	ALLOW.LOAD(kg)-Fvf (NOTE-4)			ALLOW.LOAD(kg)-Fvf (NOTE-5)		
							H≤1200	1200<H≤2500	2500<H≤4000	L≤600	600<L≤1200	1200<L≤1800
1	U100	220	320	60	85	80	130	60	40	90	40	30
2	U120	240	340	60	90	80	170	80	50	110	50	30
3	U140	300	400	80	120	80	200	100	60	140	70	40
4	U160	320	420	80	130	100	290	140	85	180	90	60
5	U180	340	440	80	135	100	360	175	110	200	100	60
6	U200	400	500	100	160	100	430	215	135	240	120	80

LENGTH MARK:(4)

MARK	L
01	400
02	500
03	600
04	700
05	800
06	900
07	1000
08	1100
09	1200
10	1300
11	1400
12	1500
13	1600
14	1700
15	1800

HEIGHT MARK:(3)

MARK	H
01	400
02	500
03	600
04	700
05	800
06	900
07	1000
08	1100
09	1200
10	1300
11	1400
12	1500
13	1600
14	1700
15	1800
16	1900
17	2000
18	2100
19	2200
20	2300
21	2400
22	2500
23	2600
24	2700
25	2800
26	2900
27	3000
28	3100
29	3200
30	3300
31	3400
32	3500
33	3600
34	3700
35	3800
36	3900
37	4000

INDICATION:

SF-09-□□-□□□□

(1) (2) (3) (4)

1-TYPE MARK
2-SIZE MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- ALLOWABLE VERTICAL LOAD Fvf HAS BEEN CALCULATED BASED ON μ=0.3 WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

4- ALLOWABLE LOAD HAS BEEN CALCULATED BASED ON HORIZONTAL FORCES IN ONE DIRECTION.

5- ALLOWABLE LOAD HAS BEEN CALCULATED BASED ON VICE VERSA HORIZONTAL FORCES.

MATERIAL: STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
T-TYPE SUPPORT (CHANNEL)	2
SF-09	2

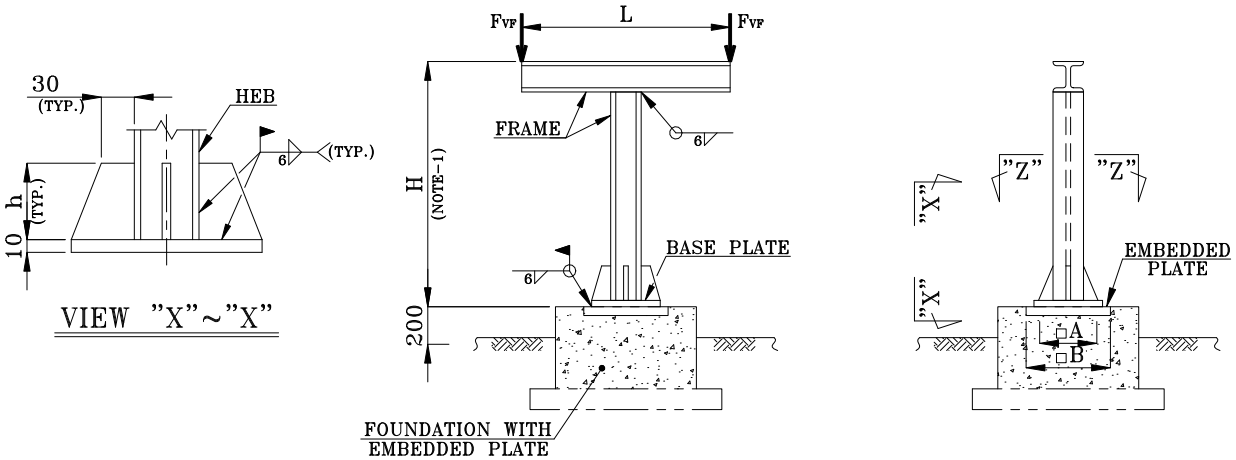
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

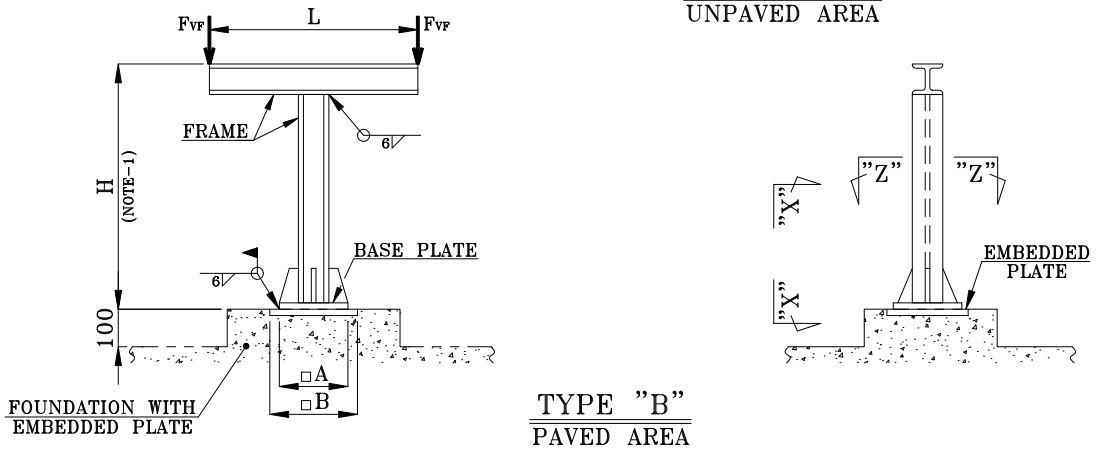
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

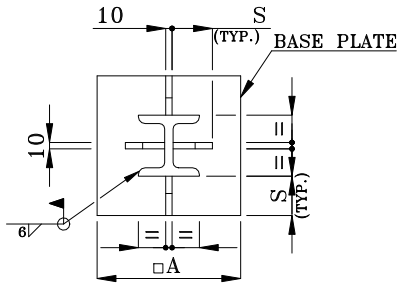
شماره صفحه: 295 از 394



TYPE "A"
UNPAVED AREA



TYPE "B"
PAVED AREA



INDICATION:

SF-10- (1)(2) - (3)(4)

1-TYPE MARK
2-SIZE MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- ALLOWABLE VERTICAL LOAD Fvf HAS BEEN CALCULATED BASED ON μ=0.3 WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

4- ALLOWABLE LOAD HAS BEEN CALCULATED BASED ON HORIZONTAL FORCES IN ONE DIRECTION.

5- ALLOWABLE LOAD HAS BEEN CALCULATED BASED ON VICE VERSA HORIZONTAL FORCES.

MATERIAL: STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
T-TYPE SUPPORT (HEB)	1
SF-10	2

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

STANDARD PIPE SUPPORT DRAWINGS

شماره پیمان:	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 296 از 394
053-073-9184	BK	GCS	PEDCO	120	PI	DW	0001	D02	

SIZE MARK:(2)

MARK	FRAME	A	B	S	h	ALLOW.LOAD(kg)-Fvf (NOTE-4)			ALLOW.LOAD(kg)-Fvf (NOTE-5)		
						H≤1200	1200<H≤2500	2500<H≤4000	L≤600	600<L≤1200	1200<L≤1800
1	HEB100	220	320	60	80	380	180	120	195	95	65
2	HEB120	240	340	60	80	600	300	180	250	125	80
3	HEB140	300	400	80	80	890	440	280	310	155	100
4	HEB160	320	420	80	100	1250	620	390	380	190	130
5	HEB180	340	440	80	100	1700	840	530	450	220	150
6	HEB200	400	500	100	100	2200	1100	700	520	270	180

HEIGHT MARK:(3)

MARK	H
01	400
02	500
03	600
04	700
05	800
06	900
07	1000
08	1100
09	1200
10	1300
11	1400
12	1500
13	1600
14	1700
15	1800
16	1900
17	2000
18	2100
19	2200
20	2300
21	2400
22	2500
23	2600
24	2700
25	2800
26	2900
27	3000
28	3100
29	3200
30	3300
31	3400
32	3500
33	3600
34	3700
35	3800
36	3900
37	4000

LENGTH MARK:(4)

MARK	L
01	400
02	500
03	600
04	700
05	800
06	900
07	1000
08	1100
09	1200
10	1300
11	1400
12	1500
13	1600
14	1700
15	1800

INDICATION:

SF-10-□□-□□□

(1) (2) (3) (4)

1-TYPE MARK
2-SIZE MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- ALLOWABLE VERTICAL LOAD Fvf HAS BEEN CALCULATED BASED ON μ=0.3 WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

4- ALLOWABLE LOAD HAS BEEN CALCULATED BASED ON HORIZONTAL FORCES IN ONE DIRECTION.

5- ALLOWABLE LOAD HAS BEEN CALCULATED BASED ON VICE VERSA HORIZONTAL FORCES.

MATERIAL: STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

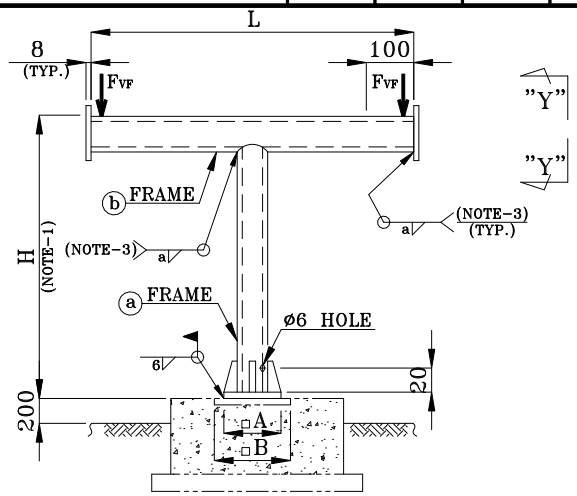
SUPPORT DESCRIPTION:	SHEET
T-TYPE SUPPORT (HEB)	2
SF-10	2

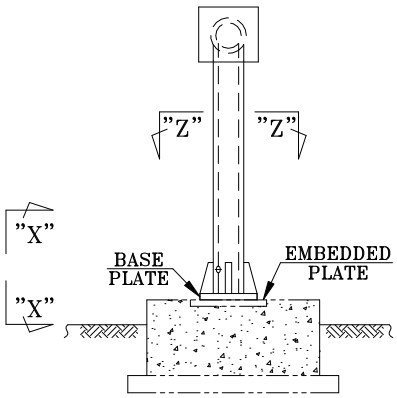
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

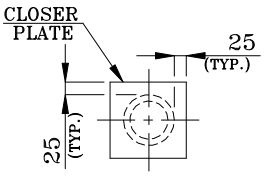
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

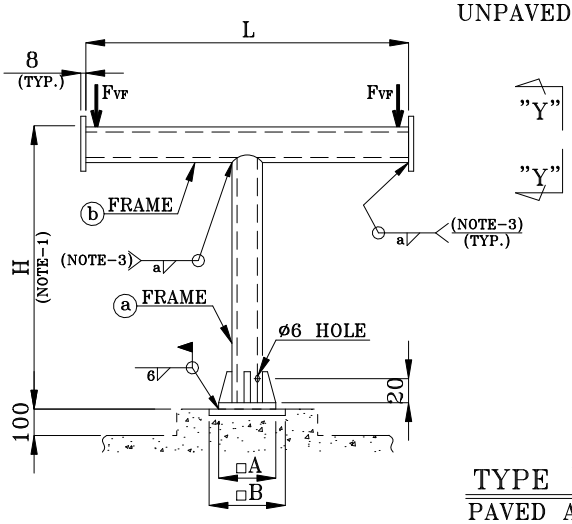


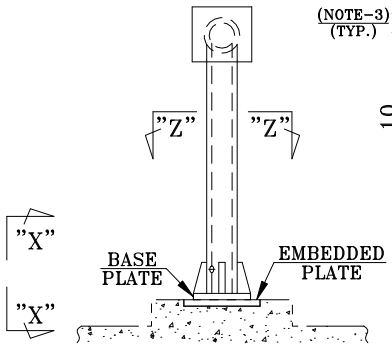


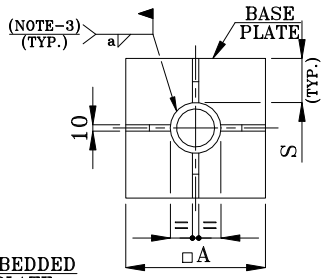


VIEW "Y"~"Y"

TYPE "A"
UNPAVED AREA

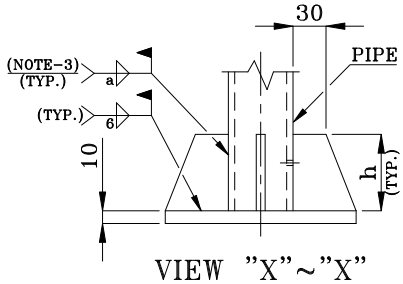






VIEW "Z"~"Z"

TYPE "B"
PAVED AREA



VIEW "X"~"X"

INDICATION:

SF-11- □□ (1)(2) - □□□ (3)(4)

1-TYPE MARK
2-SIZE MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- DIMENSIONS "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- FOR FRAME SIZE ≤4", a=FRAME WALL THICKNESS, FOR FRAME SIZE >4", a=6mm.

4- ALLOWABLE VERTICAL LOAD FVF HAS BEEN CALCULATED BASED ON μ=0.3 WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

MATERIAL:
PIPE: A53 Gr.B, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
T-TYPE SUPPORT (PIPE)	1
SF-11	2

SIZE MARK:(2)

MARK	FRAME ⓐ	FRAME ⓑ	A	B	S	h	ALLOW.LOAD(kg)-Fvf		
							H≤1200	1200<H≤2500	2500<H≤4000
1	PIPE 2", STD	PIPE 3", STD	180	280	60	80	90	50	30
2	PIPE 3", STD	PIPE 4", STD	250	350	80	100	290	140	90
3	PIPE 4", STD	PIPE 6", STD	275	375	80	100	540	270	170
4	PIPE 6", STD	PIPE 8", STD	330	430	80	100	1300	690	440
5	PIPE 8", STD	PIPE 10", STD	420	520	100	100	2600	1300	850

LENGTH MARK:(4)

MARK	L
01	400
02	500
03	600
04	700
05	800
06	900
07	1000
08	1100
09	1200
10	1300
11	1400
12	1500
13	1600
14	1700
15	1800

HEIGHT MARK:(3)

MARK	H
01	400
02	500
03	600
04	700
05	800
06	900
07	1000
08	1100
09	1200
10	1300
11	1400
12	1500
13	1600
14	1700
15	1800
16	1900
17	2000
18	2100
19	2200
20	2300
21	2400
22	2500
23	2600
24	2700
25	2800
26	2900
27	3000
28	3100
29	3200
30	3300
31	3400
32	3500
33	3600
34	3700
35	3800
36	3900
37	4000

INDICATION:

SF-11-□□-□□□□
(1) (2) (3) (4)

1-TYPE MARK
2-SIZE MARK
3-HEIGHT MARK
4-LENGTH MARK

NOTE:

1- DIMENSIONS "H" CAN BE ADJUSTED AT FIELD.

2- THE MAXIMUM QUANTITY OF PIPE WHICH CAN BE SUPPORTED SHALL BE CHECKED WITH ALLOWABLE LOAD.

3- FOR FRAME SIZE ≤4", a=FRAME WALL THICKNESS, FOR FRAME SIZE >4", a=6mm.

4- ALLOWABLE VERTICAL LOAD Fvf HAS BEEN CALCULATED BASED ON μ=0.3 WHICH IS REDUCED BY HORIZONTAL FORCES. HORIZONTAL FORCES ARE THE FORCES FORMED BY FRICTION OF THE PIPING.

MATERIAL:
PIPE: A53 Gr.B, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
T-TYPE SUPPORT (PIPE)	2
SF-11	2

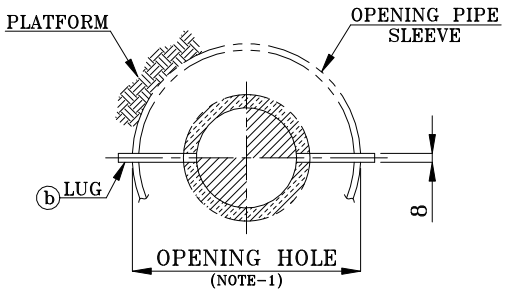
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

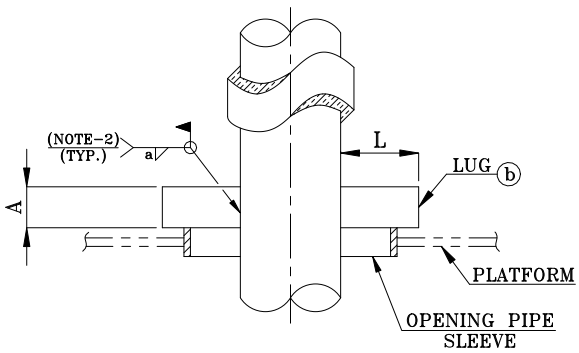
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 299 از 394





MATERIAL MARK:(1)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL
0°C TO 400°C	MARK	A
	ⓐ	–
	ⓑ	A285 Gr.C
	ⓒ	–

LUG MARK:(3)

MARK	INSULATION THK.	L
1	BARE	110
2	5-25	130
3	26-40	150
4	41-60	170
5	61-80	190
6	81-100	210

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	A
0A	1/2"	40
0B	3/4"	40
01	1"	50
1A	1+1/2"	50
02	2"	50

INDICATION:

SG-01-□□□-□
(1) (2) (3)

1-MATERIAL MARK
2-NPS MARK
3-LUG MARK

NOTE:

1- FOR OPENING HOLE DIMENSION, REFER TO DIS-PPD-091.

2- a=RUN PIPE WALL THICKNESS.

3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-18).

SUPPORT DESCRIPTION:	SHEET
WELDED PROP (CS-WITHOUT PWHT) 1/2" ~ 2"	1
SG-01	1

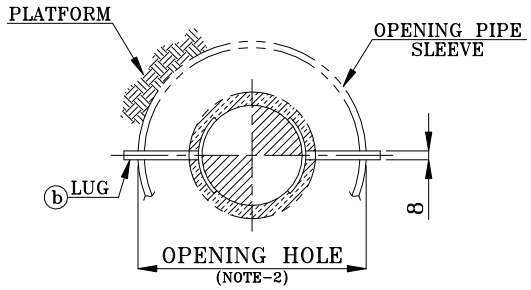
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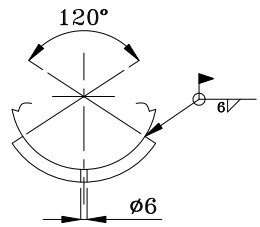
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

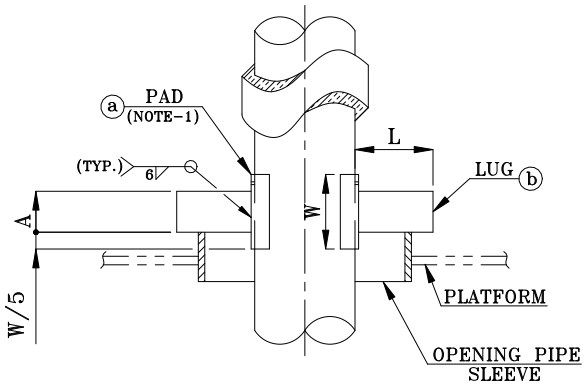
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 300 از 394





DETAIL OF PAD



LUG MARK:(3)

MARK	INSULATION THK.	L
1	BARE	110
2	5-50	130
3	51-100	180
4	101-150	230
5	151-200	280

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	W	A
0A	1/2"	100	40
0B	3/4"	100	40
01	1"	150	50
1A	1+1/2"	150	50
02	2"	150	50

MATERIAL MARK:(1)

DES. TEMP	MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 400°C	MARK	A	C	E
	ⓐ NOTE-1	-	-	-
	ⓑ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓒ	-	-	-
400°C TO 550°C	MARK	B	D	F
	ⓐ NOTE-1	-	-	-
	ⓑ	-	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	-	-	-

INDICATION:

SG-02-□□□-□
(1) (2) (3)

1-MATERIAL MARK
2-NPS MARK
3-LUG MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT.

2- FOR OPENING HOLE DIMENSION, REFER TO DIS-PPD-091.

3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-18).

SUPPORT DESCRIPTION:	SHEET
WELDED PROP (CS-WITH PWHT, AS, SS) 1/2" ~ 2"	1
SG-02	1

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

HIRGAN ENERGY

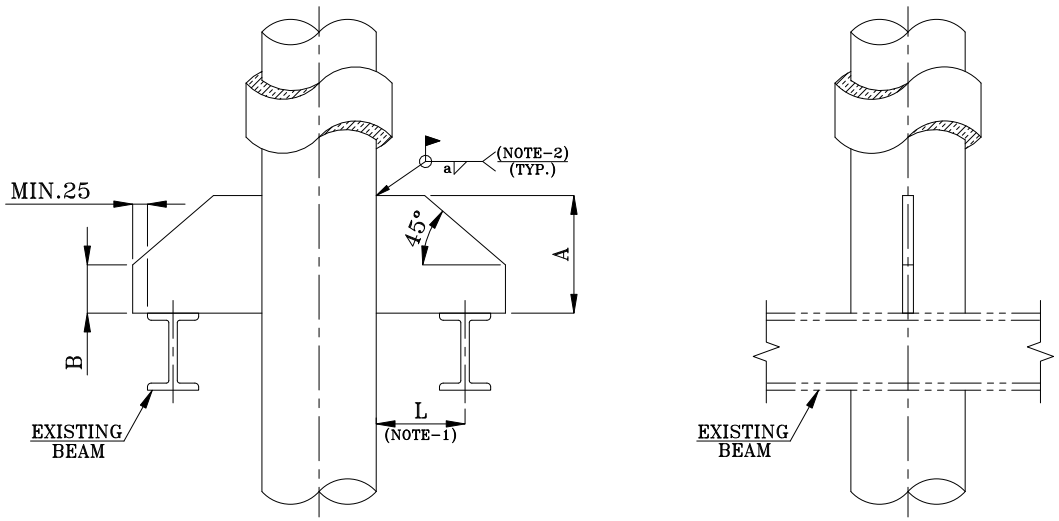
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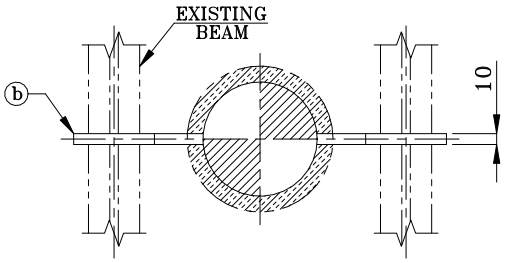
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

شماره صفحه: 301 از 394

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK





LENGTH MARK:(3)

MARK	L
01	200
02	300
03	400
04	500
05	600
06	700
07	800

MATERIAL MARK:(1)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL
0°C TO 400°C	MARK	A
	ⓐ	–
	ⓑ	A285 Gr.C
	ⓒ	–

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	A	B
03	3"	60	30
04	4"	80	40
06	6"	100	50

INDICATION:

SG-03-□□□-□□

(1) (2) (3)

1-MATERIAL MARK
2-NPS MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR RUN PIPE SIZE ⩽4", a=RUN PIPE WALL THICKNESS, FOR RUN PIPE SIZE>4", a=6mm.

3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-18).

SUPPORT DESCRIPTION:	SHEET
WELDED PROP (CS-WITHOUT PWHT) 3" ~ 6"	1
SG-03	3

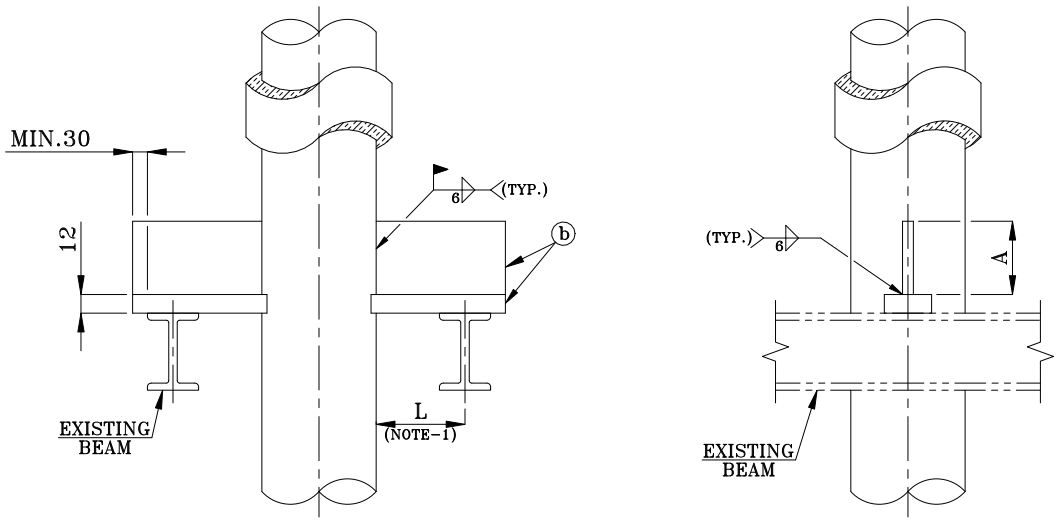
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

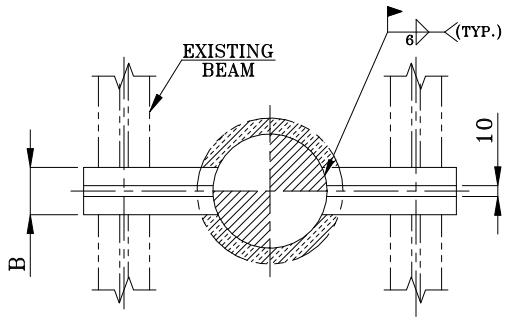
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 302 از 394





LENGTH MARK:(3)

MARK	L
01	400
02	500
03	600
04	700
05	800
06	900
07	1000

MATERIAL MARK:(1)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL
0°C TO 400°C	MARK	A
	ⓐ	–
	ⓑ	A285 Gr.C
	ⓒ	–

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	A	B
08	8"	80	100
10	10"	100	100
12	12"	100	100

INDICATION:

SG-03-□□□-□□□
(1) (2) (3)

1-MATERIAL MARK
2-NPS MARK
3-LENGTH MARK

NOTE:
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF ALLOWABLE LOAD SEE (G-18).

SUPPORT DESCRIPTION:	SHEET
WELDED PROP (CS-WITHOUT PWHT) 8" ~ 12"	2
SG-03	3

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

HIRGAN ENERGY

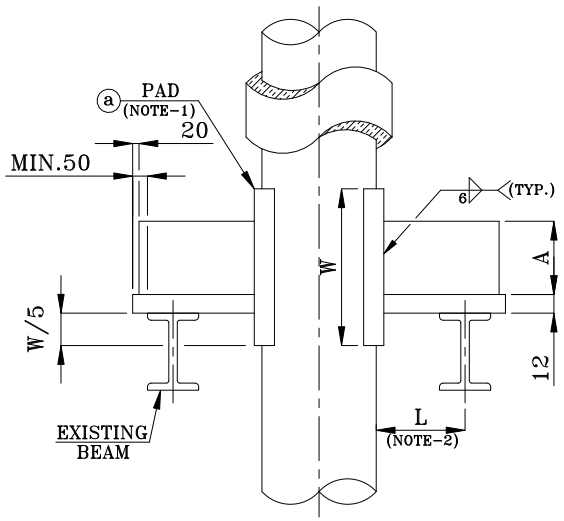
شماره پیمان:

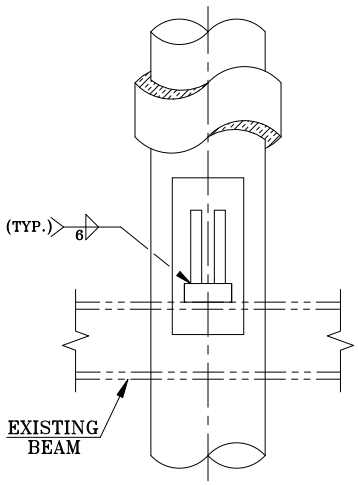
053-073-9184

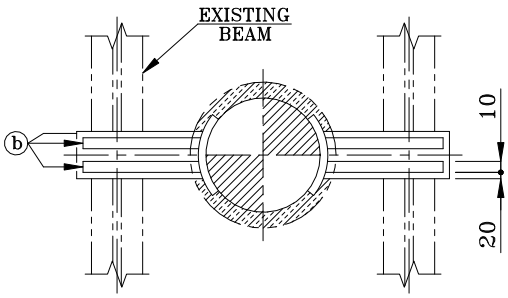
STANDARD PIPE SUPPORT DRAWINGS

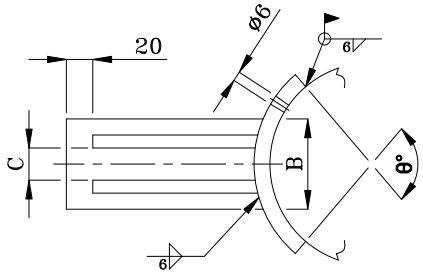
شماره صفحه: 303 از 394

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK









DETAIL OF PAD

LENGTH MARK:(3)

MARK	L
01	500
02	600
03	700
04	800
05	900
06	1000
07	1100
08	1200
09	1300
10	1400
11	1500

MATERIAL MARK:(1)

DES. TEMP	MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL
0°C TO 400°C	MARK	A
	ⓐ (NOTE-1)	–
	ⓑ	A285 Gr.C
	ⓒ	–

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	C	B	A	θ°	W
14	14"	50	110	100	90°	200
16	16"	70	130	100	90°	200
18	18"	100	160	120	90°	250
20	20"	120	180	120	90°	250
24	24"	140	200	150	90°	300

INDICATION:

SG-03-□□□-□□

(1) (2) (3)

1-MATERIAL MARK
2-NPS MARK
3-LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE.

2- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-18).

SUPPORT DESCRIPTION:	SHEET
WELDED PROP (CS-WITHOUT PWHT) 14" ~ 24"	3
SG-03	3

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

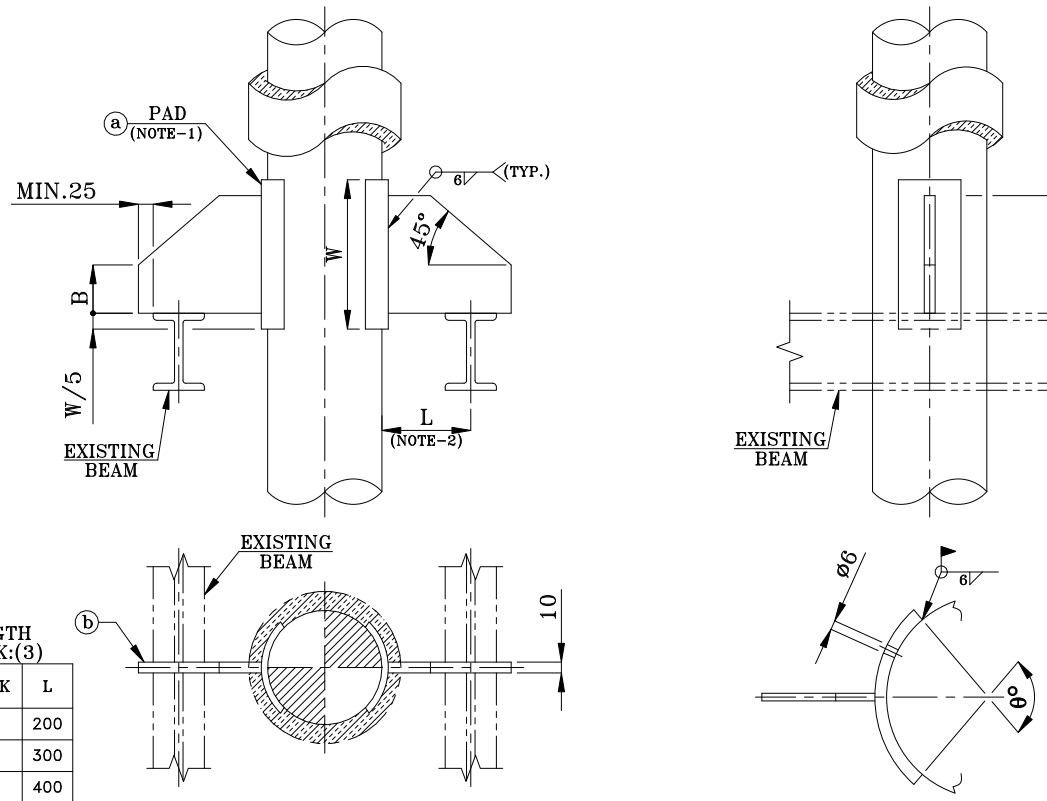
HIRGAN ENERGY

شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



DETAIL OF PAD

LENGTH MARK:(3)

MARK	L
01	200
02	300
03	400
04	500
05	600
06	700
07	800

MATERIAL MARK:(1)

DES. TEMP	MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 400°C	MARK	A	C	E
	ⓐ NOTE-1	–	–	–
	ⓑ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓒ	–	–	–
400°C TO 550°C	MARK	B	D	F
	ⓐ NOTE-1	–	–	–
	ⓑ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓒ	–	–	–

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	A	B	θ°	W
03	3"	60	30	90°	100
04	4"	80	40	120°	130
06	6"	100	50	90°	150

INDICATION:

SG-04-□□□-□□

(1) (2) (3)

1-MATERIAL MARK
2-NPS MARK
3-LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT.

2- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-18).

SUPPORT DESCRIPTION:	SHEET
WELDED PROP (CS-WITH PWHT, AS, SS) 3" ~ 6"	1
SG-04	3

NISOC

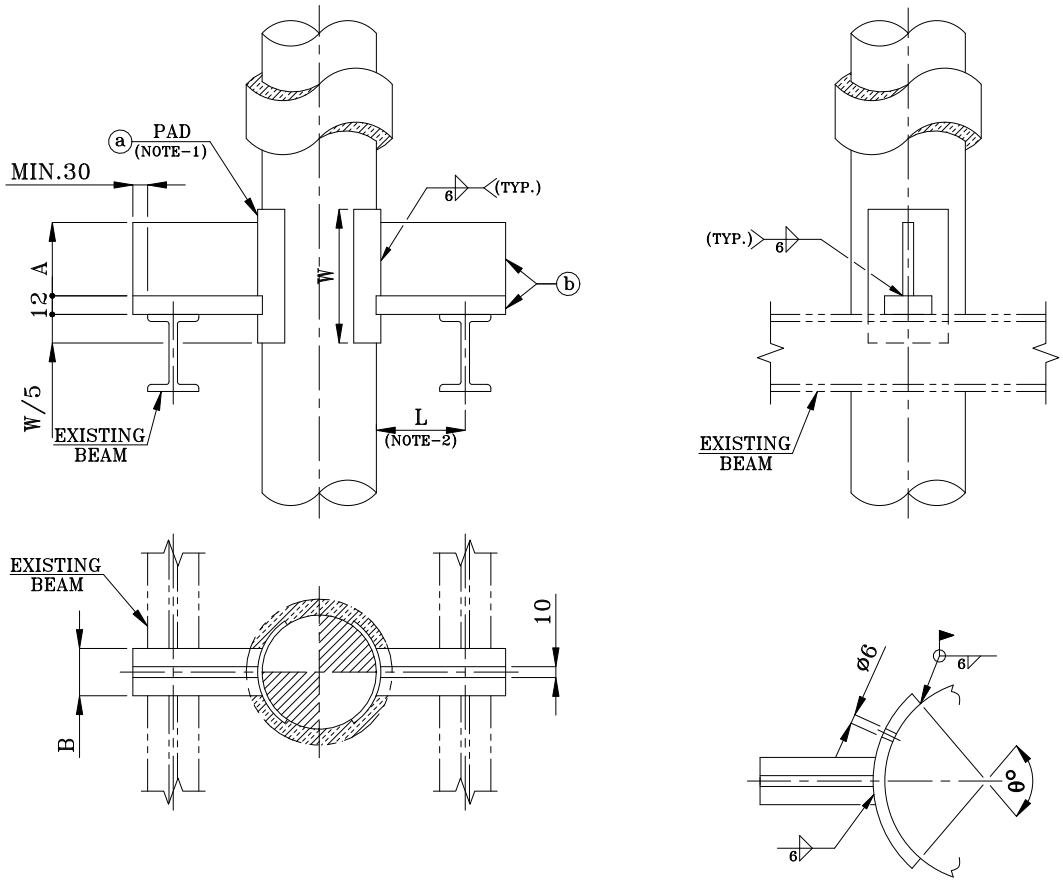
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



DETAIL OF PAD

LENGTH MARK:(3)

MARK	L
01	400
02	500
03	600
04	700
05	800
06	900
07	1000

MATERIAL MARK:(1)

DES. TEMP	MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 400°C	MARK	A	C	E
	ⓐ NOTE-1	–	–	–
	ⓑ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓒ	–	–	–
400°C TO 550°C	MARK	B	D	F
	ⓐ NOTE-1	–	–	–
	ⓑ	–	A387 Gr.91 Cl.2	A240 Gr. 316
	ⓒ	–	–	–

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	A	B	θ°	W
08	8"	80	100	90°	150
10	10"	100	100	90°	150
12	12"	100	100	90°	150

INDICATION:

SG-04-□□□-□□□
(1) (2) (3)

1-MATERIAL MARK
2-NPS MARK
3-LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT.
2- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-18).

SUPPORT DESCRIPTION:	SHEET
WELDED PROP (CS-WITH PWHT, AS, SS) 8" ~ 12"	2
SG-04	3

NISOC

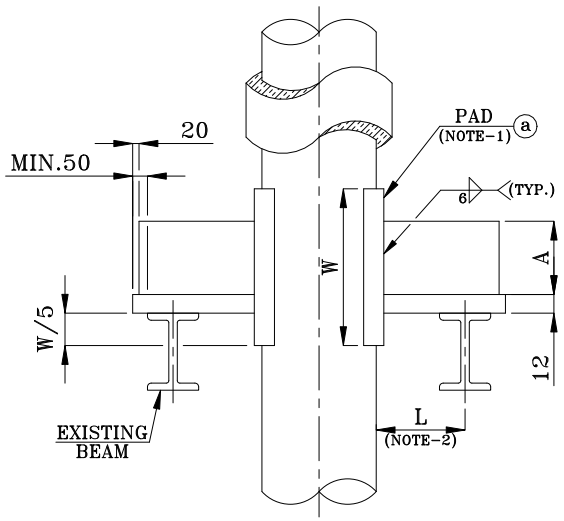
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

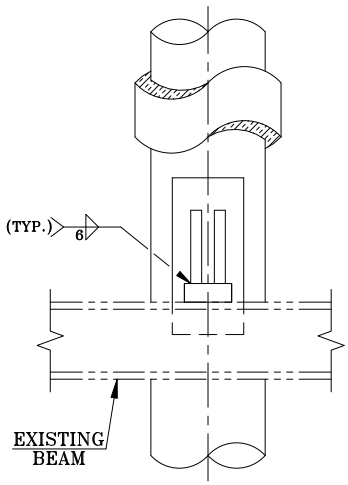
PEDCO
HIRGAN ENERGY

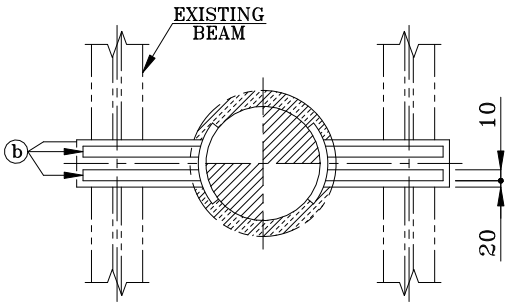
شماره پیمان:
053-073-9184

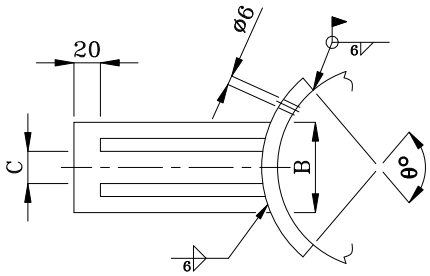
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02









DETAIL OF PAD

LENGTH MARK:(3)

MARK	L
01	500
02	600
03	700
04	800
05	900
06	1000
07	1100
08	1200
09	1300
10	1400
11	1500

MATERIAL MARK:(1)

DES. TEMP	MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 400°C	MARK	A	C	E
	ⓐ NOTE-1	–	–	–
	ⓑ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓒ	–	–	–
400°C TO 550°C	MARK	B	D	F
	ⓐ NOTE-1	–	–	–
	ⓑ	–	A387 Gr.91 Cl.2	A240 Gr. 316
	ⓒ	–	–	–

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	C	B	A	θ°	W
14	14"	50	110	100	90°	200
16	16"	70	130	100	90°	200
18	18"	100	160	120	90°	250
20	20"	120	180	120	90°	250
24	24"	140	200	150	90°	300

INDICATION:

SG-04-□□□-□□
(1) (2) (3)

1-MATERIAL MARK
2-NPS MARK
3-LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT.

2- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-18).

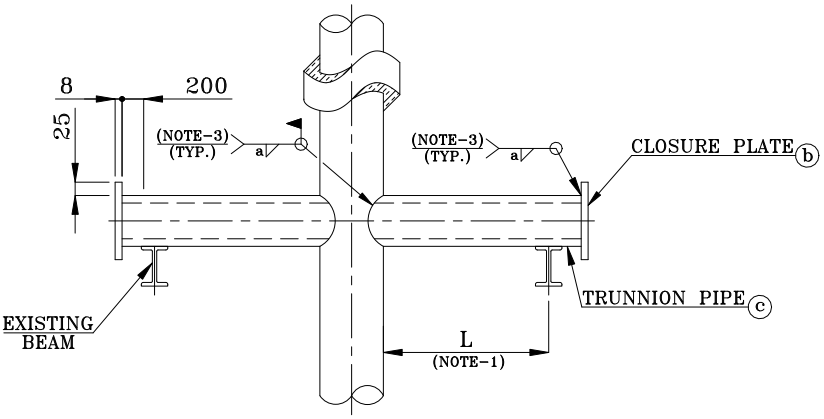
SUPPORT DESCRIPTION:	SHEET
WELDED PROP (CS-WITH PWHT, AS, SS) 14" ~ 24"	3
SG-04	3

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

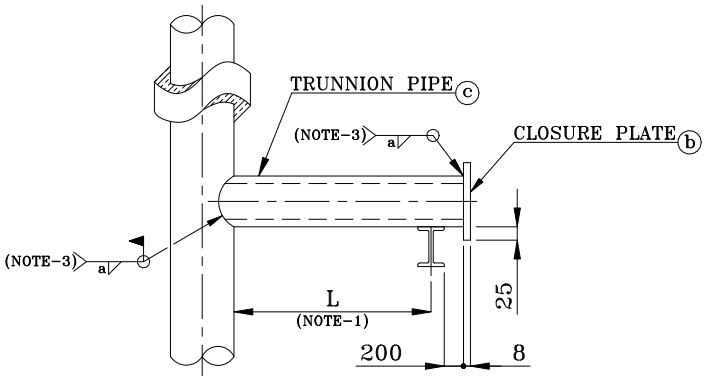
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



TYPE "A"

LENGTH MARK:(4)

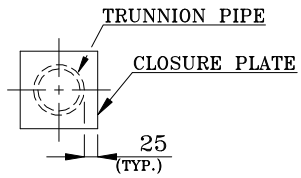
MARK	L
1	500
2	600
3	700
4	800
5	900
6	1000
7	1100
8	1200



TYPE "B"

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE	TRUNNION PIPE SIZE	TRUNNION PIPE THK.
02	2"	1+1/2"	SCH80
03	3"	2"	STD
04	4"	3"	
06	6"	4"	
08	8"	6"	
10	10"		
12	12"	8"	
14	14"		
16	16"	10"	
18	18"		
20	20"	12"	
24	24"	14"	
26	26"		
28	28"	16"	
30	30"		
32	32"	18"	
34	34"		
36	36"	20"	
38	38"		
40	40"	24"	
42	42"		
44	44"		
46	46"		
48	48"	26"	
50	50"		
52	52"	28"	
54	54"		
56	56"	30"	



DETAIL OF CLOSURE PLATE

MATERIAL MARK:(2)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL
0°C TO 400°C	MARK	A
	ⓐ	–
	ⓑ	A283 Gr.C
	ⓒ	A53 Gr.B

INDICATION:

SG-05-□□-□□□

(1) (2) (3) (4)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- WEEP HOLE (ø=6mm) SHALL BE PROVIDED FOR TRUNNIONS.

3- FOR TRUNNION SIZE ≤4", a=TRUNNION WALL THICKNESS, FOR TRUNNION SIZE >4", a=6mm.

4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-18).

5- ORIENTATION OF TRUNNION WILL BE SPECIFIED WITH A NOTE BY CONSIDERING PLANT NORTH AS 0° AND CLOCKWISE FROM 0°. {EX: SG-05-BA-061 (TETA=90 DEG.)}

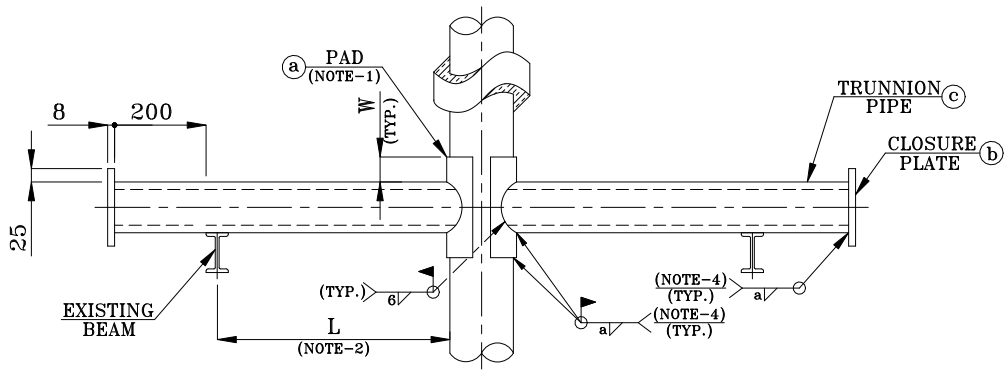
SUPPORT DESCRIPTION:	SHEET
SINGLE & DOUBLE TRUNNION (CS-WITHOUT PWHT) 2" ~ 36"	1
SG-05	1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

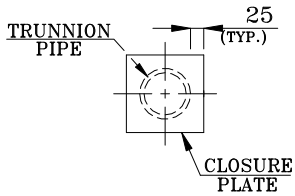
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 308 از 394

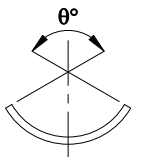
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

053-073-9184



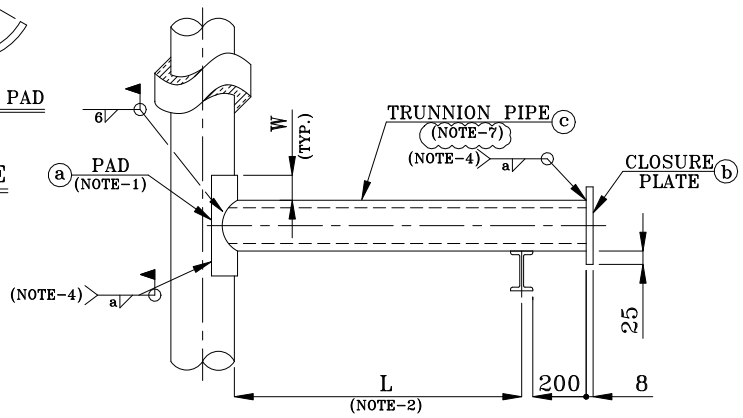
TYPE "A"





DETAIL OF PAD

DETAIL OF CLOSURE PLATE



TYPE "B"

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE	TRUNNION PIPE SIZE	TRUNNION PIPE THK.	θ°	W
02	2"	1+1/2"	SCH80	120	25
03	3"	2"	STD		
04	4"	3"			
06	6"	4"			
08	8"	6"			30
10	10"				
12	12"	8"			
14	14"				
16	16"	10"			50
18	18"				
20	20"	12"		90	
24	24"	14"			75
26	26"				
28	28"	16"			
30	30"				
32	32"	18"			100
34	34"				
36	36"	20"			
38	38"				
40	40"	24"			
42	42"				
44	44"				
46	46"				
48	48"	26"			
50	50"				
52	52"	28"			
54	54"				
56	56"	30"			

MATERIAL MARK:(2)

DES. TEMP / MATERIAL OF RUN PIPE — MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 400°C	MARK	A	C	E
	ⓐ NOTE-1	–	–	–
	ⓑ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓒ	A53 Gr.B	A53 Gr.B	A53 Gr.B
400°C TO 550°C	MARK	B	D	F
	ⓐ NOTE-1	–	–	–
	ⓑ	–	A283 Gr.C	A283 Gr.C
	ⓒ	–	A53 Gr.B	A53 Gr.B

LENGTH MARK:(4)

MARK	L
1	500
2	600
3	700
4	800
5	900
6	1000
7	1100
8	1200

INDICATION:

SG-06-□□-□□□
(1) (2) (3) (4)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT.

2- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

3- WEEP HOLE (ø=6mm) SHALL BE PROVIDED FOR TRUNNION.

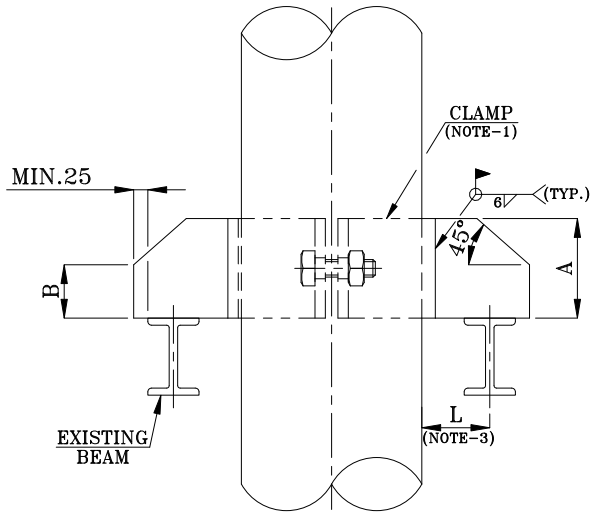
4- FOR TRUNNION SIZE ≤4", a=TRUNNION WALL THICKNESS, FOR TRUNNION SIZE >4", a=6mm.

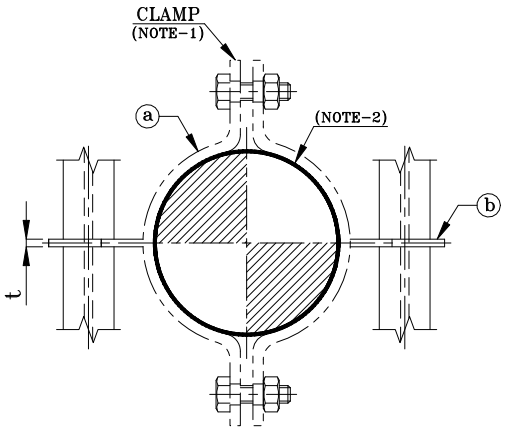
5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-18).

6- ORIENTATION OF TRUNNION WILL BE SPECIFIED WITH A NOTE BY CONSIDERING PLANT NORTH AS 0° AND CLOCKWISE FROM 0°. {EX: SG-06-BA-061 (TETA=90 DEG.)}

7- FOR COLD LINES (DESIGN TEMPERATURE BELOW -29°C) , SAME MATERIAL OF RUN PIPE SHALL BE APPLIED FOR MATERIAL "C".

SUPPORT DESCRIPTION:	SHEET
SINGLE & DOUBLE TRUNNION (CS-WITH PWHT, AS, SS) 2" ~ 36"	1
SG-06	1





NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	A	B	t
0A	1/2"	40	20	5
0B	3/4"	40	20	5
01	1"	40	20	5
1A	1+1/2"	50	30	5
02	2"	50	30	8
03	3"	60	30	8
04	4"	60	30	10
06	6"	70	40	10

LENGTH MARK:(3)

MARK	L
1	200
2	300
3	400
4	500
5	600
6	700
7	800

MATERIAL MARK:(1)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 400°C	MARK	A	C	E
	ⓐ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓑ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓒ	–	–	–
400°C TO 550°C	MARK	B	D	F
	ⓐ	–	A387 Gr.91 Cl.2	A240 Gr.316
	ⓑ	–	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	–	–	–

INDICATION:

SG-07-□□□-□
(1) (2) (3)

1-MATERIAL MARK
2-NPS MARK
3-LENGTH MARK

NOTE:

1- SEPARATED TAG IS REQUIRED FOR CLAMP (SK-01).

2- FOR "AS" AND "SS" PIPES, ANTI CORROSION TAPE SHALL BE APPLIED BETWEEN PIPE AND CLAMP, FOR RUN PIPE WITH TEMP. MORE THAN 350°, THIN STAINLESS STEEL OR ALLOY STEEL SHEET WITH THICKNESS 0.5mm CAN BE USED "AS" AN ANTI CORROSION ITEM.

3- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-18).

SUPPORT DESCRIPTION:	SHEET
REMOVABLE PROP 1/2" ~ 6"	1
SG-07	3

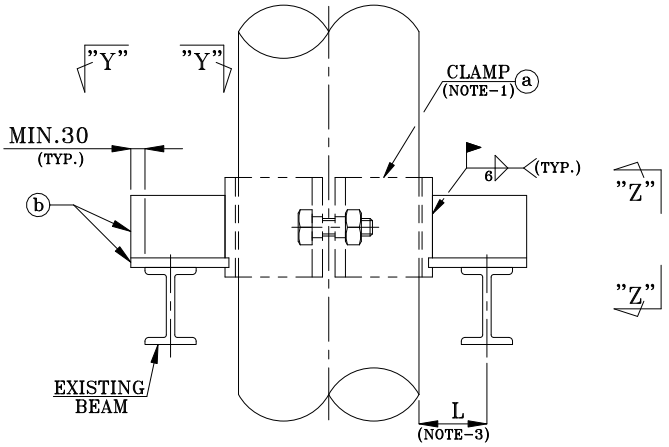
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

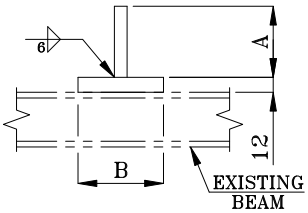
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

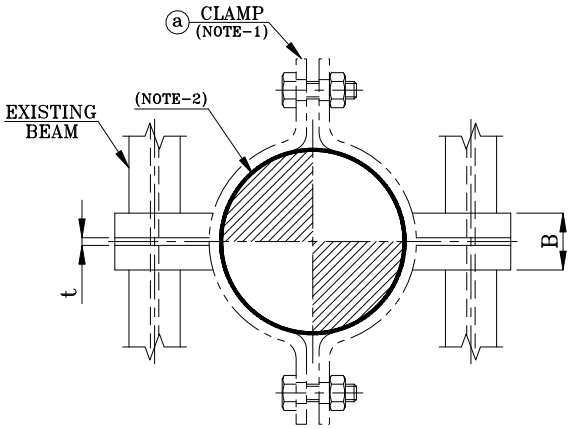
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

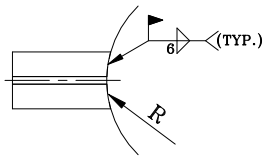
شماره صفحه: 310 از 394





VIEW "Z"~"Z"





VIEW "Y"~"Y"

MATERIAL MARK:(1)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0 °C TO 400°C	MARK	A	C	E
	ⓐ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓑ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓒ	-	-	-
400 °C TO 550°C	MARK	B	D	F
	ⓐ	-	A387 Gr.91 Cl.2	A240 Gr.316
	ⓑ	-	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	-	-	-

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	A	B	R	t
08	8"	50	100	120	10
10	10"	80	100	147	10
12	12"	80	100	173	10

LENGTH MARK:(3)

MARK	L
1	400
2	500
3	600
4	700
5	800

INDICATION:

SG-07-□□□-□
(1) (2) (3)

1-MATERIAL MARK
2-NPS MARK
3-LENGTH MARK

NOTE:

1- SEPARATED TAG IS REQUIRED FOR CLAMP (SK-01).

2- FOR "AS" AND "SS" PIPES, ANTI CORROSION TAPE SHALL BE APPLIED BETWEEN PIPE AND CLAMP, FOR RUN PIPE WITH TEMP. MORE THAN 350°, THIN STAINLESS STEEL OR ALLOY STEEL SHEET WITH THICKNESS 0.5mm CAN BE USED "AS" AN ANTI CORROSION ITEM.

3- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-18).

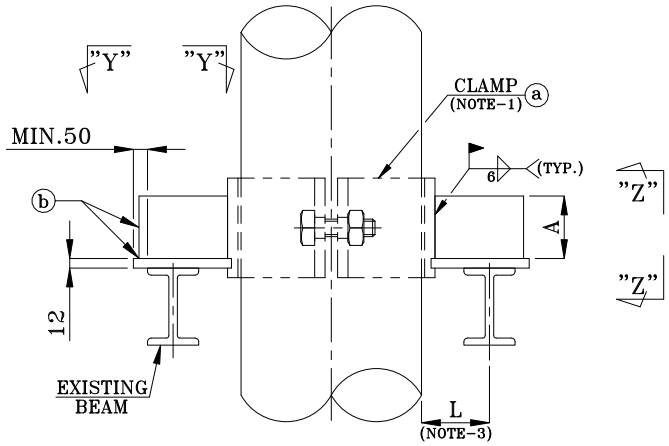
SUPPORT DESCRIPTION:	SHEET
REMOVABLE PROP 8" ~ 12"	2
SG-07	3

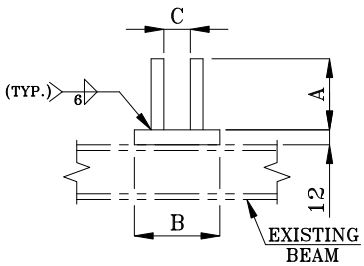
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 311 از 394

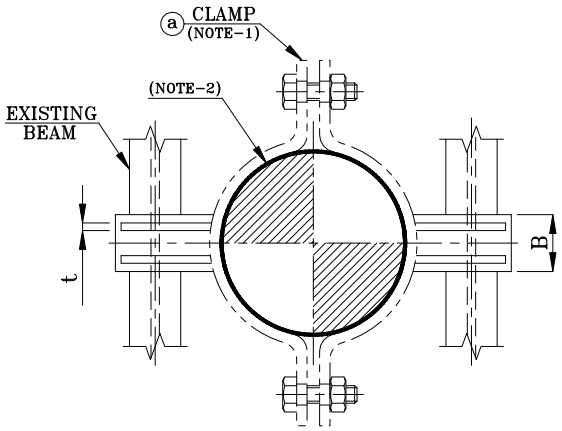
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

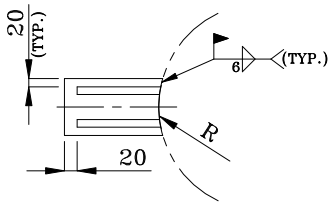
053-073-9184





VIEW "Z"~"Z"





VIEW "Y"~"Y"

LENGTH MARK:(3)

MARK	L
1	500
2	600
3	700
4	800
5	900
6	1000
7	1100
8	1200

MATERIAL MARK:(1)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 400°C	MARK	A	C	E
	ⓐ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓑ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓒ	-	-	-
400°C TO 550°C	MARK	B	D	F
	ⓐ	-	A387 Gr.91 Cl.2	A240 Gr.316
	ⓑ	-	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	-	-	-

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	A	B	R	t	C
14	14"	80	110	189	10	50
16	16"	100	130	215	10	70
18	18"	100	160	240	10	100
20	20"	100	180	265	10	120
24	24"	100	200	316	10	140

INDICATION:

SG-07-□□□-□
(1) (2) (3)

1-MATERIAL MARK
2-NPS MARK
3-LENGTH MARK

NOTE:

1- SEPARATED TAG IS REQUIRED FOR CLAMP (SK-01).

2- FOR "AS" AND "SS" PIPES, ANTI CORROSION TAPE SHALL BE APPLIED BETWEEN PIPE AND CLAMP, FOR RUN PIPE WITH TEMP. MORE THAN 350°, THIN STAINLESS STEEL OR ALLOY STEEL SHEET WITH THICKNESS 0.5mm CAN BE USED "AS" AN ANTI CORROSION ITEM.

3- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-18).

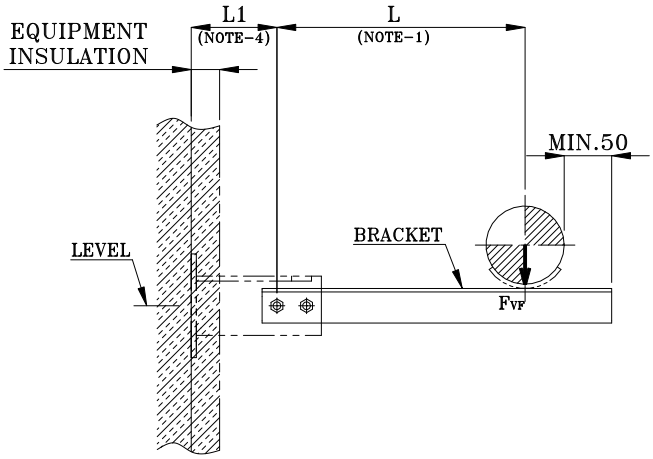
SUPPORT DESCRIPTION:	SHEET
REMOVABLE PROP 14" ~ 24"	3
SG-07	3

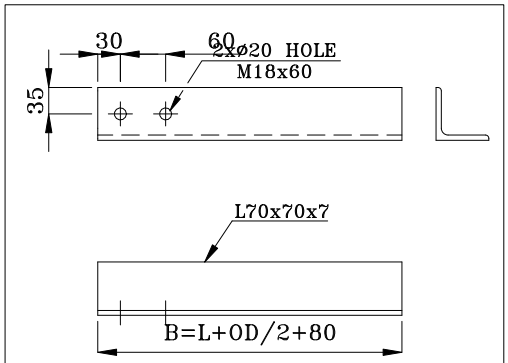
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

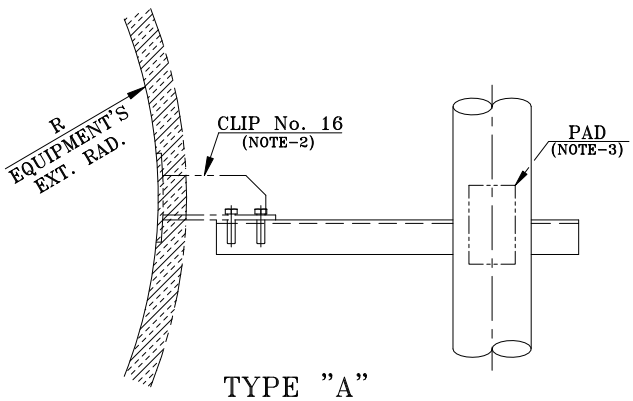
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02





DETAIL OF BRACKET



TYPE "A"

LENGTH MARK:(3)

MARK	L	ALLOW. LOAD(kg)-Fv
01	300	150
02	400	
03	500	85
04	600	
05	700	
06	800	60
07	900	
08	1000	

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE
0A	1/2"
0B	3/4"
01	1"
1A	1+1/2"
02	2"

INDICATION:

SH-01-□□□-□□□

(1) (2) (3)

1-TYPE MARK
2-NPS MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- SEPARATED TAG IS REQUIRED FOR PAD (SC-05).

4- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

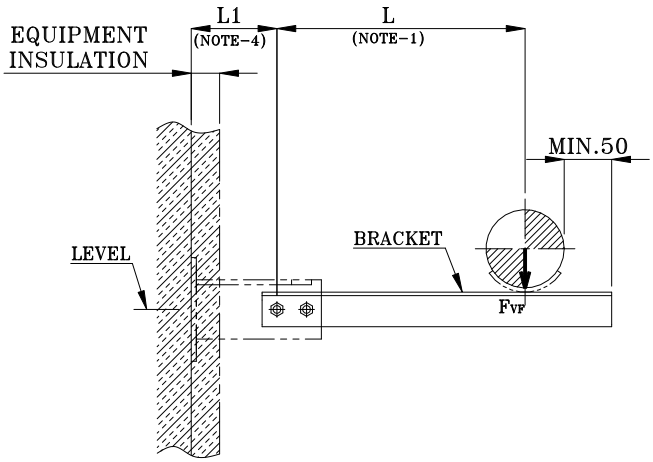
MATERIAL:

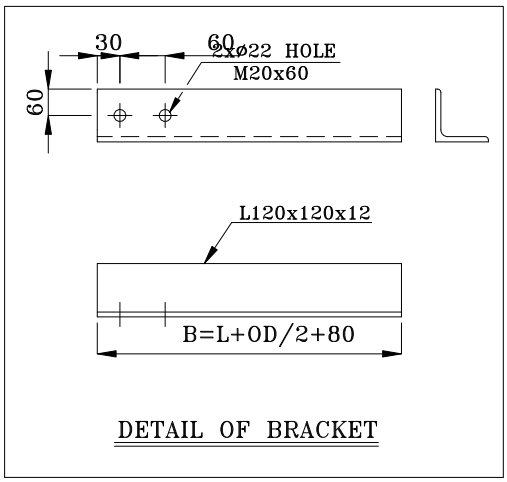
STANDARD PROFILE: ASTM A36, BOLT & NUT: A325

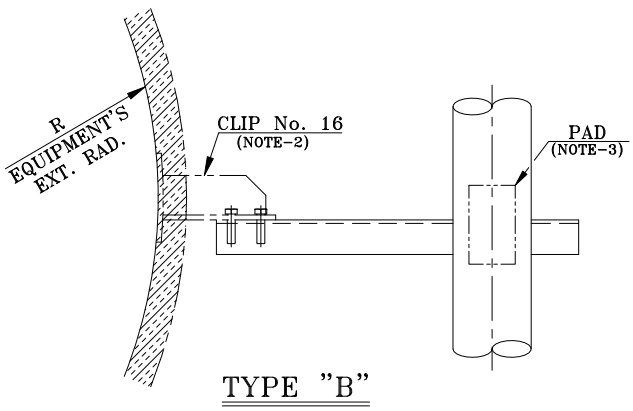
SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT HORIZONTAL RUN PIPE (TYPE "A")	1
SH-01	6

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 313 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	







LENGTH MARK:(3)

MARK	L	ALLOW. LOAD(kg)-Fv
01	300	350
02	400	
03	500	200
04	600	
05	700	
06	800	140
07	900	
08	1000	

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE
0A	1/2"
0B	3/4"
01	1"
1A	1+1/2"
02	2"
03	3"
04	4"

INDICATION:

SH-01-[ ][ ][ ]-[ ][ ]
(1) (2) (3)

1-TYPE MARK
2-NPS MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- SEPARATED TAG IS REQUIRED FOR PAD (SC-05).

4- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

MATERIAL:

STANDARD PROFILE: ASTM A36, BOLT & NUT: A325

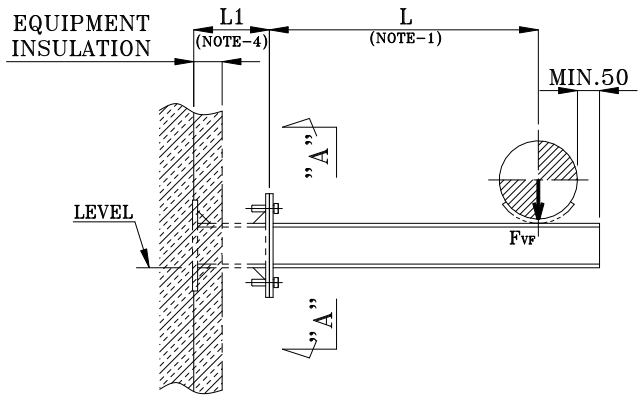
SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT HORIZONTAL RUN PIPE (TYPE "B")	2
SH-01	6

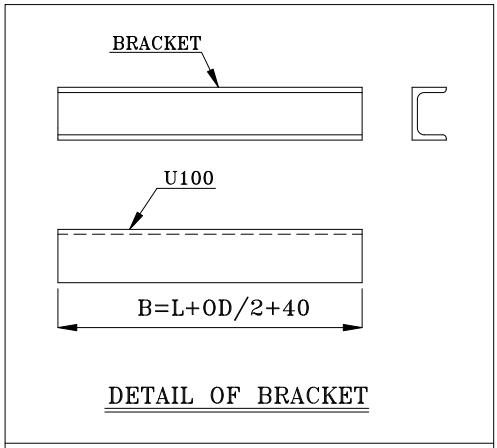
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 314 از 394

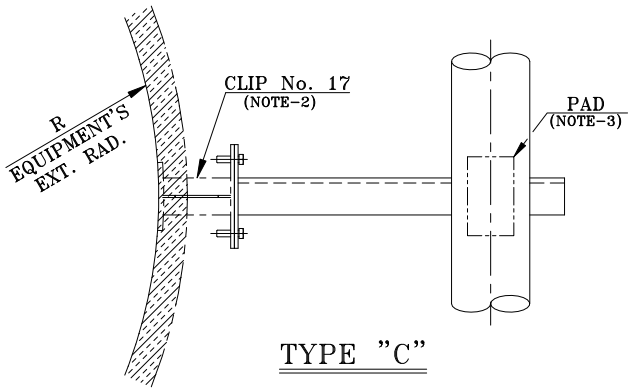
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

053-073-9184

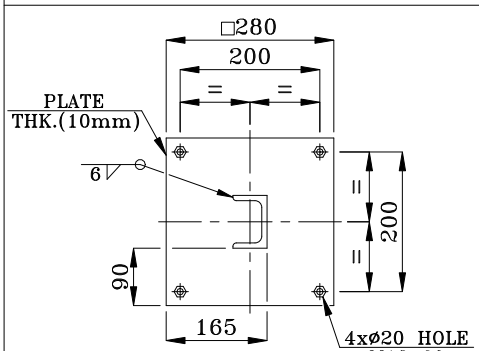




DETAIL OF BRACKET



TYPE "C"



VIEW "A"~"A"

LENGTH MARK:(3)

MARK	L	ALLOW. LOAD(kg)-Fv
01	300	270
02	400	
03	500	
04	600	
05	700	180
06	800	
07	900	
08	1000	130
09	1100	
10	1200	
11	1300	100
12	1400	
13	1500	

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE
0A	1/2"
0B	3/4"
01	1"
1A	1+1/2"
02	2"
03	3"
04	4"
06	6"

INDICATION:

SH-01-[ ][ ][ ]-[ ][ ]
(1) (2) (3)

1-TYPE MARK
2-NPS MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- SEPARATED TAG IS REQUIRED FOR PAD (SC-05).

4- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

MATERIAL:

STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.C

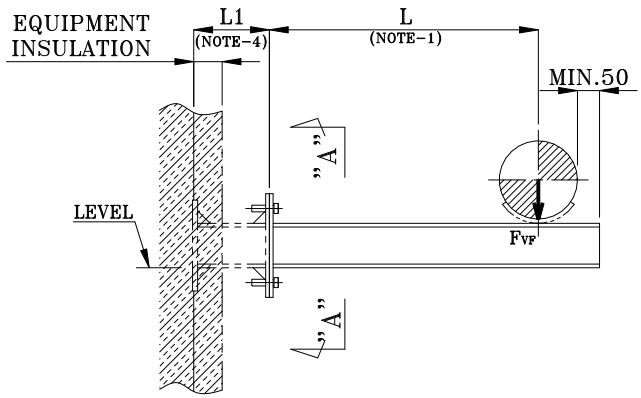
SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT HORIZONTAL RUN PIPE (TYPE "C")	3
SH-01	6

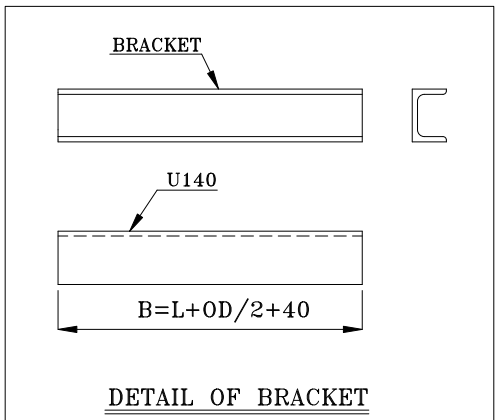
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 315 از 394

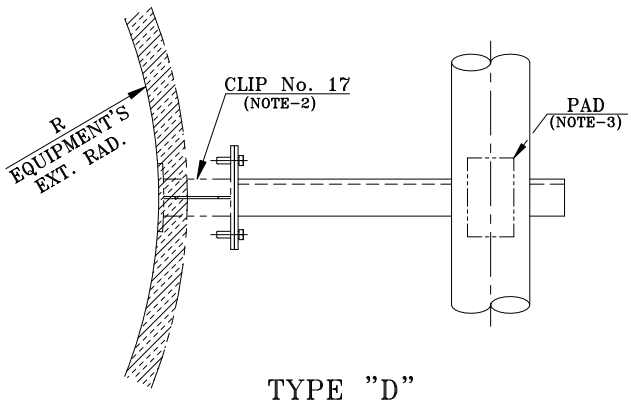
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

053-073-9184

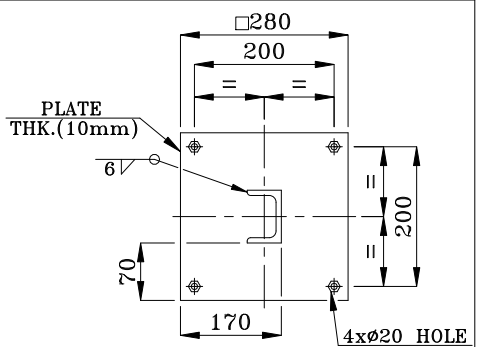




DETAIL OF BRACKET



TYPE "D"



VIEW "A"~"A"

LENGTH MARK:(3)

MARK	L	ALLOW. LOAD(kg)-Fv
01	300	500
02	400	
03	500	
04	600	
05	700	340
06	800	
07	900	
08	1000	250
09	1100	
10	1200	
11	1300	200
12	1400	
13	1500	

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE
0A	1/2"
0B	3/4"
01	1"
1A	1+1/2"
02	2"
03	3"
04	4"
06	6"

INDICATION:

SH-01-□□-□□ (1) (2) (3)

1-TYPE MARK
2-NPS MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- SEPARATED TAG IS REQUIRED FOR PAD (SC-05).

4- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

MATERIAL:

STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT HORIZONTAL RUN PIPE (TYPE "D")	4
SH-01	6

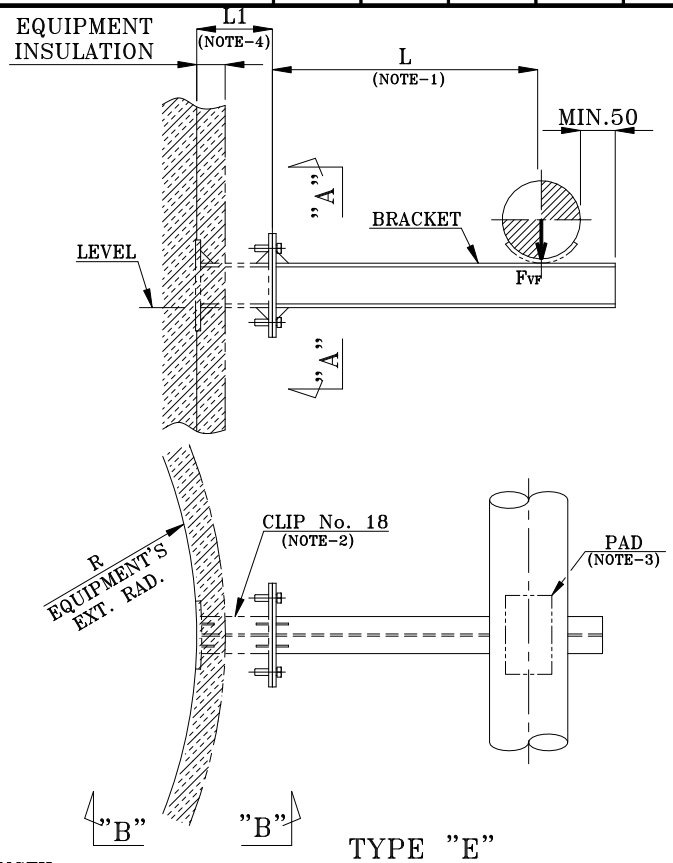
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 316 از 394



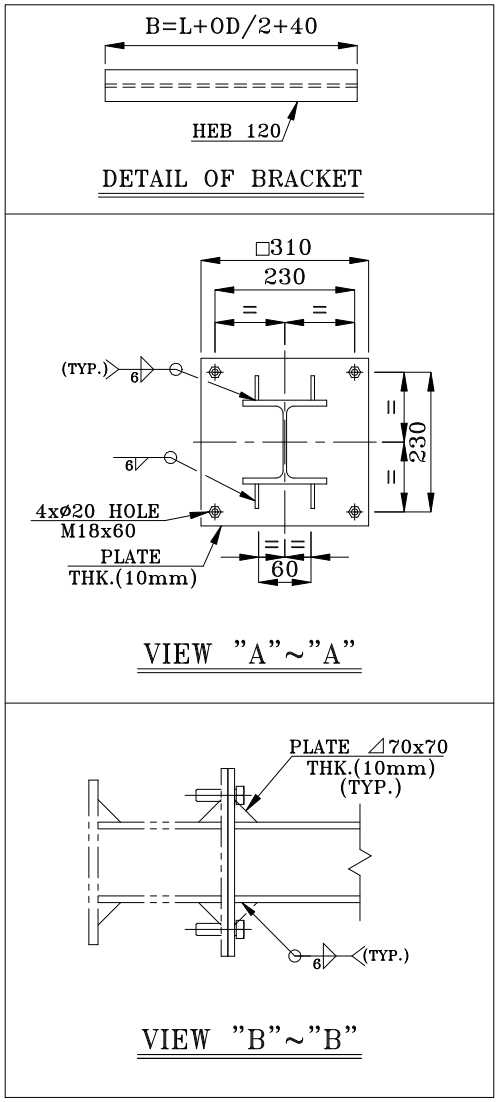
TYPE "E"

LENGTH MARK:(3)

MARK	L	ALLOW. LOAD(kg)-Fv
01	300	1000
02	400	
03	500	
04	600	720
05	700	
06	800	
07	900	560
08	1000	
09	1100	
10	1200	460
11	1300	
12	1400	
13	1500	390
14	1600	
15	1700	
16	1800	330
17	1900	
18	2000	

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE
0A	1/2"
0B	3/4"
01	1"
1A	1+1/2"
02	2"
03	3"
04	4"
06	6"
08	8"
10	10"



INDICATION:

SH-01-□□□-□□□
(1) (2) (3)

1-TYPE MARK
2-NPS MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF CLIP SEE (G-03).
3- SEPARATED TAG IS REQUIRED FOR PAD (SC-05).
4- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

MATERIAL:
STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT HORIZONTAL RUN PIPE (TYPE "E")	5
SH-01	6

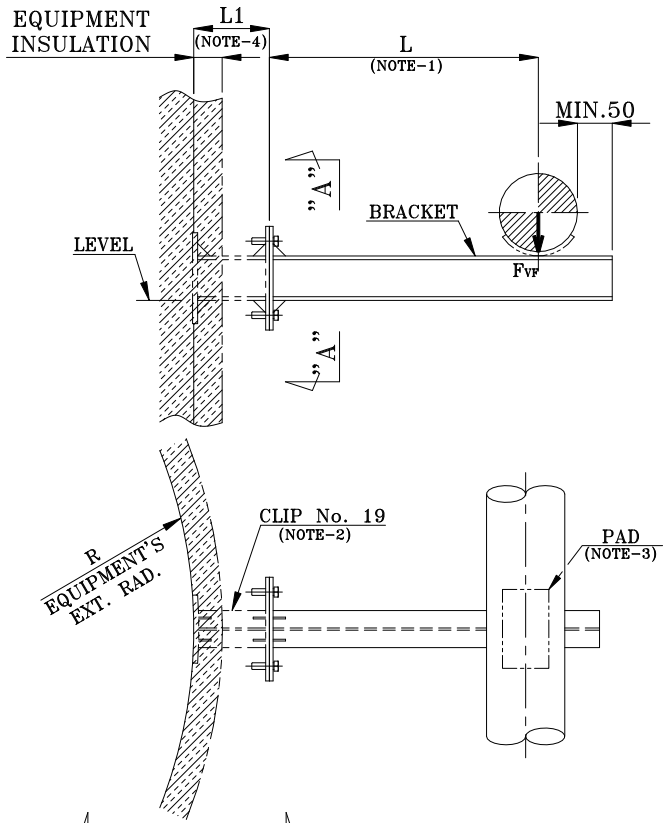
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 317 از 394



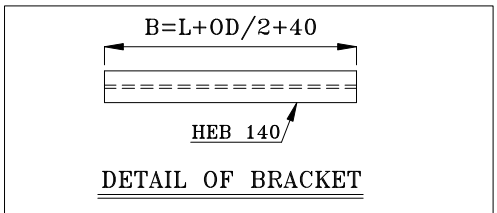
TYPE "F"

LENGTH MARK:(3)

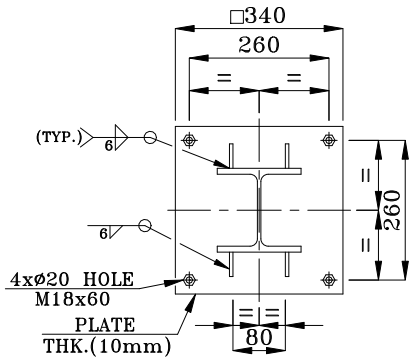
MARK	L	ALLOW. LOAD(kg)-Fv
01	300	1500
02	400	
03	500	
04	600	1050
05	700	
06	800	
07	900	830
08	1000	
09	1100	
10	1200	680
11	1300	
12	1400	
13	1500	580
14	1600	
15	1700	
16	1800	500
17	1900	
18	2000	

NPS MARK:(2)

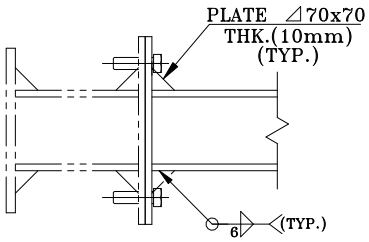
NPS MARK	RUN PIPE SIZE
0A	1/2"
0B	3/4"
01	1"
1A	1+1/2"
02	2"
03	3"
04	4"
06	6"
08	8"
10	10"
12	12"
14	14"



DETAIL OF BRACKET



VIEW "A"~"A"



VIEW "B"~"B"

INDICATION:

SH-01-□□□-□□

(1) (2) (3)

1-TYPE MARK
2-NPS MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- SEPARATED TAG IS REQUIRED FOR PAD (SC-05).

4- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

MATERIAL:

STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT HORIZONTAL RUN PIPE (TYPE "F")	6
SH-01	6

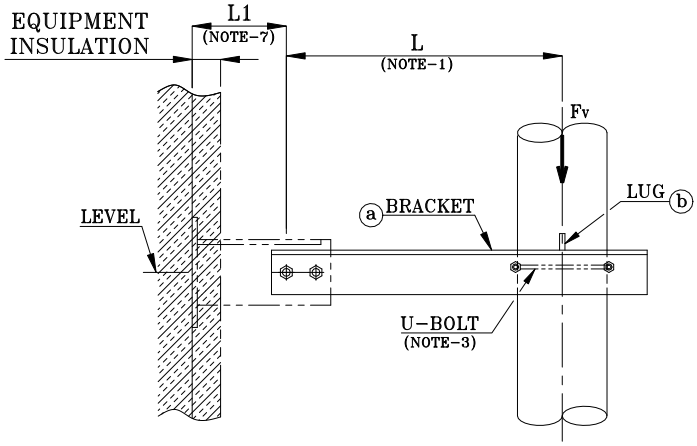
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

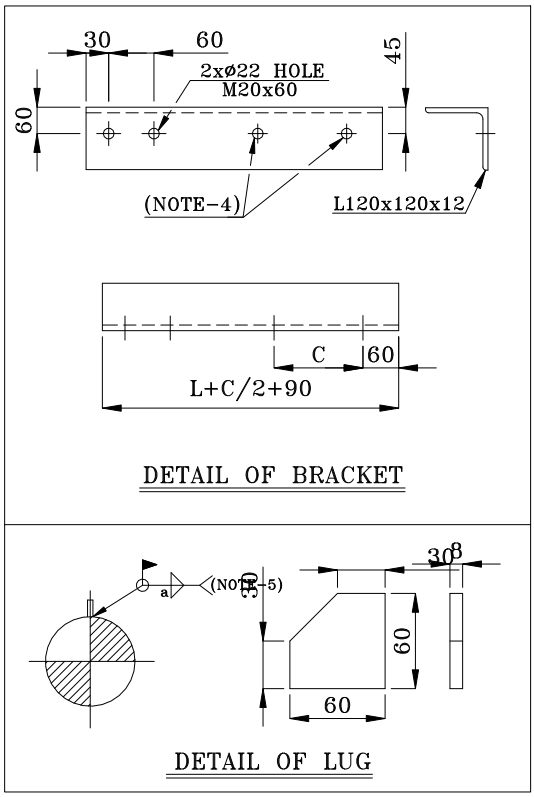
شماره پیمان:
053-073-9184

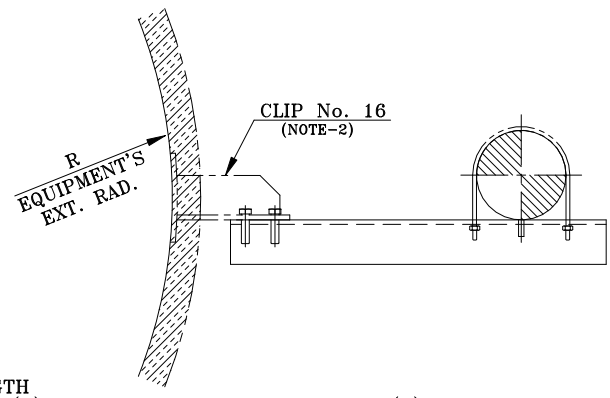
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 318 از 394







LENGTH MARK:(3)

MARK	L	ALLOW. LOAD(kg)-Fv
1	200	230
2	300	
3	400	200
4	500	
5	600	
6	700	140
7	800	

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	C
0A	1/2"	34
0B	3/4"	40
01	1"	48
1A	1+1/2"	66
02	2"	78

MATERIAL MARK:(1)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	C
0°C TO 350°C ⓐ	ASTM A36	ASTM A36	ASTM A36
0°C TO 350°C ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
0°C TO 350°C ⓒ	A325	A325	A325
0°C TO 350°C ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SH-02-□□□-□
(1) (2) (3)

1-MATERIAL MARK
2-NPS MARK
3-LENGTH MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF CLIP SEE (G-03).
3- SEPARATED TAG IS REQUIRED FOR U-BOLT (SA-01).
4- U-BOLT HOLES AND THEIR LOCATION SHALL BE SPECIFIED BASED ON U-BOLT DETAIL (SA-01).
5- a=RUN PIPE WALL THICKNESS.
6- ALLOWABLE LOAD OF U-BOLT SHALL BE CHECKED SEPARATELY.
7- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

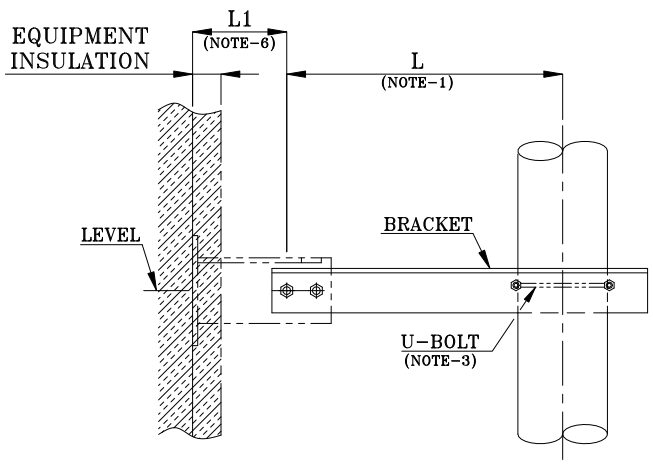
SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT U-BOLT TYPE SEMI ANCHOR 1/2" ~ 2"	1
SH-02	1

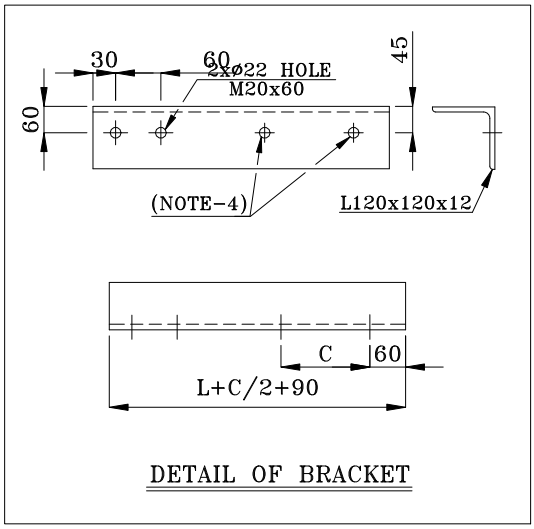
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

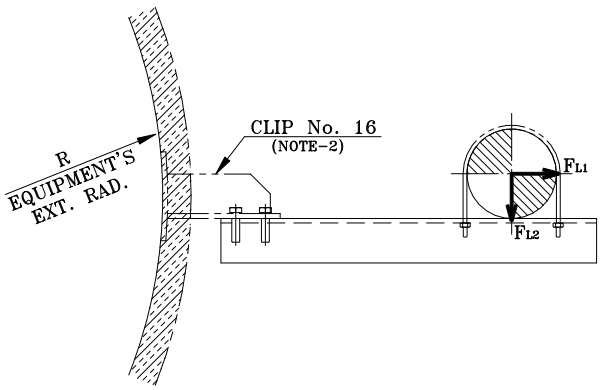
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 319 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

053-073-9184







LENGTH MARK:(2)

MARK	L
1	200
2	300
3	400
4	500
5	600
6	700
7	800

ALLOW. LOAD(kg)-FL_2

SIZE \ LENGTH	200<L≤400	400<L≤800
1/2"	200	
3/4"~2	400	250

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE	C	ALLOW. LOAD(kg)-FL_1
0A	1/2"	34	70
0B	3/4"	40	130
01	1"	48	
1A	1+1/2"	66	270
02	2"	78	

INDICATION:

SH-03-[ ][ ][ ]
(1) (2)

1-NPS MARK
2-LENGTH MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- SEPARATED TAG IS REQUIRED FOR U-BOLT (SA-01).

4- U-BOLT HOLES AND THEIR LOCATION SHALL BE SPECIFIED BASED ON U-BOLT DETAIL (SA-01).

5- ALLOWABLE LOAD OF U-BOLT SHALL BE CHECKED SEPARATELY.

6- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

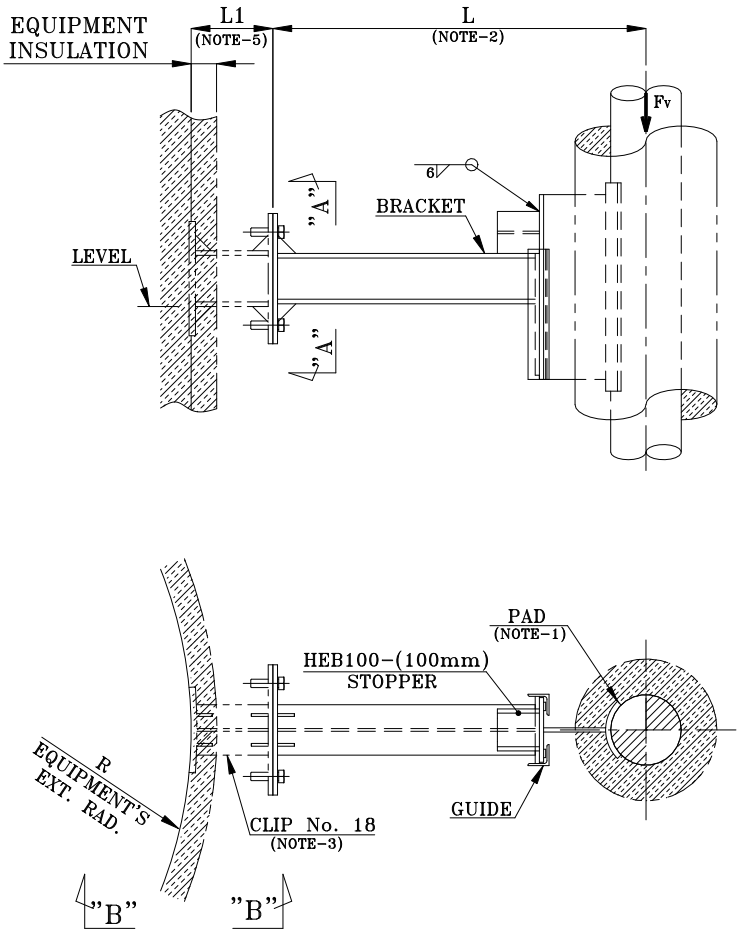
MATERIAL:

STANDARD PROFILE: ASTM A36, BOLT & NUT: A325. PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT U-BOLT TYPE DOUBLE GUIDE 1/2" ~ 2"	1
SH-03	1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 320 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	



INDICATION:

SH-04-□□-□-□

(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-HEIGHT MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHELL BE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT.

2- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

3- FOR DETAIL OF CLIP SEE (G-03).

4- "H" INDICATES SHOE HEIGHT.

5- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

MATERIAL:

STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT SHOE TYPE SEMI ANCHOR 2" ~ 6"	1
SH-04	2

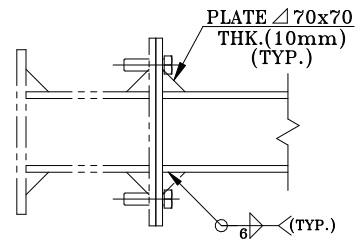
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

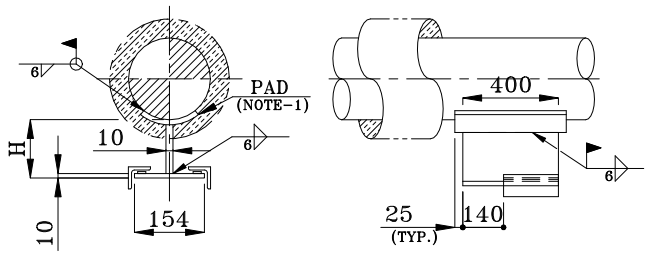
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

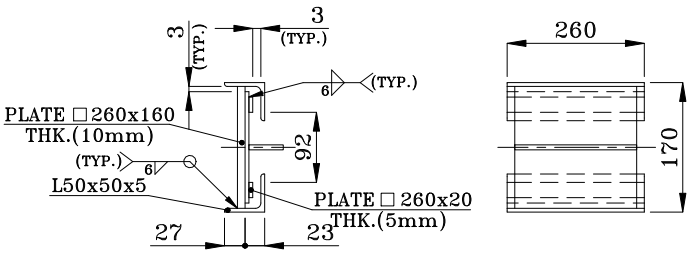
شماره صفحه: 321 از 394



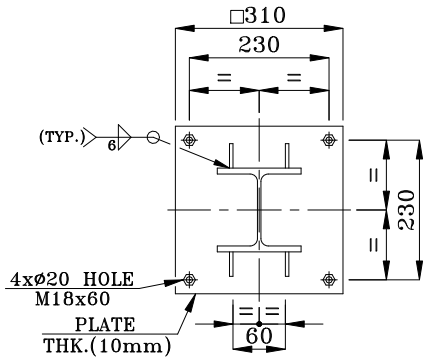
VIEW "B"~"B"



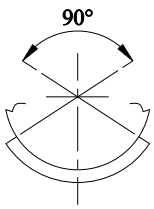
DETAIL OF PIPE SHOE



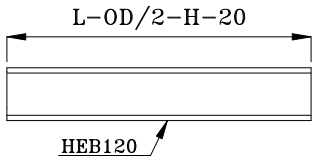
DETAIL OF GUIDE



VIEW "A"~"A"



DETAIL OF PAD



DETAIL OF BRACKET

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg)-Fv
1	500	700
2	600	
3	700	
4	800	
5	900	550
6	1000	
7	1100	

HEIGHT MARK:(3)

MARK	H	INSULATION THK.
1	100	UP TO 75mm
2	150	76mm TO 125mm
3	200	126mm TO 175mm
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED		

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
02	2"
03	3"
04	4"
06	6"

INDICATION:

SH-04-□□-□-□
(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-HEIGHT MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHELL BE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT.
2- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
3- FOR DETAIL OF CLIP SEE (G-03).
4- "H" INDICATES SHOE HEIGHT.
5- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

MATERIAL:
STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:
BRACKET ON EQUIPMENT
SHOE TYPE
SEMI ANCHOR
2" ~ 6"
SH-04

SHEET
2
2

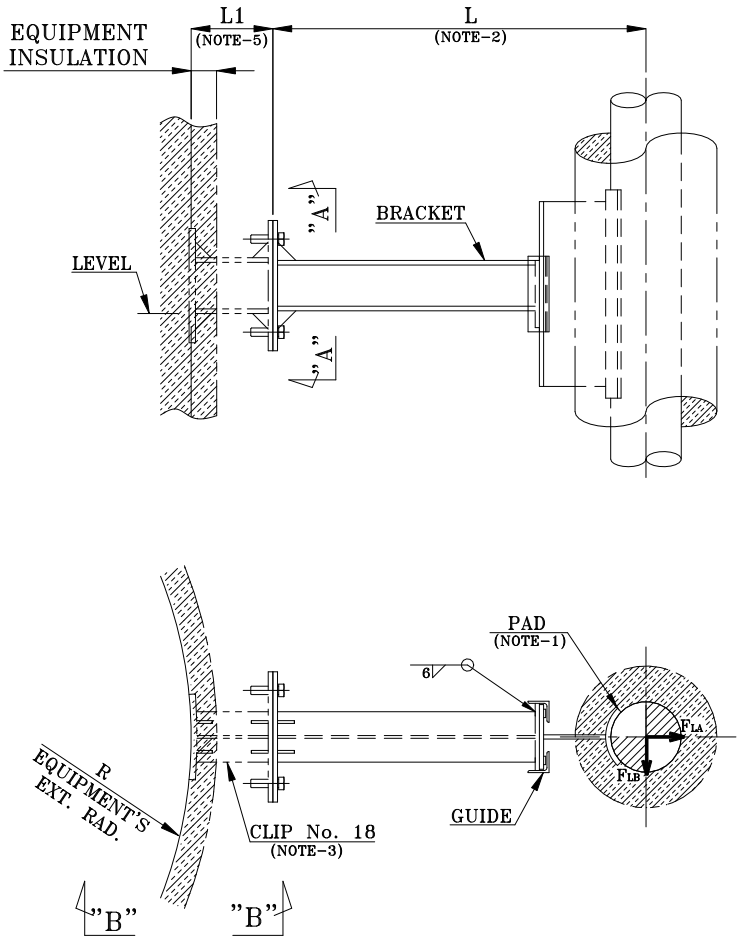
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 322 از 394



INDICATION:

SH-05-□□-□-□
(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-HEIGHT MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHELL BE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT.
2- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
3- FOR DETAIL OF CLIP SEE (G-03).
4- "H" INDICATES SHOE HEIGHT.
5- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

MATERIAL:
STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT SHOE TYPE DOUBLE GUIDE 2" ~ 6"	1
SH-05	2

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

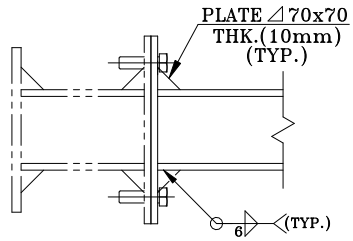
HIRGAN ENERGY

شماره پیمان:

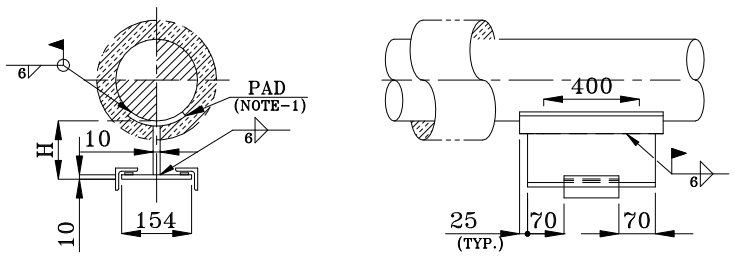
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

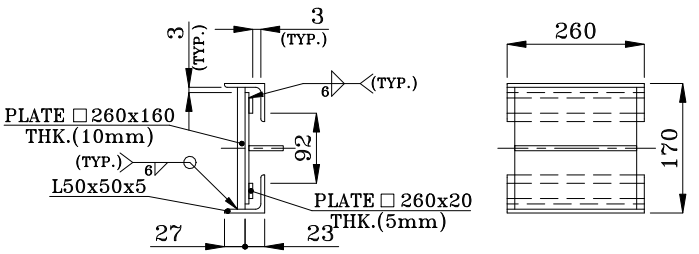
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



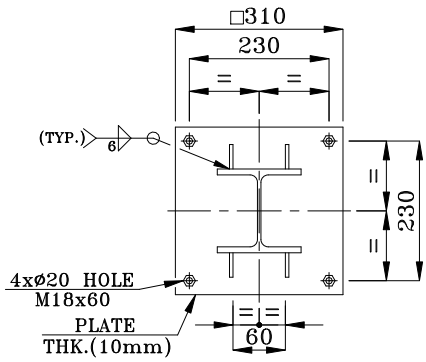
VIEW "B"~"B"



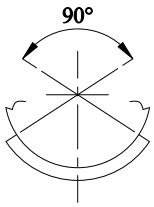
DETAIL OF PIPE SHOE



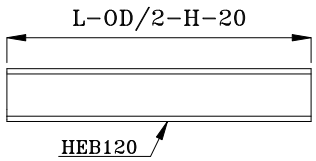
DETAIL OF GUIDE



VIEW "A"~"A"



DETAIL OF PAD



DETAIL OF BRACKET

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg) F_{LA}	ALLOW. LOAD(kg) F_{LB}
1	500	400	500
2	600		
3	700		
4	800		
5	900		
6	1000		
7	1100		

HEIGHT MARK:(3)

MARK	H	INSULATION THK.
1	100	UP TO 75mm
2	150	76mm TO 125mm
3	200	126mm TO 175mm
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED		

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
02	2"
03	3"
04	4"
06	6"

INDICATION:

SH-05-□□-□-□

(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-HEIGHT MARK

NOTE:

1- PAD (MATERIAL ⓐ) SHELL BE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE AND SHALL BE WELDED BEFORE PWHT.

2- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

3- FOR DETAIL OF CLIP SEE (G-03).

4- "H" INDICATES SHOE HEIGHT.

5- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

MATERIAL:

STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:
BRACKET ON EQUIPMENT
SHOE TYPE
DOUBLE GUIDE
2" ~ 6"
SH-05

SHEET 2 / 2

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

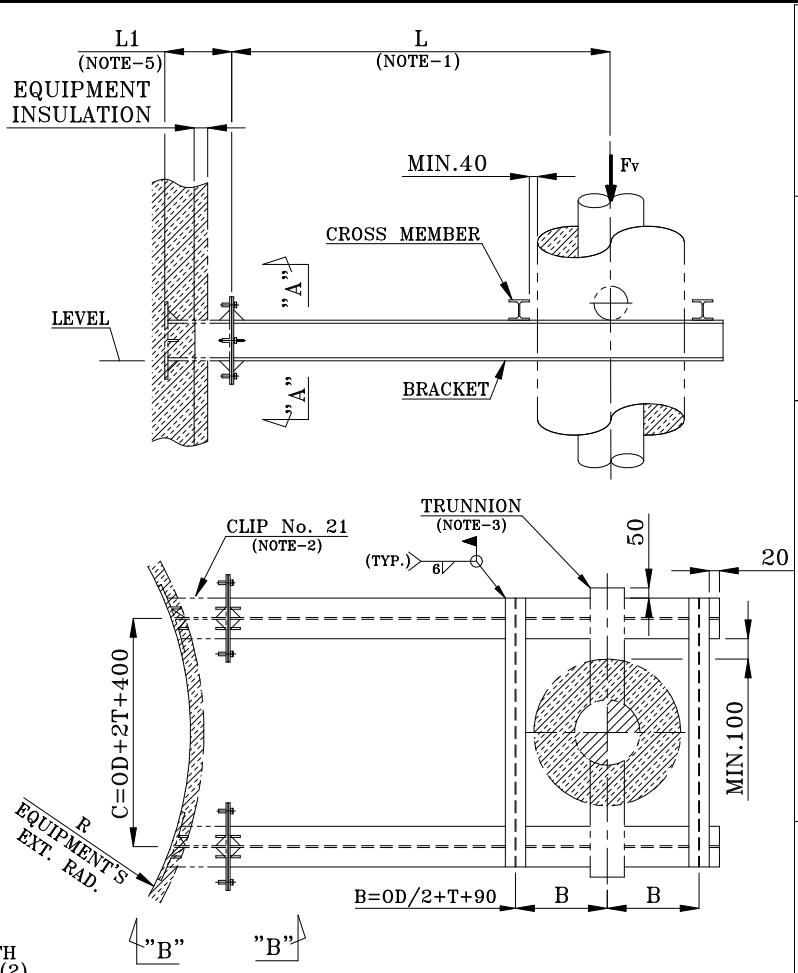
HIRGAN ENERGY

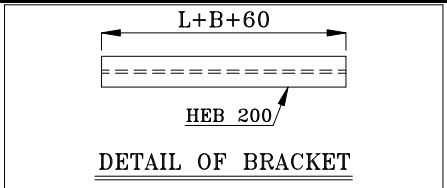
شماره پیمان:

053-073-9184

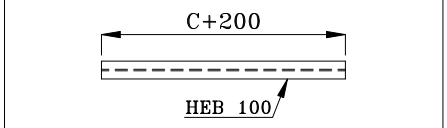
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

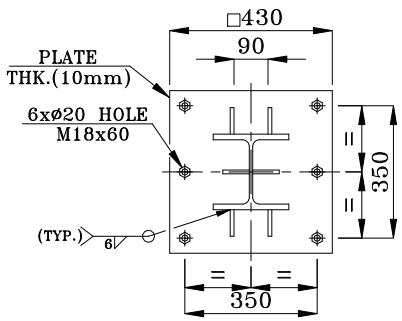




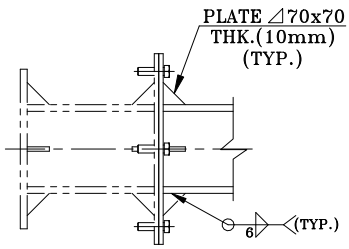
DETAIL OF BRACKET



DETAIL OF CROSS MEMBER



VIEW "A"~"A"



VIEW "B"~"B"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg) Fv
01	600	5500
02	700	
03	800	
04	900	4300
05	1000	
06	1100	
07	1200	3400
08	1300	
09	1400	
10	1500	2800
11	1600	
12	1700	
13	1800	2300
14	1900	
15	2000	

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
08	8"
10	10"
12	12"

INSULATION THK. MARK:(3)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

INDICATION:

SH-06-□□□-□
(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

4- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION SHALL BE CHECKED SEPARATELY.

5- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

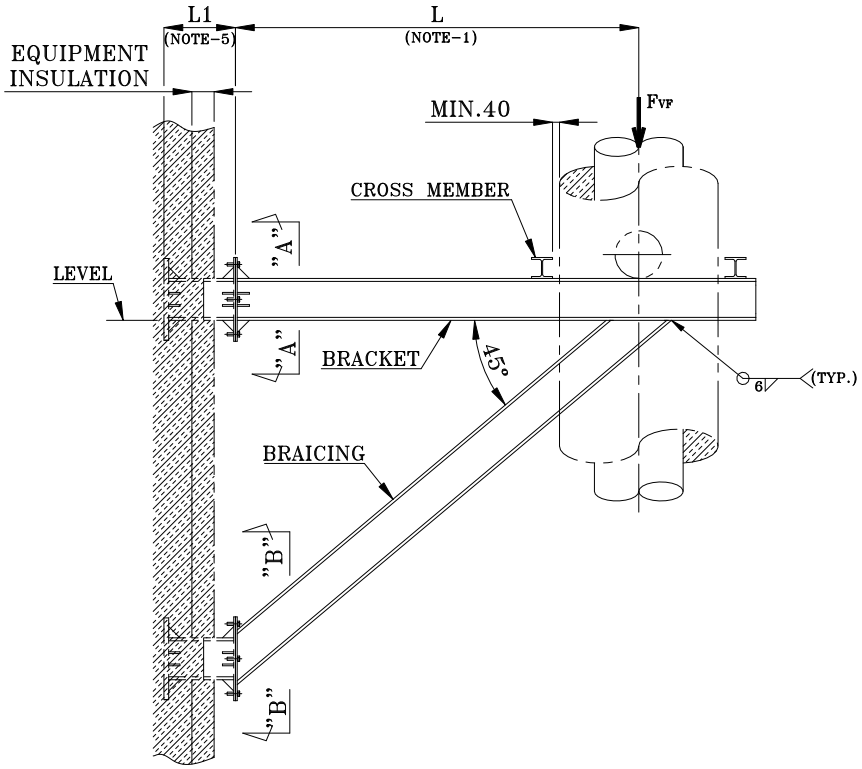
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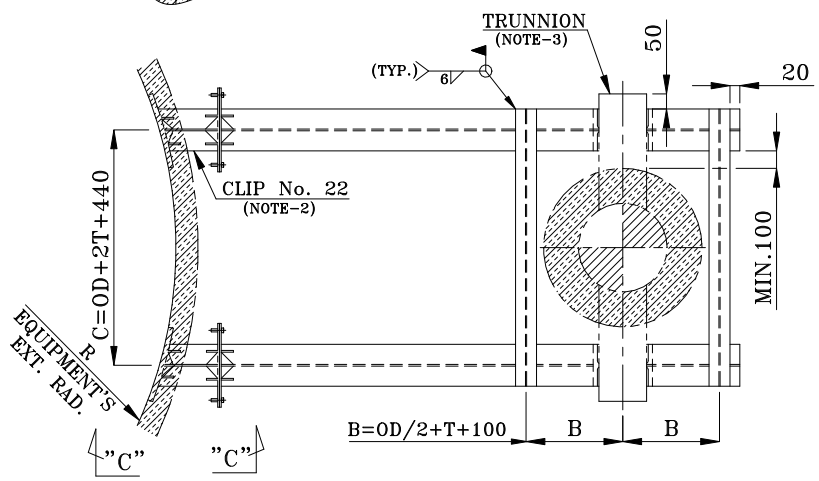
STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT REST 8" ~ 12"	1
SH-06	7

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 325 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	





INDICATION:

SH-06-□□□□-□

(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

4- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION SHALL BE CHECKED SEPARATELY.

5- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

MATERIAL:

STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT REST 14" ~ 24"	2
SH-06	7

NISOC

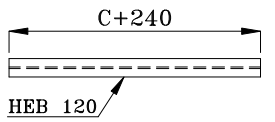
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO
HIRGAN ENERGY

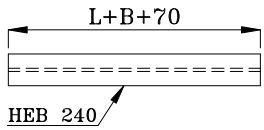
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

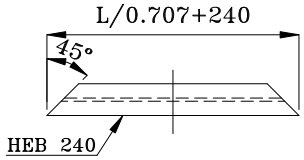
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



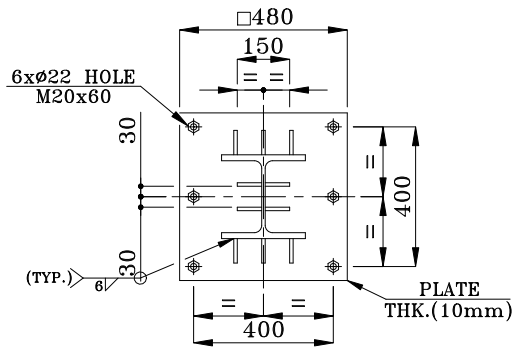
DETAIL OF CROSS MEMBER



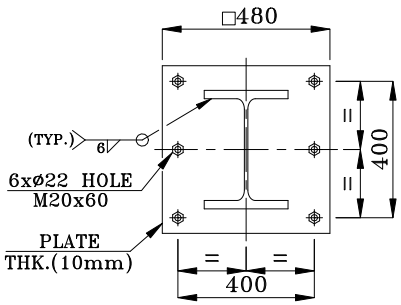
DETAIL OF BRACING



DETAIL OF BRACKET



VIEW "A"~"A"



VIEW "B"~"B"

INSULATION THK. MARK:(3)

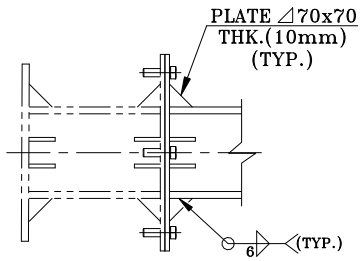
HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg) Fvf
01	800	18800
02	900	13800
03	1000	
04	1100	
05	1200	10000
06	1300	
07	1400	
08	1500	7700
09	1600	
10	1700	
11	1800	5900
12	1900	
13	2000	

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
14	14"
16	16"
18	18"
20	20"
22	22"
24	24"



VIEW "C"~"C"

INDICATION:

SH-06-[ ][ ][ ]-[ ]
(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF CLIP SEE (G-03).
3- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).
4- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION SHALL BE CHECKED SEPARATELY.
5- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

MATERIAL:
STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT REST 14" ~ 24"	3
SH-06	7

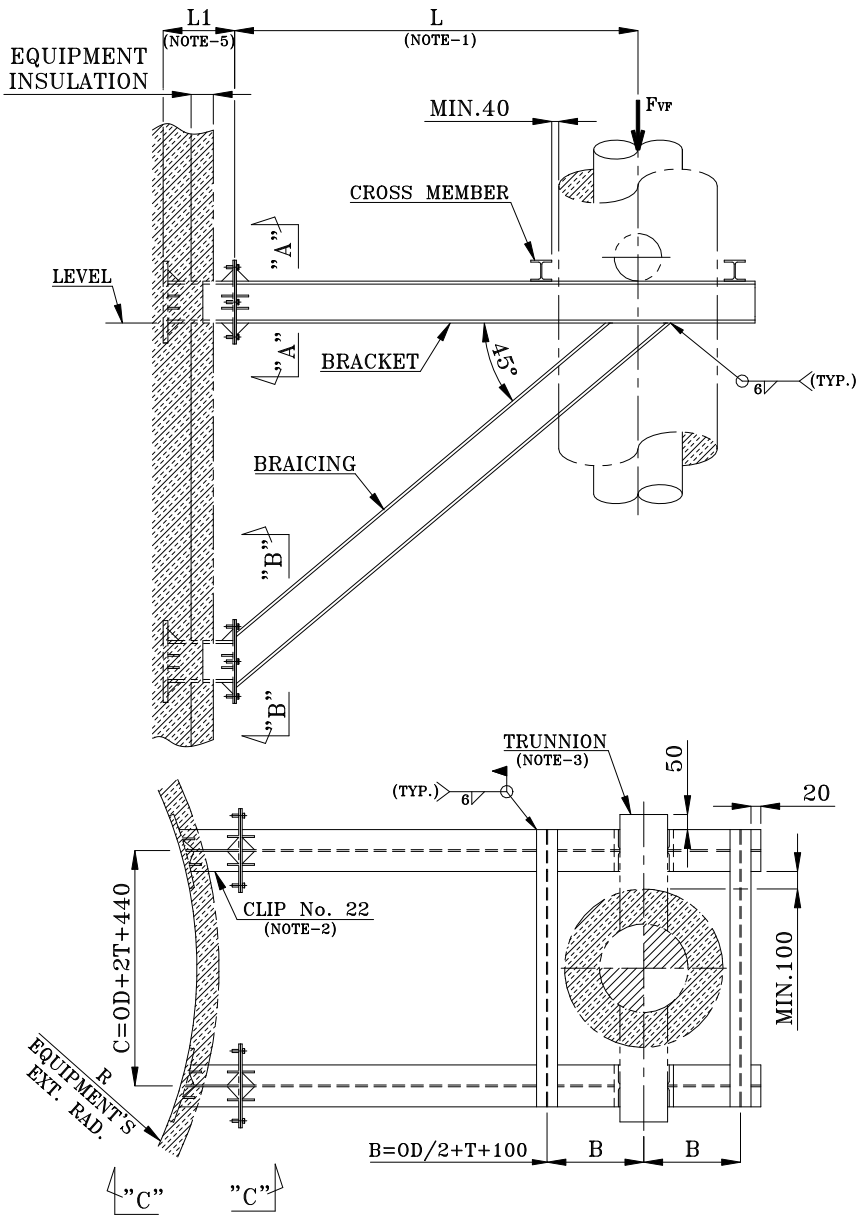
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 327 از 394



INDICATION:

SH-06-[ ][ ][ ][ ]-[ ]
(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

4- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION SHALL BE CHECKED SEPARATELY.

5- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

MATERIAL:

STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT REST 26" ~ 42"	4
SH-06	7

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

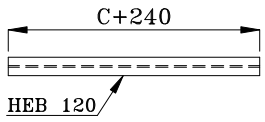
PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

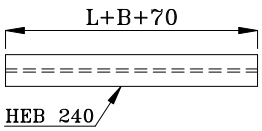
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

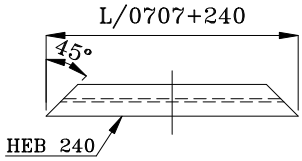
شماره صفحه: 328 از 394



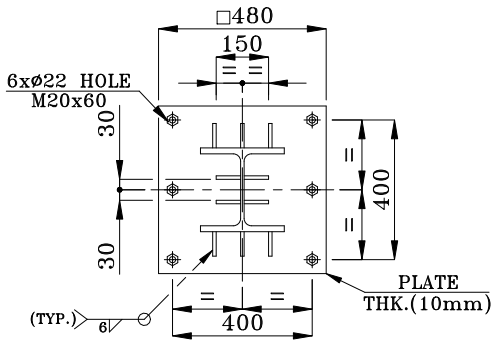
DETAIL OF CROSS MEMBER



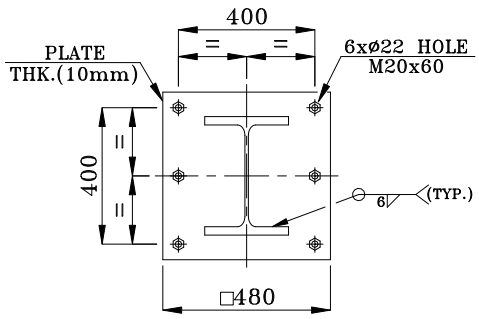
DETAIL OF BRACKET



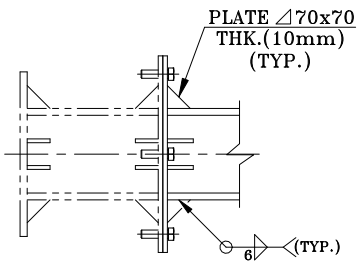
DETAIL OF BRAICING



VIEW "A"~"A"



VIEW "B"~"B"



VIEW "C"~"C"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg) Fvf
01	1000	15500
02	1100	
03	1200	11400
04	1300	
05	1400	
06	1500	8600
07	1600	
08	1700	
09	1800	6600
10	1900	
11	2000	

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
26	26"
28	28"
30	30"
32	32"
34	34"
36	36"
38	38"
40	40"
42	42"

INSULATION THK. MARK:(3)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

INDICATION:

SH-06- [ ][ ][ ] - [ ]
(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

4- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION SHALL BE CHECKED SEPARATELY.

5- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

MATERIAL:
STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT REST 26" ~ 42"	5
SH-06	7

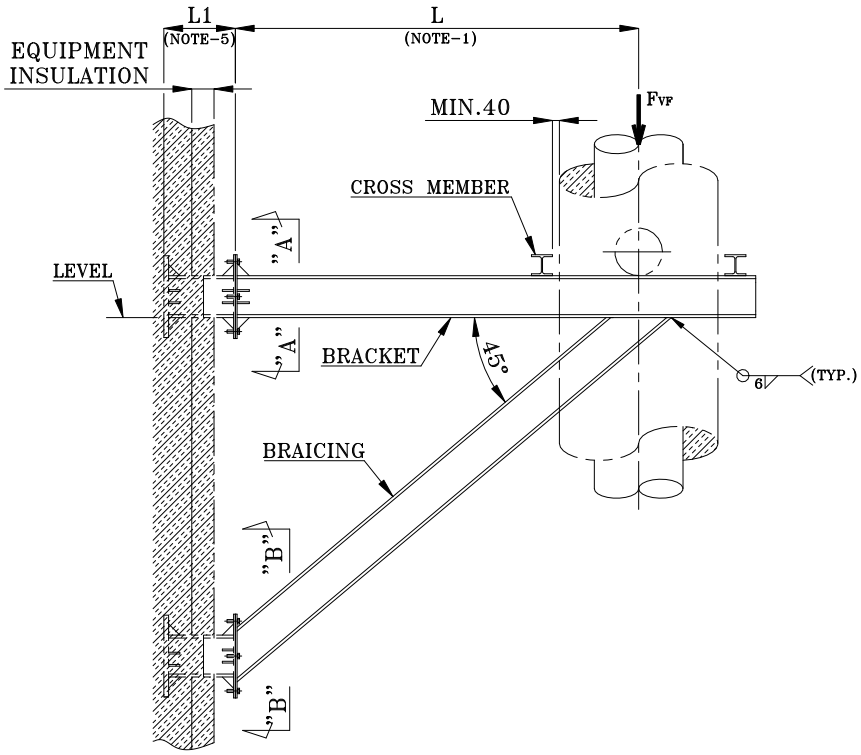
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

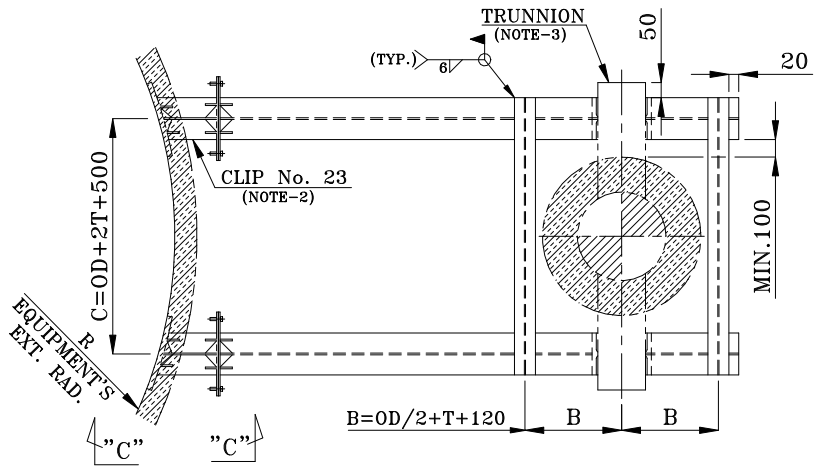
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 329 از 394





INDICATION:

SH-06-[ ][ ][ ]-[ ]
(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

4- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION SHALL BE CHECKED SEPARATELY.

5- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

MATERIAL:

STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT REST 44" ~ 56"	6
SH-06	7

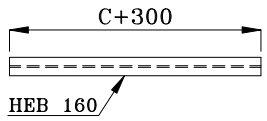
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

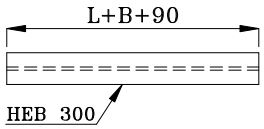
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

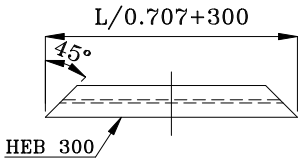
شماره صفحه: 330 از 394



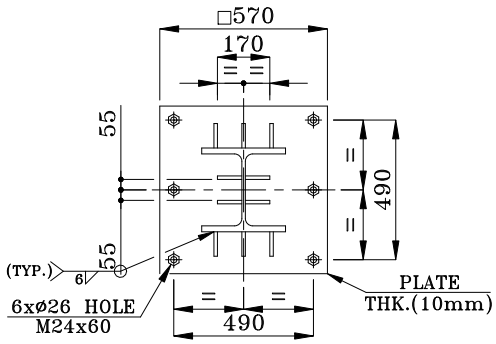
DETAIL OF CROSS MEMBER



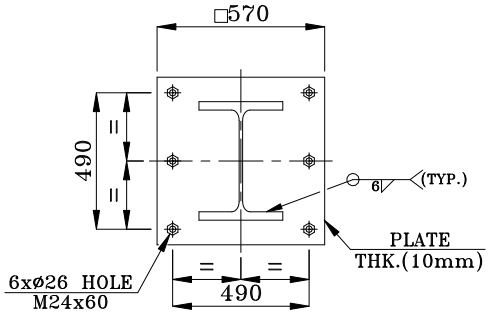
DETAIL OF BRACKET



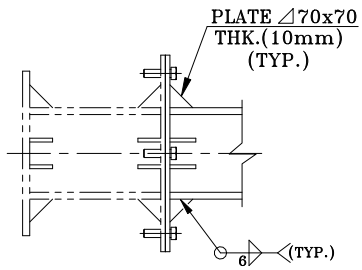
DETAIL OF BRAICING



VIEW "A"~"A"



VIEW "B"~"B"



VIEW "C"~"C"

INSULATION THK. MARK:(3)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg) Fvf
01	1300	15600
02	1400	
03	1500	14000
04	1600	
05	1700	
06	1800	12500
07	1900	
08	2000	

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
44	44"
46	46"
48	48"
50	50"
52	52"
54	54"
56	56"

INDICATION:

SH-06-[ ][ ][ ]-[ ]
(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

4- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION SHALL BE CHECKED SEPARATELY.

5- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

MATERIAL:

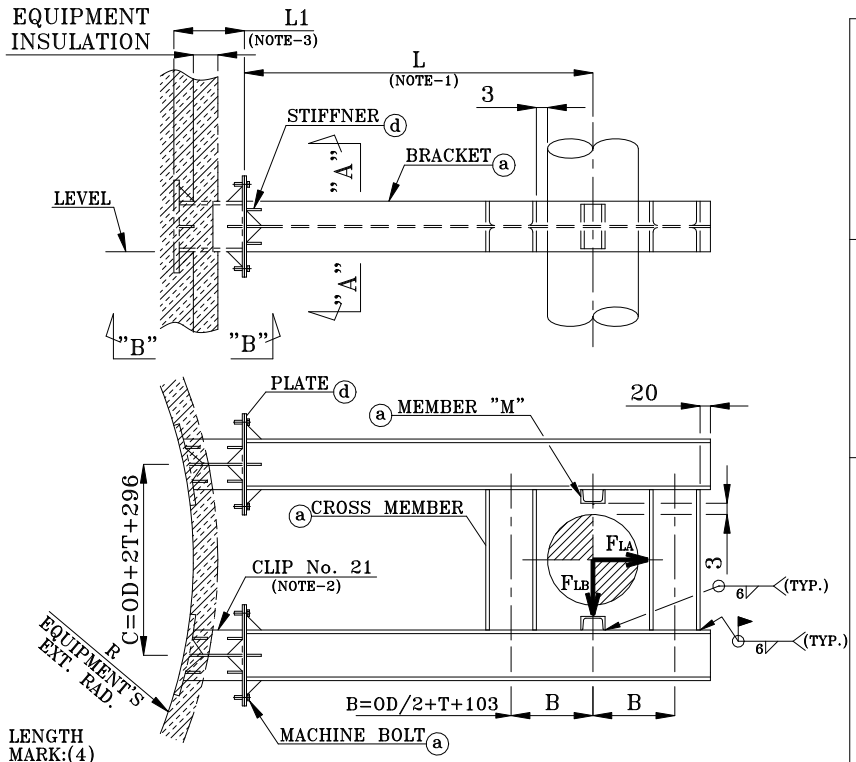
STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT REST 44" ~ 56"	7
SH-06	7

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 331 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



TYPE "A"
CARBON STEEL (BARE)

LENGTH MARK:(4)

MARK	L	ALLOW. LOAD(kg) FLA	ALLOW. LOAD(kg) FLB
01	500	30000	6500
02	600		
03	700		
04	800		
05	900		4900
06	1000		
07	1100		
08	1200		3800
09	1300		
10	1400		
11	1500		3000
12	1600		
13	1700		
14	1800		2500
15	1900		
16	2000		

NPS MARK:(3)

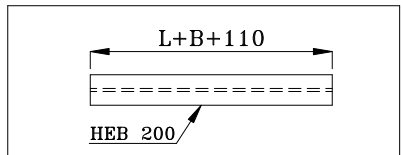
NPS MARK	RUN PIPE SIZE
08	8"
10	10"
12	12"

INSULATION THK. MARK:(5)

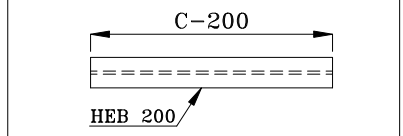
HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

MATERIAL MARK:(2)

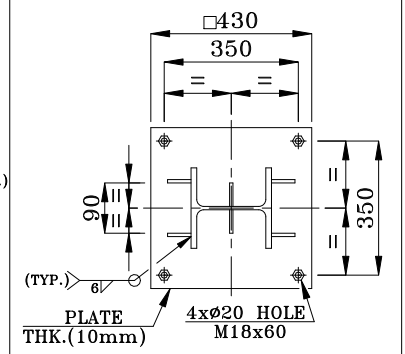
DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	C
0°C TO 350°C ⓐ	ASTM A36	ASTM A36	ASTM A36
0°C TO 350°C ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
0°C TO 350°C ⓒ	A325	A325	A325
0°C TO 350°C ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C



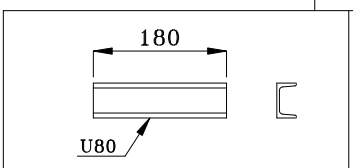
DETAIL OF BRACKET



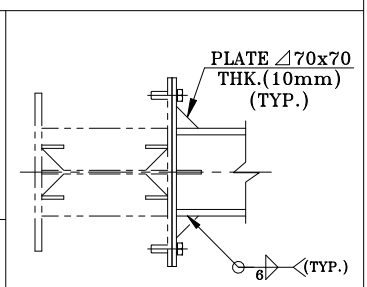
DETAIL OF CROSS MEMBER



VIEW "A"~"A"



DETAIL OF MEMBER "M"



VIEW "B"~"B"

INDICATION:

SH-07-□□-□□-□□□
(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF CLIP SEE (G-03).
3- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

SUPPORT DESCRIPTION:
BRACKET ON EQUIPMENT
DOUBLE GUIDE
(TYPE A-CS)
8" ~ 12"
SH-07

SHEET 1 / 22

NISOC

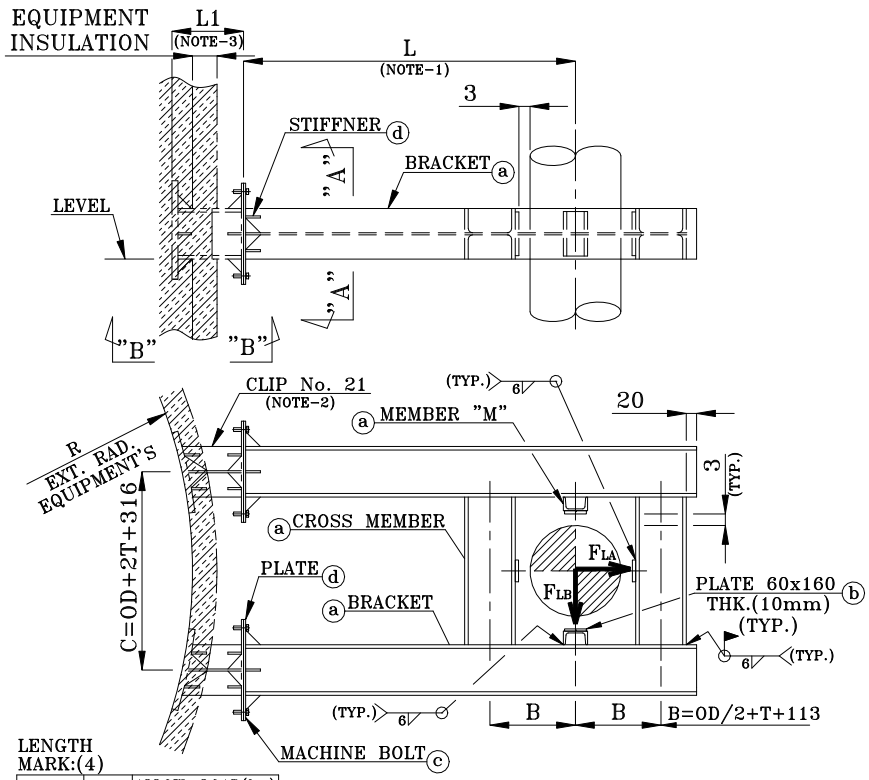
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



TYPE "B"
ALLOY STEEL OR STAINLESS STEEL (BARE)

LENGTH MARK:(4)

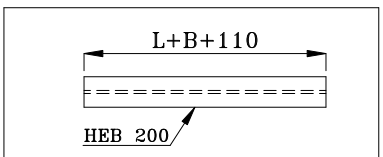
MARK	L	ALLOW. LOAD(kg) FLA	ALLOW. LOAD(kg) FLB
01	500	30000	6500
02	600		
03	700		
04	800		
05	900		4900
06	1000		
07	1100		
08	1200		3800
09	1300		
10	1400		
11	1500		3000
12	1600		
13	1700		
14	1800		2500
15	1900		
16	2000		

NPS MARK:(3)

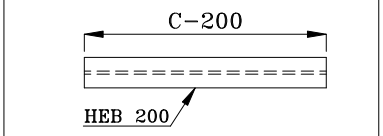
NPS MARK	RUN PIPE SIZE
08	8"
10	10"
12	12"

INSULATION THK. MARK:(5)

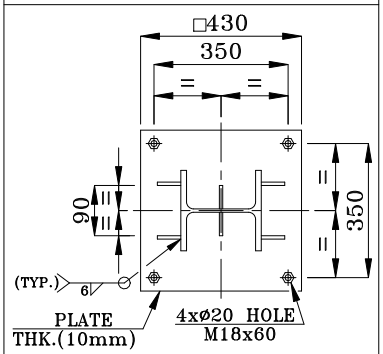
HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5



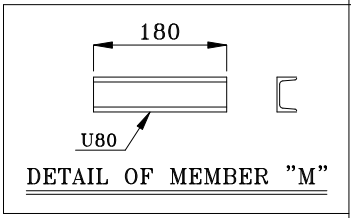
DETAIL OF BRACKET



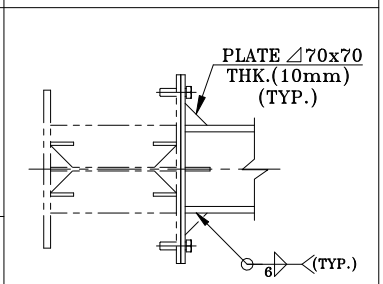
DETAIL OF CROSS MEMBER



VIEW "A"~"A"



DETAIL OF MEMBER "M"



VIEW "B"~"B"

MATERIAL MARK:(2)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER	MARK	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	B	C
	a	ASTM A36	ASTM A36	ASTM A36
	b	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	c	A325	A325	A325
	d	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SH-07-□□-□□-□□□ (1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF CLIP SEE (G-03).
3- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

SUPPORT DESCRIPTION:
BRACKET ON EQUIPMENT
DOUBLE GUIDE
(TYPE B-AS,SS)
8" ~ 12"

SH-07

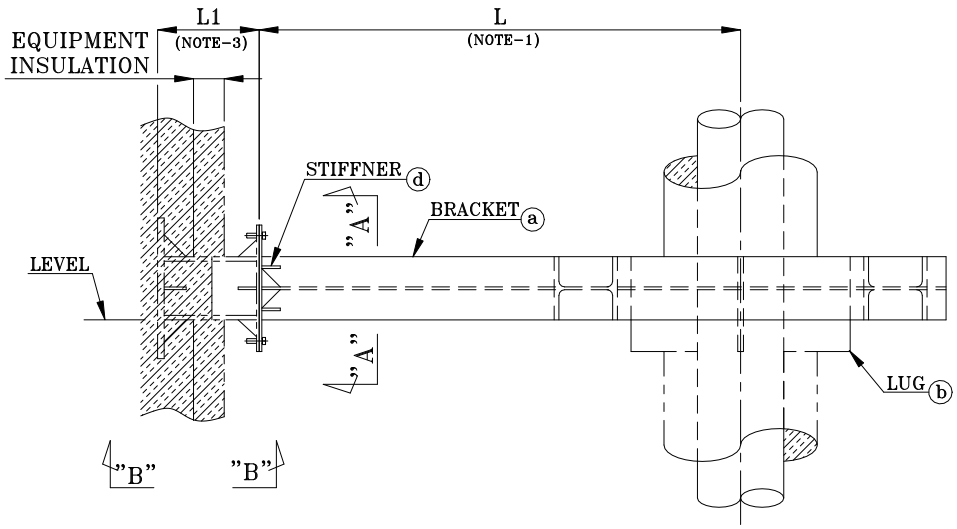
SHEET 2 / 22

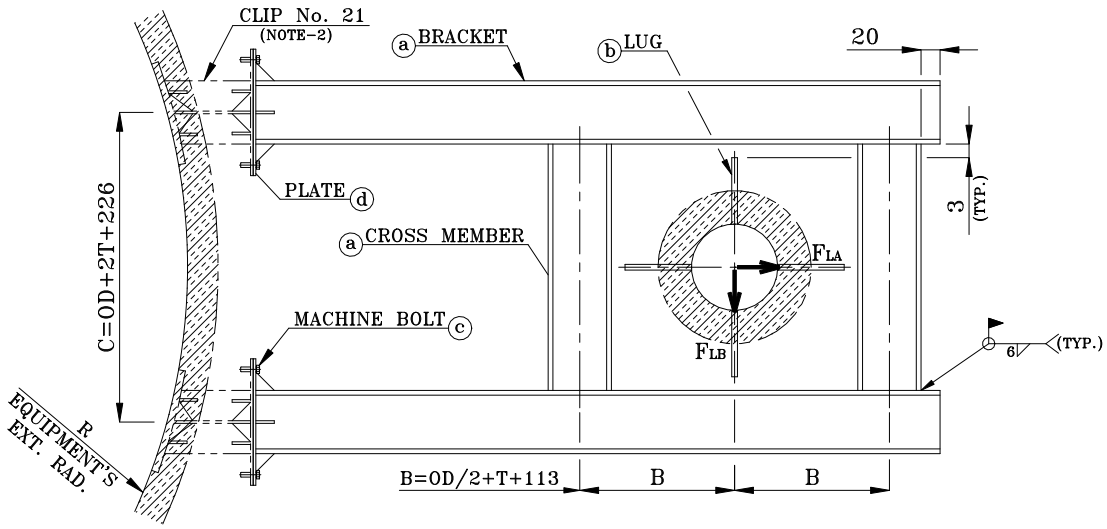
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02





TYPE "C"

CS, AS, OR SS (INSULATED)

INDICATION:

SH-07-□□-□□□-□□□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE C-CS,AS,SS) 8" ~ 12"	3
SH-07	22

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

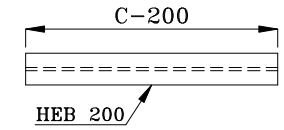
HIRGAN ENERGY

شماره پیمان:

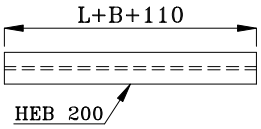
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

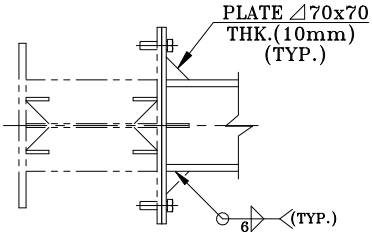
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



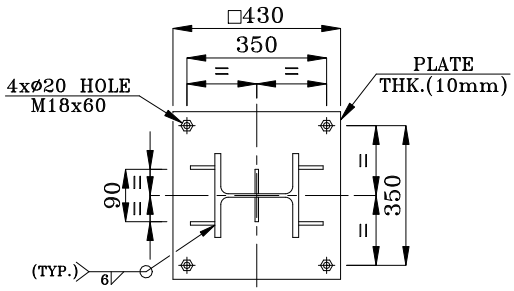
DETAIL OF CROSS MEMBER



DETAIL OF BRACKET



VIEW "B"~"B"



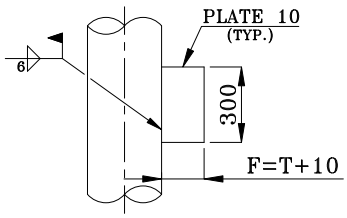
VIEW "A"~"A"

LENGTH MARK:(4)

MARK	L	ALLOW. LOAD(kg) F_{LA}	ALLOW. LOAD(kg) F_{LB}
01	700	30000	6500
02	800		
03	900		4900
04	1000		
05	1100		
06	1200		3800
07	1300		
08	1400		
09	1500		3000
10	1600		
11	1700		
12	1800		2500
13	1900		
14	2000		

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE
08	8"
10	10"
12	12"



DETAIL OF LUG

TYPE "C"

CS, AS, OR SS (INSULATED)

INSULATION THK. MARK:(5)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

MATERIAL MARK:(2)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
	MARK	A	B	C
0°C TO 350°C	ⓐ	ASTM A36	ASTM A36	ASTM A36
	ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	A325	A325	A325
	ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SH-07-□□-□□-□□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

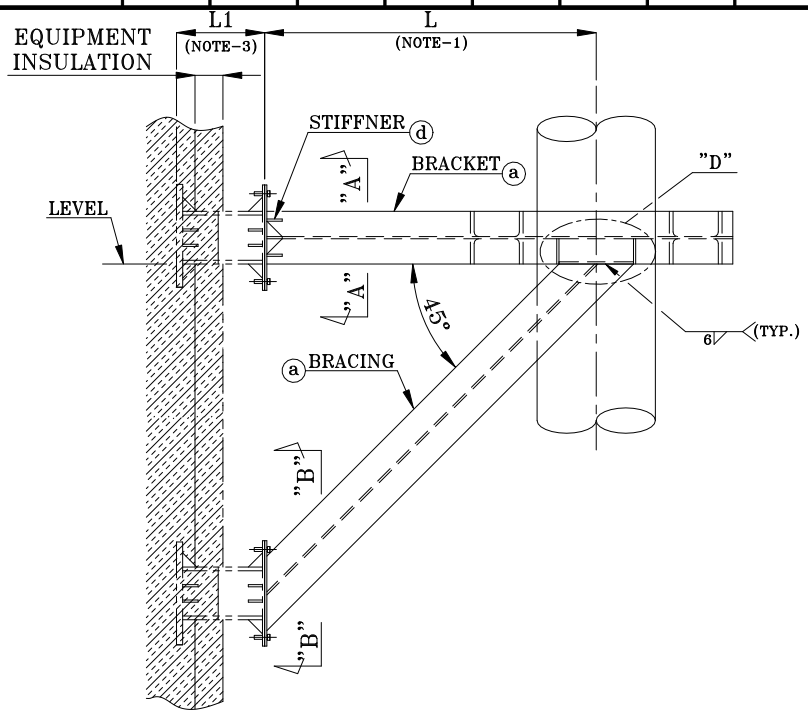
SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE C-CS,AS,SS) 8" ~ 12"	4
SH-07	22

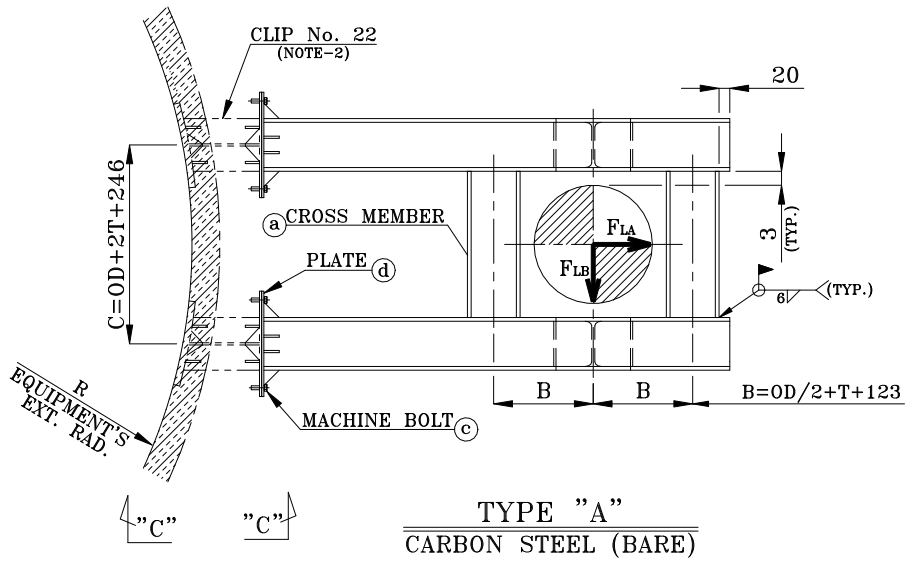
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 335 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

053-073-9184





TYPE "A"
CARBON STEEL (BARE)

INDICATION:

SH-07-□□-□□□-□□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE A-CS) 14" ~ 24"	5
SH-07	22

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

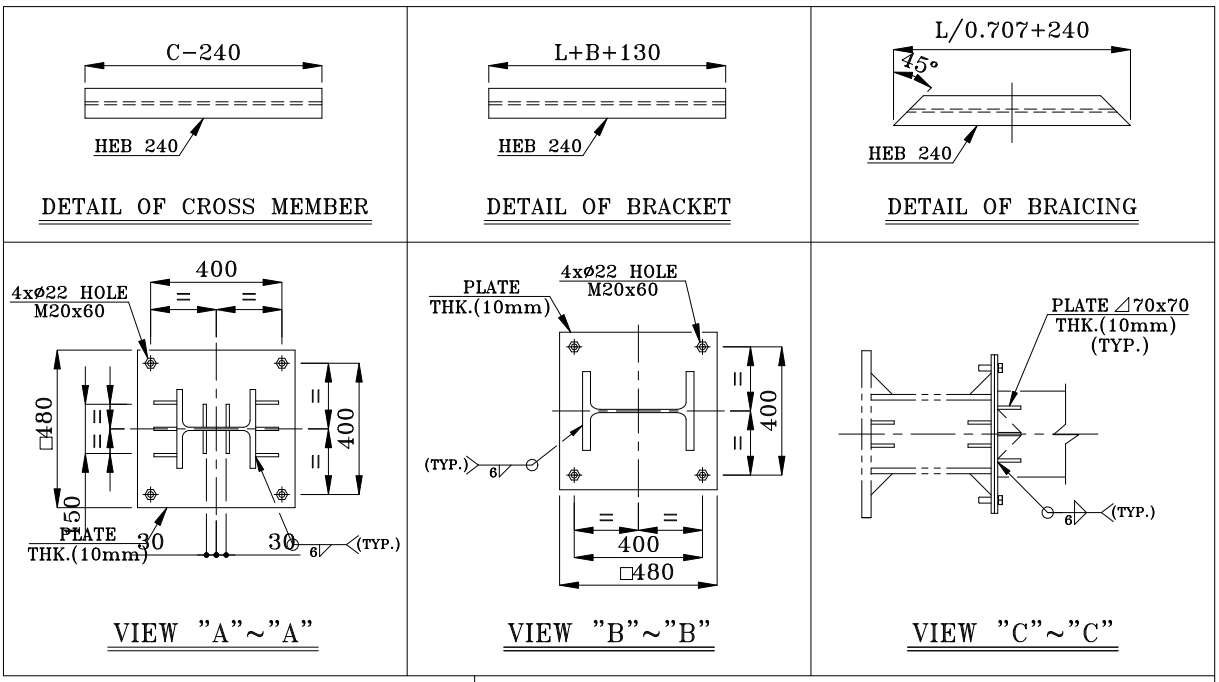
HIRGAN ENERGY

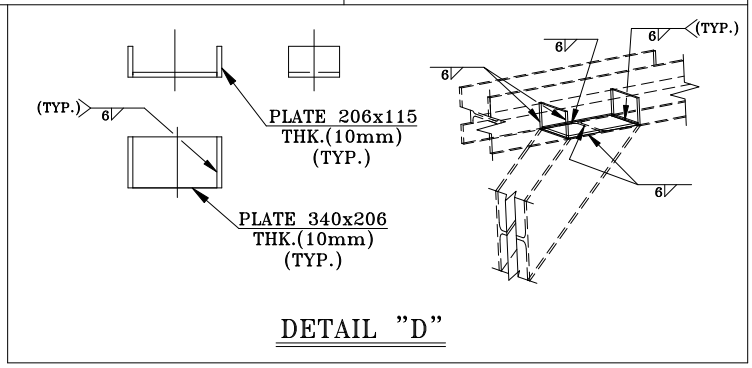
شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02





LENGTH MARK:(4)

MARK	L	ALLOW. LOAD(kg) F_{LA}	ALLOW. LOAD(kg) F_{LB}
01	700	36000	7800
02	800		
03	900		
04	1000		
05	1100		
06	1200		5900
07	1300		
08	1400		
09	1500		4700
10	1600		
11	1700		
12	1800		3600
13	1900		
14	2000		

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE
14	14"
16	16"
18	18"
20	20"
22	22"
24	24"

TYPE "A"
CARBON STEEL (BARE)

INSULATION THK. MARK:(5)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

MATERIAL MARK:(2)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	C
0°C TO 350°C	ⓐ	ASTM A36	ASTM A36	ASTM A36
	ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	A325	A325	A325
	ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SH-07-□□-□□□-□□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

SUPPORT DESCRIPTION:
BRACKET ON EQUIPMENT
DOUBLE GUIDE
(TYPE A-CS)
14" ~ 24"
SH-07

SHEET 6 / 22

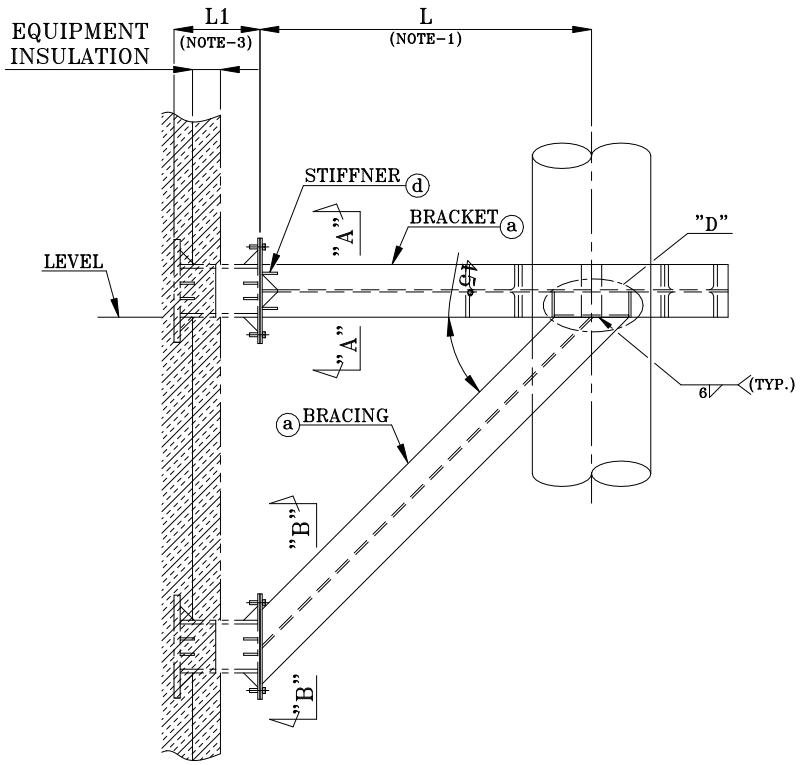
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

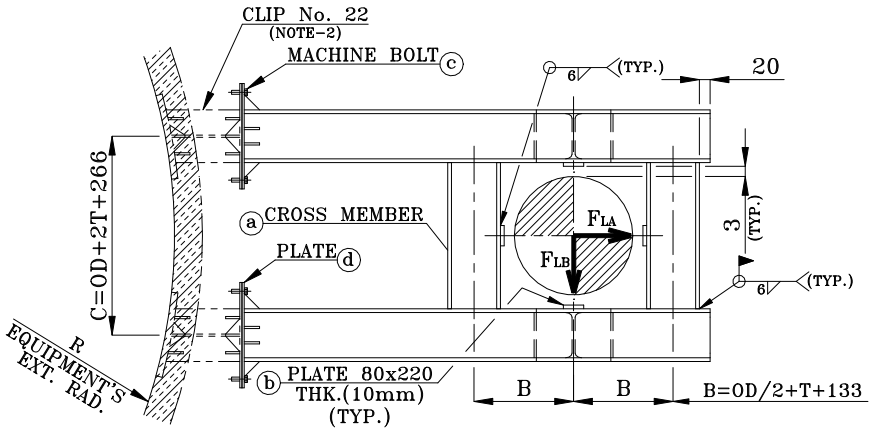
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 337 از 394





"C" "C"

TYPE "B"
ALLOY STEEL OR STAINLESS STEEL (BARE)

INDICATION:

SH-07-□□-□□-□□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE B-AS,SS) 14" ~ 24"	7
SH-07	22

NISOC

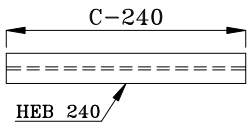
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO
HIRGAN ENERGY

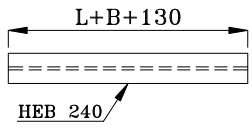
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

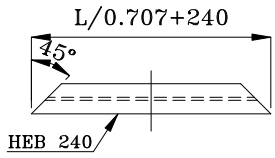
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



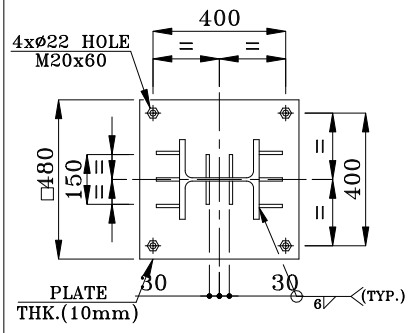
DETAIL OF CROSS MEMBER



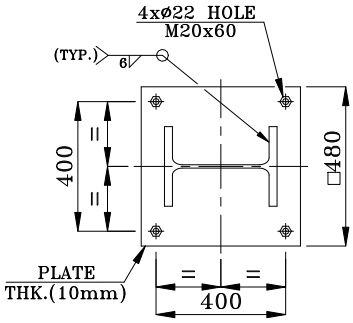
DETAIL OF BRACKET



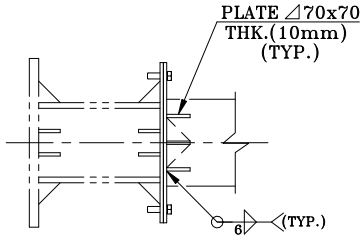
DETAIL OF BRAICING



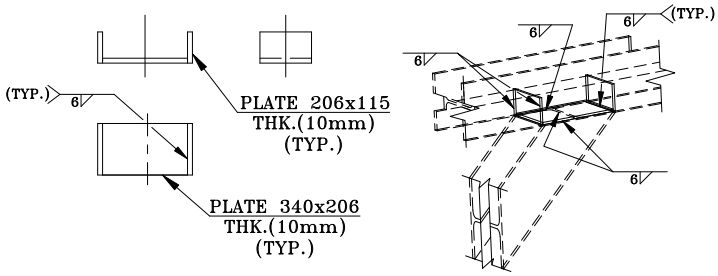
VIEW "A"~"A"



VIEW "B"~"B"



VIEW "C"~"C"



DETAIL "D"

TYPE "B"
ALLOY STEEL OR STAINLESS STEEL (BARE)

LENGTH MARK:(4)

MARK	L	ALLOW. LOAD(kg) F_{LA}	ALLOW. LOAD(kg) F_{LB}
01	700	36000	7800
02	800		
03	900		
04	1000		
05	1100		
06	1200		5900
07	1300		
08	1400		
09	1500		4700
10	1600		
11	1700		
12	1800		3600
13	1900		
14	2000		

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE
14	14"
16	16"
18	18"
20	20"
22	22"
24	24"

INSULATION THK. MARK:(5)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

MATERIAL MARK:(2)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	B	C
	ⓐ	ASTM A36	ASTM A36	ASTM A36
	ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	A325	A325	A325
	ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SH-07-□□-□□-□□□
(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

NOTE:
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF CLIP SEE (G-03).
3- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

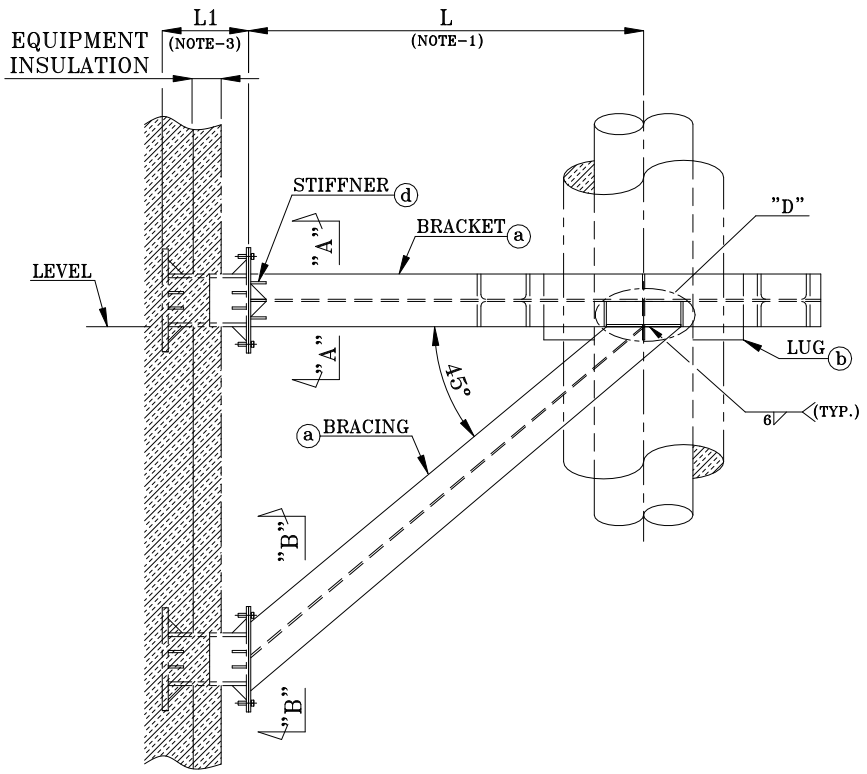
SUPPORT DESCRIPTION:
BRACKET ON EQUIPMENT
DOUBLE GUIDE
(TYPE B AS,SS)
14" ~ 24"
SH-07

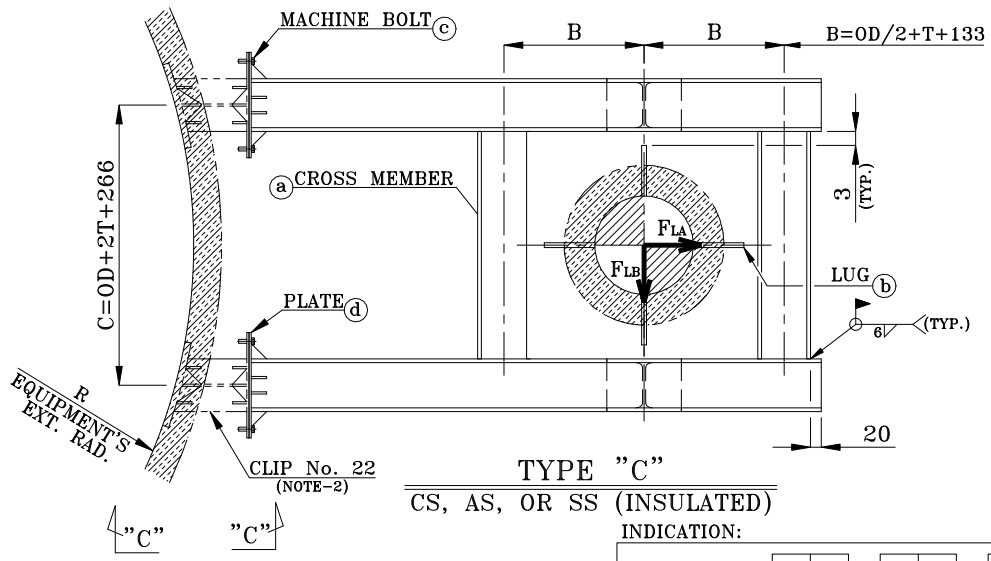
SHEET
8
22

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 339 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02





TYPE "C"
CS, AS, OR SS (INSULATED)

INDICATION:

SH-07-□□-□□-□□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF CLIP SEE (G-03).
3- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE C CS,AS,SS) 14" ~ 24"	9
SH-07	22

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

HIRGAN ENERGY

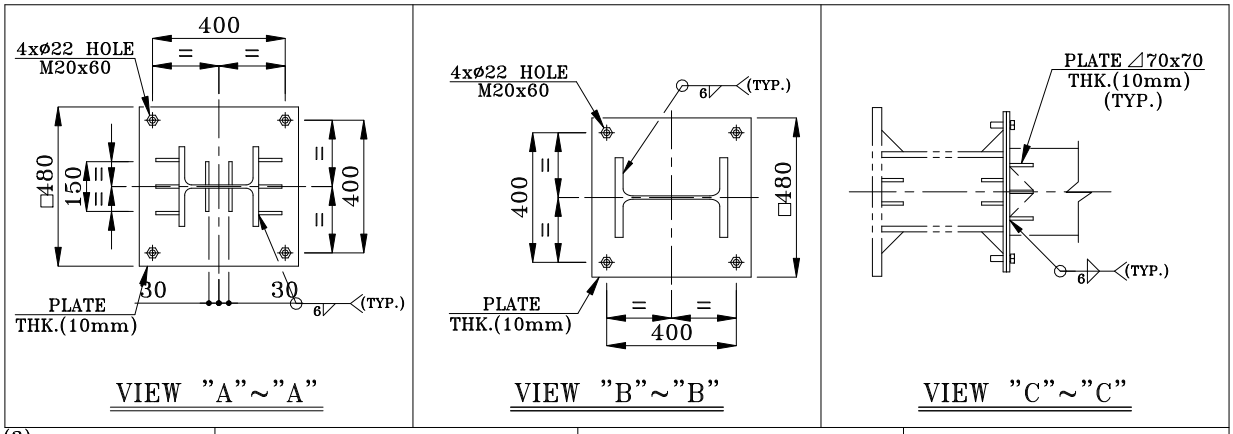
شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

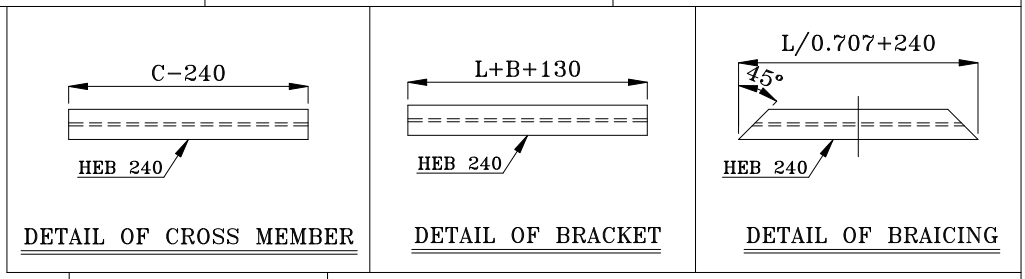
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 340 از 394



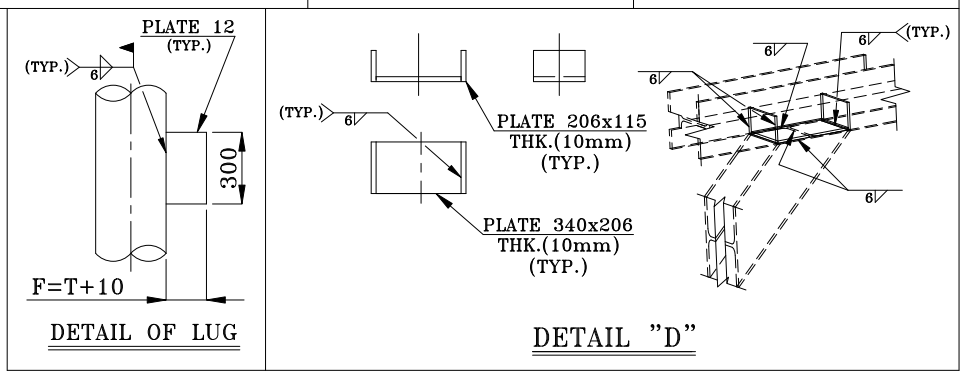
NPS MARK:(3)

NPS MARK	RUN PIPE SIZE
14	14"
16	16"
18	18"
20	20"
22	22"
24	24"



LENGTH MARK:(4)

MARK	L	ALLOW. LOAD(kg) F_{LA}	ALLOW. LOAD(kg) F_{LB}
01	900	36000	7800
02	1000		
03	1100		
04	1200		5900
05	1300		
06	1400		
07	1500		4700
08	1600		
09	1700		
10	1800		3600
11	1900		
12	2000		



TYPE "C"
CS, AS, OR SS (INSULATED)

INSULATION THK. MARK:(5)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

MATERIAL MARK:(2)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
	MARK	A	B	C
0°C TO 350°C	ⓐ	ASTM A36	ASTM A36	ASTM A36
	ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	A325	A325	A325
	ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SH-07-□□-□□□-□□□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

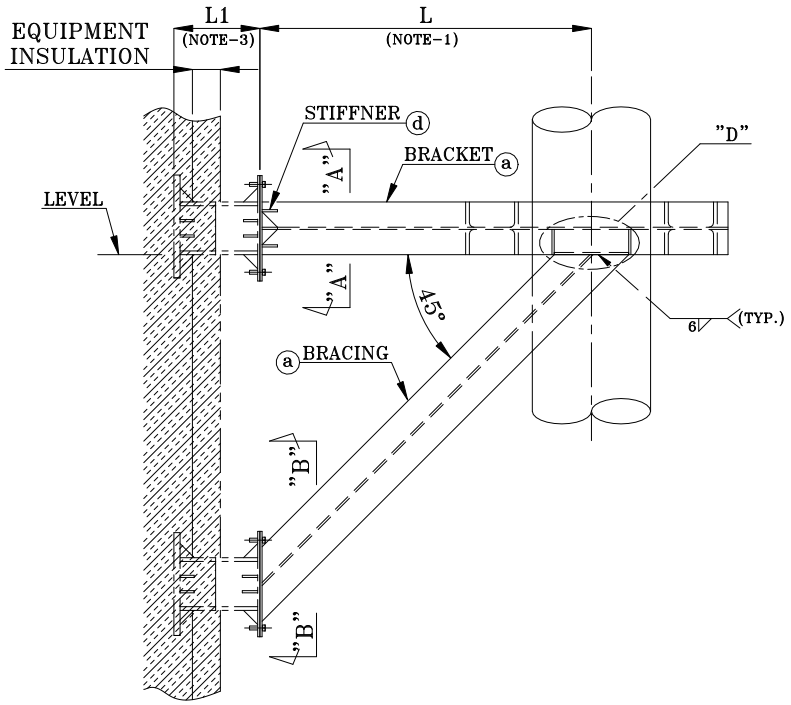
NOTE:

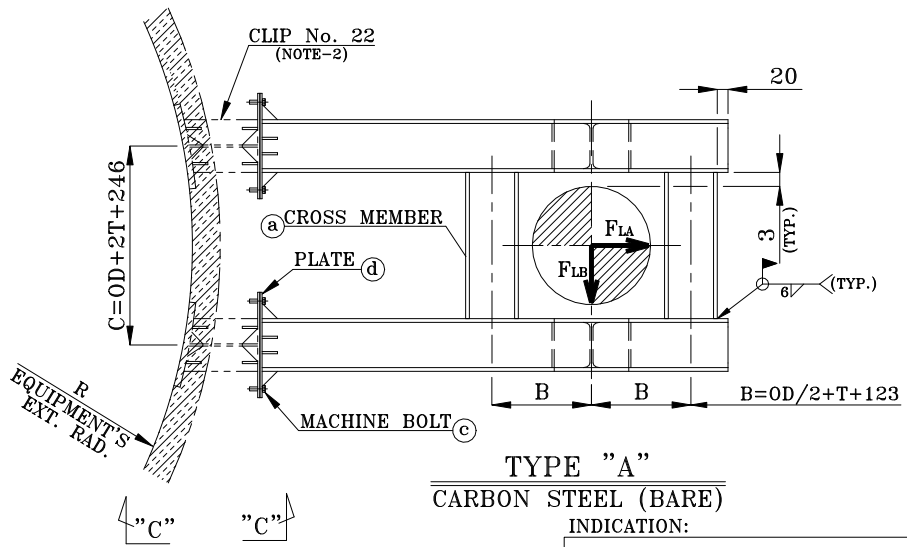
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE C CS,AS,SS) 14" ~ 24"	10
SH-07	22





TYPE "A"
CARBON STEEL (BARE)

INDICATION:

SH-07-□□-□□□-□□□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE A-CS) 26" ~ 42"	11
SH-07	22

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

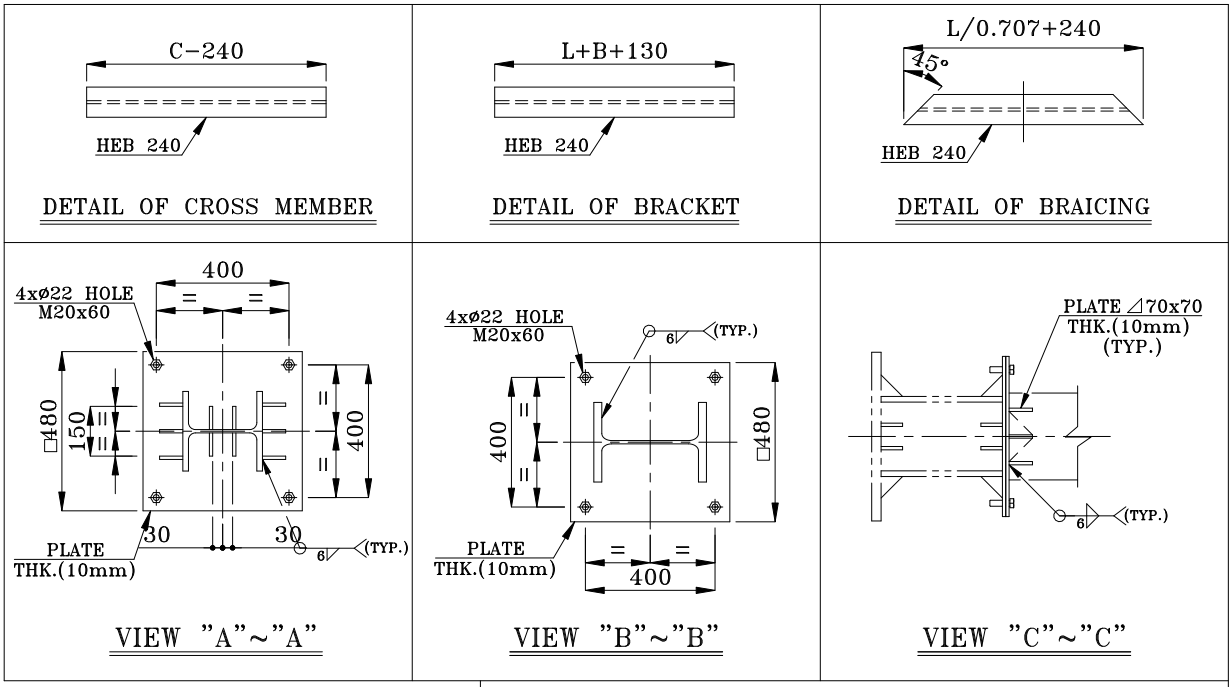
HIRGAN ENERGY

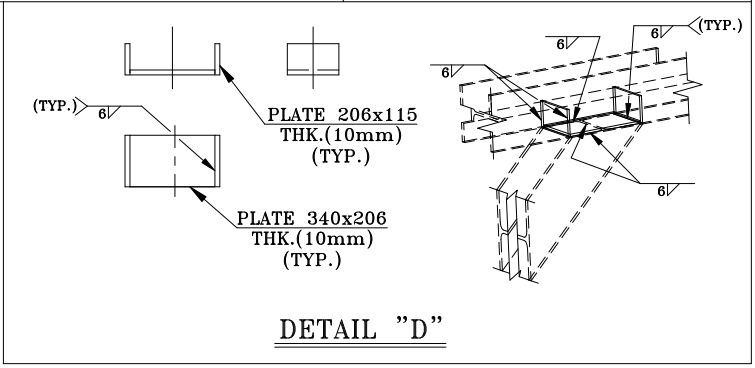
شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02





LENGTH MARK:(4)

MARK	L	ALLOW. LOAD(kg) F_{LA}	ALLOW. LOAD(kg) F_{LB}
01	900	27000	9200
02	1000		
03	1100		
04	1200		7000
05	1300		
06	1400		
07	1500		5500
08	1600		
09	1700		
10	1800		4300
11	1900		
12	2000		

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE
26	26"
28	28"
30	30"
32	32"
34	34"
36	36"
38	38"
40	40"
42	42"

TYPE "A"
CARBON STEEL (BARE)

INSULATION THK. MARK:(5)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

MATERIAL MARK:(2)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	B	C
	ⓐ	ASTM A36	ASTM A36	ASTM A36
	ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	A325	A325	A325
	ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SH-07-□□-□□-□□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

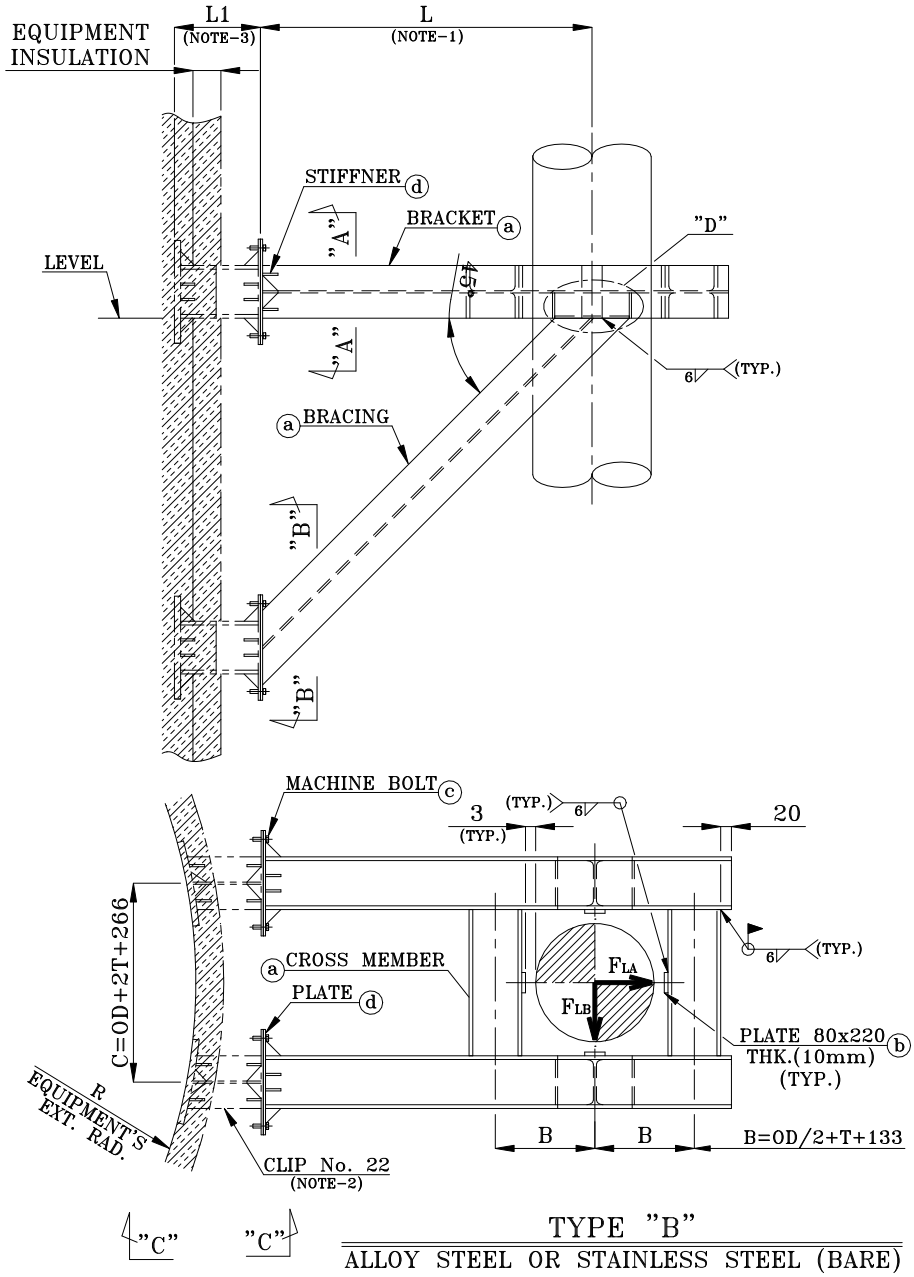
SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE A-CS) 26" ~ 42"	12
SH-07	22

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



TYPE "B"
ALLOY STEEL OR STAINLESS STEEL (BARE)

INDICATION:

SH-07-□□-□□-□□□-□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

SUPPORT DESCRIPTION:
BRACKET ON EQUIPMENT
DOUBLE GUIDE
(TYPE B-AS,SS)
26" ~ 42"
SH-07

SHEET 13 / 22

NOTE:
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF CLIP SEE (G-03).
3- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

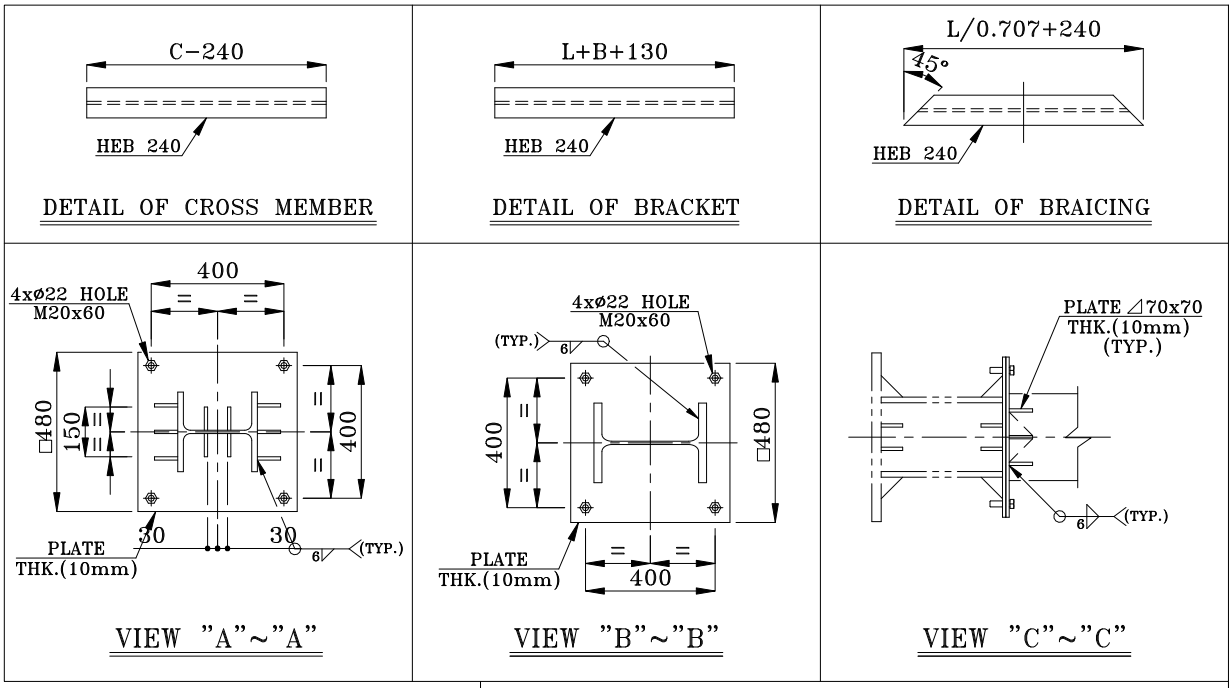
HIRGAN ENERGY

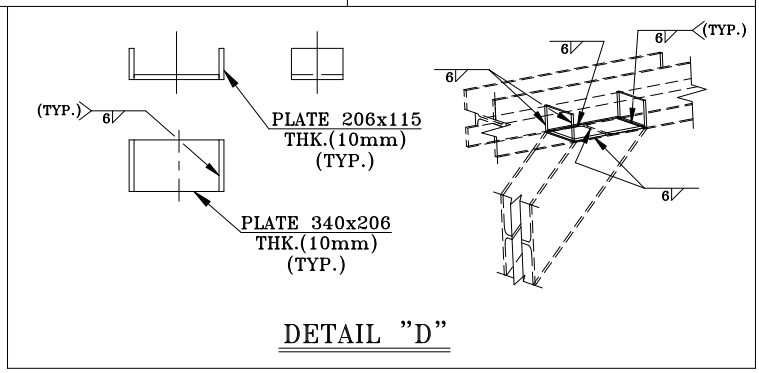
شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02





LENGTH MARK:(4)

MARK	L	ALLOW. LOAD(kg) F_{LA}	ALLOW. LOAD(kg) F_{LB}
01	900	27000	9200
02	1000		
03	1100		
04	1200		7000
05	1300		
06	1400		
07	1500		5500
08	1600		
09	1700		
10	1800		4300
11	1900		
12	2000		

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE
26	26"
28	28"
30	30"
32	32"
34	34"
36	36"
38	38"
40	40"
42	42"

TYPE "B"

ALLOY STEEL OR STAINLESS STEEL (BARE)

INSULATION THK. MARK:(5)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

MATERIAL MARK:(2)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER	MARK	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	ⓐ	ASTM A36	ASTM A36	ASTM A36
	ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	A325	A325	A325
	ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SH-07-□□-□□□-□□□ (1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

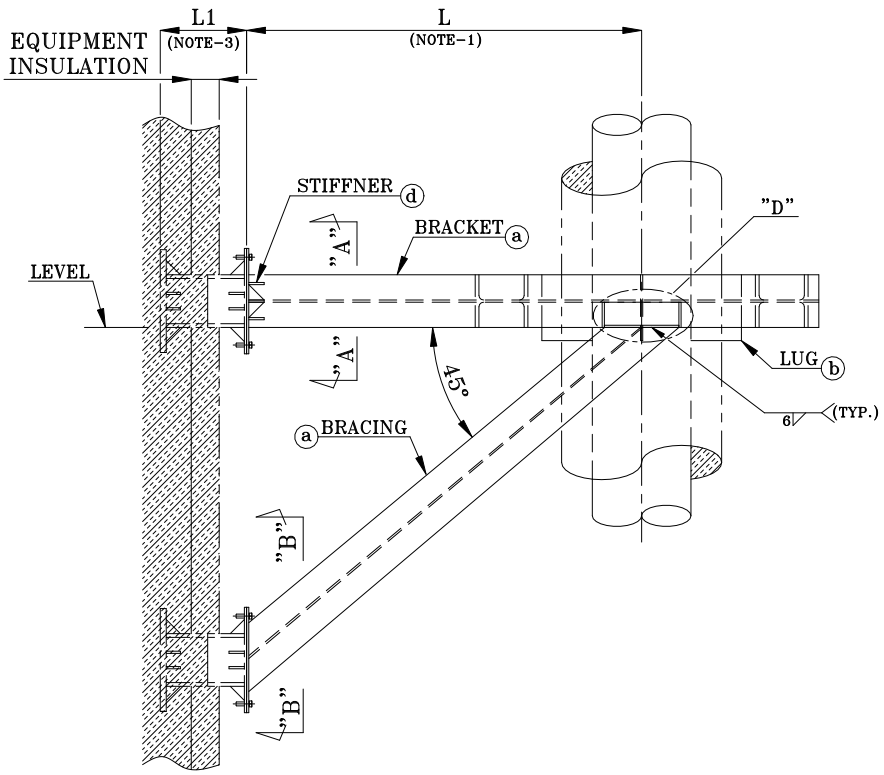
3- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

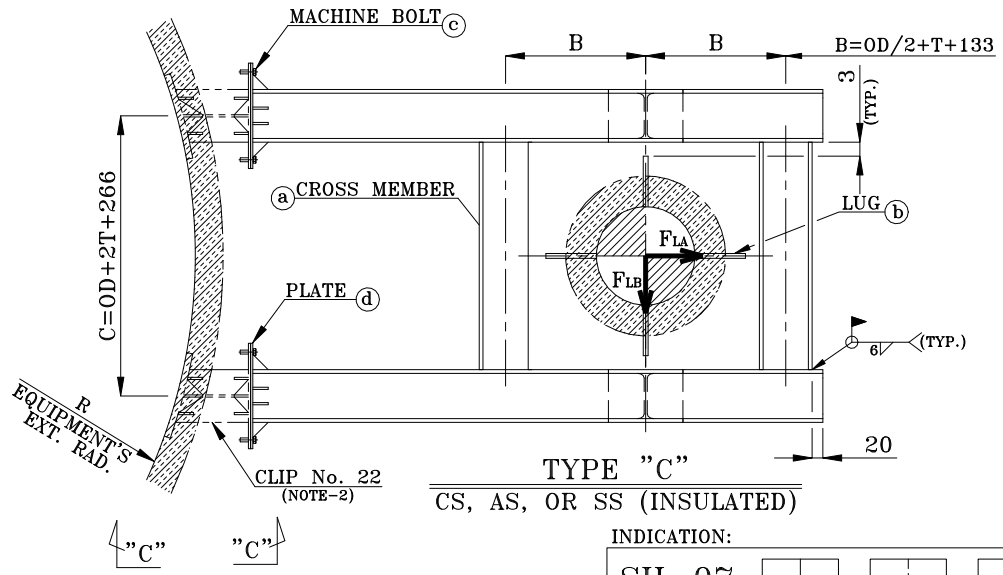
SUPPORT DESCRIPTION:
BRACKET ON EQUIPMENT
DOUBLE GUIDE
(TYPE B AS,SS)
26" ~ 42"
SH-07

SHEET 14 / 22

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 345 از 394
	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02





TYPE "C"
CS, AS, OR SS (INSULATED)

INDICATION:

SH-07-□□-□□-□□□-□□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE C CS,AS,SS) 26" ~ 42"	15
SH-07	22

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

HIRGAN ENERGY

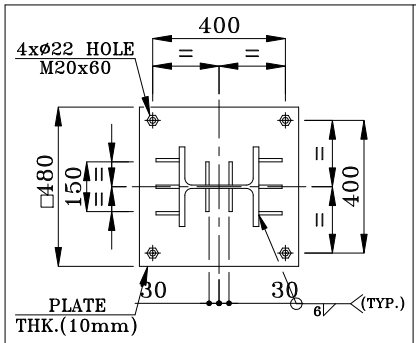
شماره پیمان:

053-073-9184

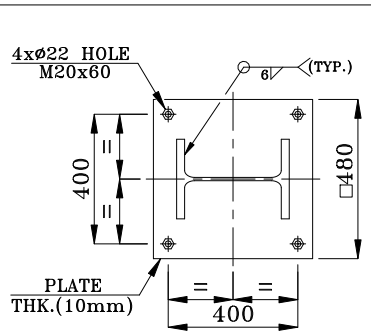
STANDARD PIPE SUPPORT DRAWINGS

شماره صفحه: 346 از 394

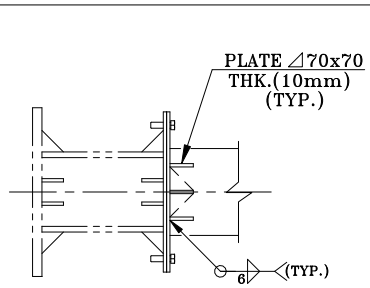
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



VIEW "A"~"A"



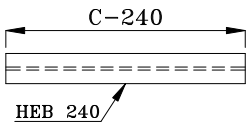
VIEW "B"~"B"



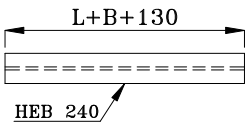
VIEW "C"~"C"

NPS MARK:(3)

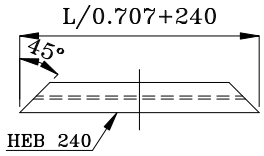
NPS MARK	RUN PIPE SIZE
26	26"
28	28"
30	30"
32	32"
34	34"
36	36"
38	38"
40	40"
42	42"



DETAIL OF CROSS MEMBER



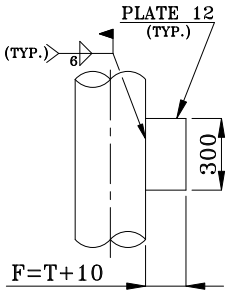
DETAIL OF BRACKET



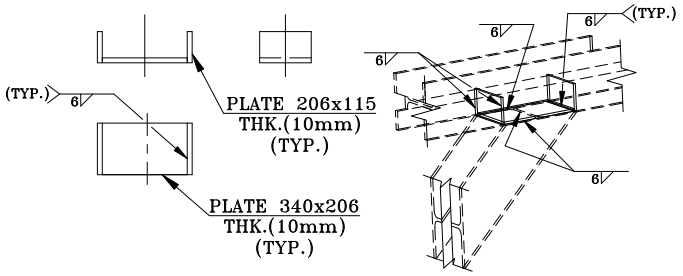
DETAIL OF BRAICING

LENGTH MARK:(4)

MARK	L	ALLOW. LOAD(kg) F_{LA}	F_{LB}
01	1100	27000	9200
02	1200		7000
03	1300		
04	1400		
05	1500		5500
06	1600		
07	1700		
08	1800		4300
09	1900		
10	2000		



DETAIL OF LUG



DETAIL "D"

INSULATION THK. MARK:(5)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

TYPE "C"

CS, AS, OR SS (INSULATED)

MATERIAL MARK:(2)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER	MARK	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	ⓐ	ASTM A36	ASTM A36	ASTM A36
	ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	A325	A325	A325
	ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SH-07-□□-□□□-□□□□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

SUPPORT DESCRIPTION:
BRACKET ON EQUIPMENT
DOUBLE GUIDE
(TYPE C CS,AS,SS)
26" ~ 42"

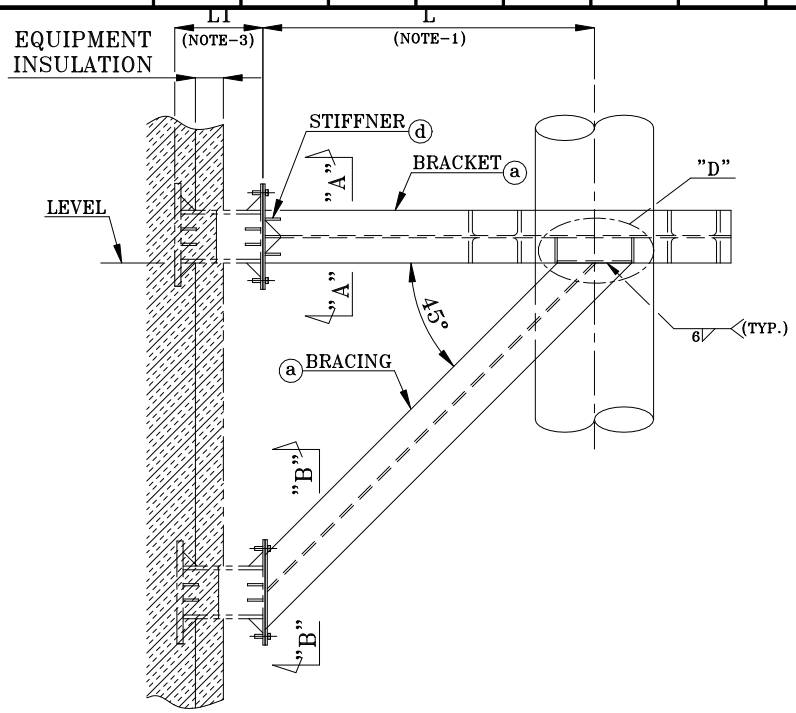
SH-07

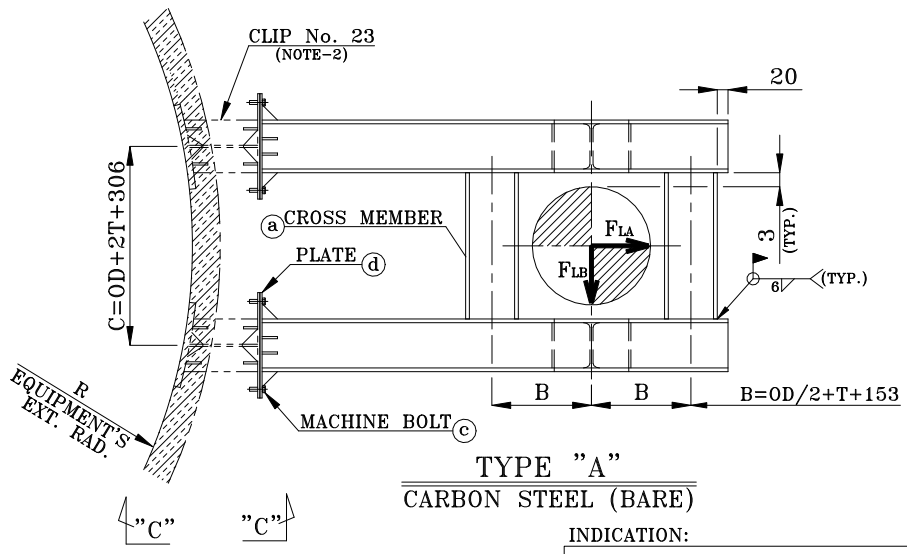
SHEET 16 / 22

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 347 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02





TYPE "A"
CARBON STEEL (BARE)

INDICATION:

SH-07-□□-□□-□□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE A-CS) 44" ~ 56"	17
SH-07	22

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

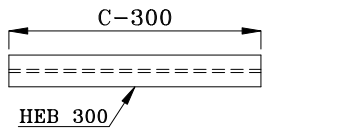
PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

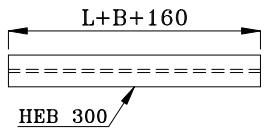
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

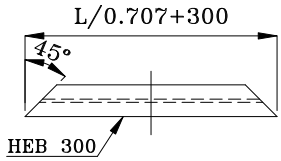
شماره صفحه: 348 از 394



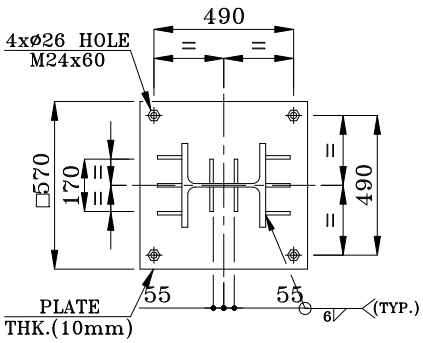
DETAIL OF CROSS MEMBER



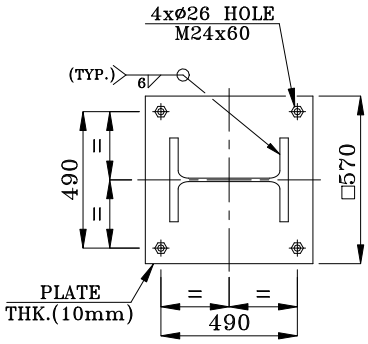
DETAIL OF BRACKET



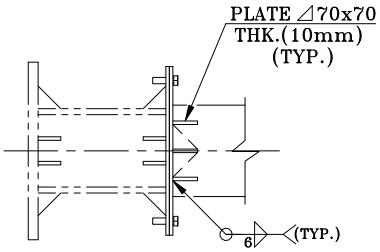
DETAIL OF BRAICING



VIEW "A"~"A"



VIEW "B"~"B"



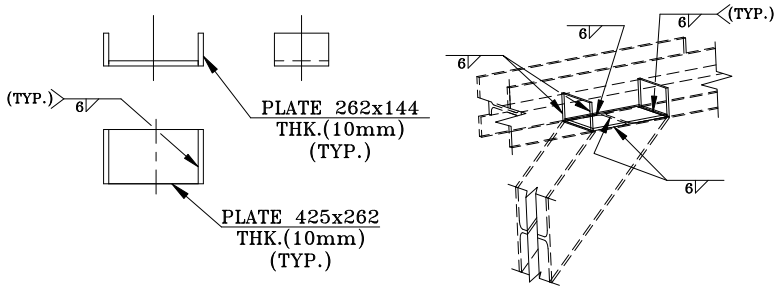
VIEW "C"~"C"

LENGTH MARK:(4)

MARK	L	ALLOW. LOAD(kg) F_{LA}	ALLOW. LOAD(kg) F_{LB}
01	1200	32000	10000
02	1300		
03	1400		
04	1500		8200
05	1600		
06	1700		
07	1800		6400
08	1900		
09	2000		

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE
44	44"
46	46"
48	48"
50	50"
52	52"
54	54"
56	56"



DETAIL "D"

INSULATION THK. MARK:(5)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

TYPE "A"
CARBON STEEL (BARE)

MATERIAL MARK:(2)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	B	C
	ⓐ	ASTM A36	ASTM A36	ASTM A36
	ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	A325	A325	A325
	ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SH-07-□□-□-□□-□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

NOTE:

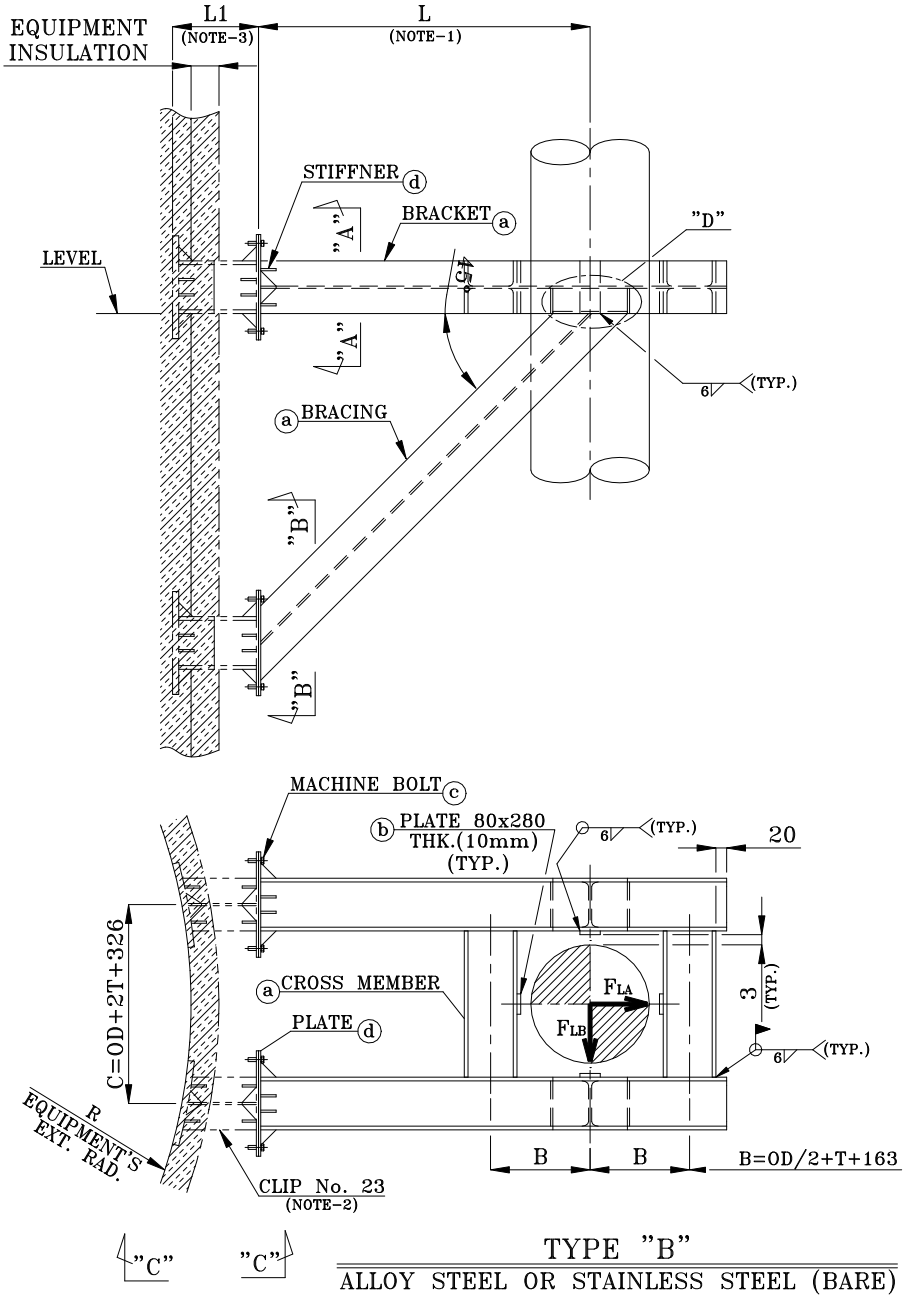
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF CLIP SEE (G-03).
3- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

SUPPORT DESCRIPTION:
BRACKET ON EQUIPMENT
DOUBLE GUIDE
(TYPE A-CS)
44" ~ 56"
SH-07

SHEET
18
22

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 349 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	



TYPE "B"
ALLOY STEEL OR STAINLESS STEEL (BARE)

INDICATION:

SH-07-□□-□□-□□□-□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE B-AS,SS) 44" ~ 56"	19
SH-07	22

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

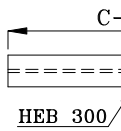
PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

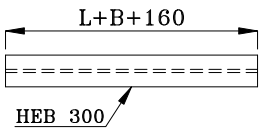
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

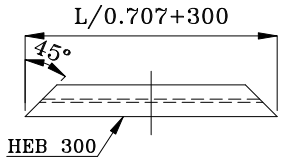
شماره صفحه: 350 از 394



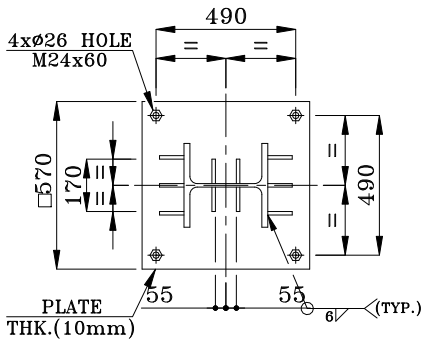
DETAIL OF CROSS MEMBER



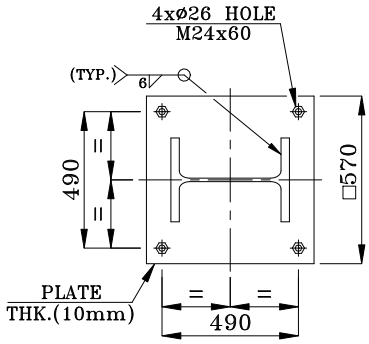
DETAIL OF BRACKET



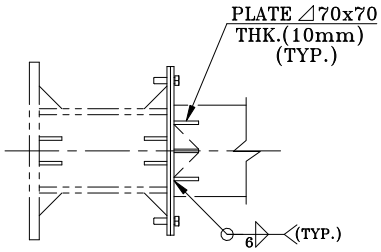
DETAIL OF BRAICING



VIEW "A"~"A"



VIEW "B"~"B"



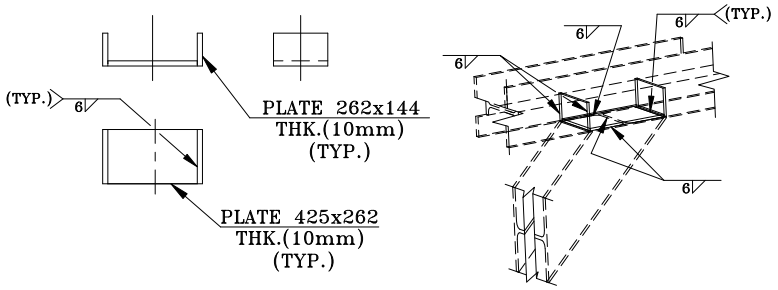
VIEW "C"~"C"

LENGTH MARK:(4)

MARK	L	ALLOW. LOAD(kg) F_{LA}	ALLOW. LOAD(kg) F_{LB}
01	1200	32000	10000
02	1300		
03	1400		
04	1500		8200
05	1600		
06	1700		
07	1800		6400
08	1900		
09	2000		

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE
44	44"
46	46"
48	48"
50	50"
52	52"
54	54"
56	56"



DETAIL "D"

INSULATION THK. MARK:(5)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

TYPE "B"
ALLOY STEEL OR STAINLESS STEEL (BARE)

MATERIAL MARK:(2)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	B	C
	ⓐ	ASTM A36	ASTM A36	ASTM A36
	ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	A325	A325	A325
	ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SH-07-□□-□□□-□□□
(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF CLIP SEE (G-03).
3- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE B AS,SS) 44" ~ 56"	20
SH-07	22

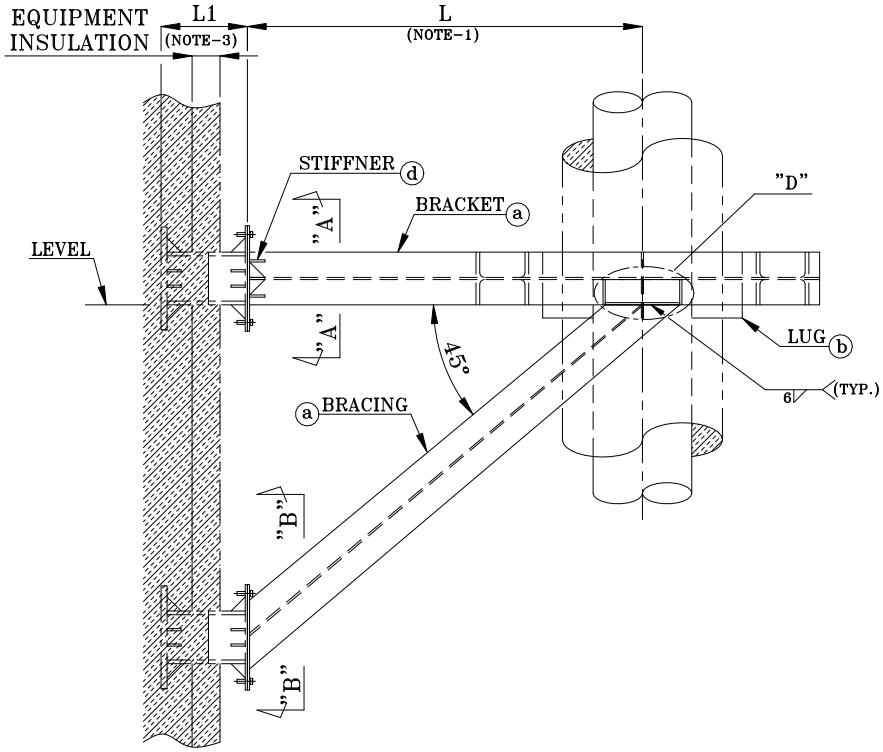
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

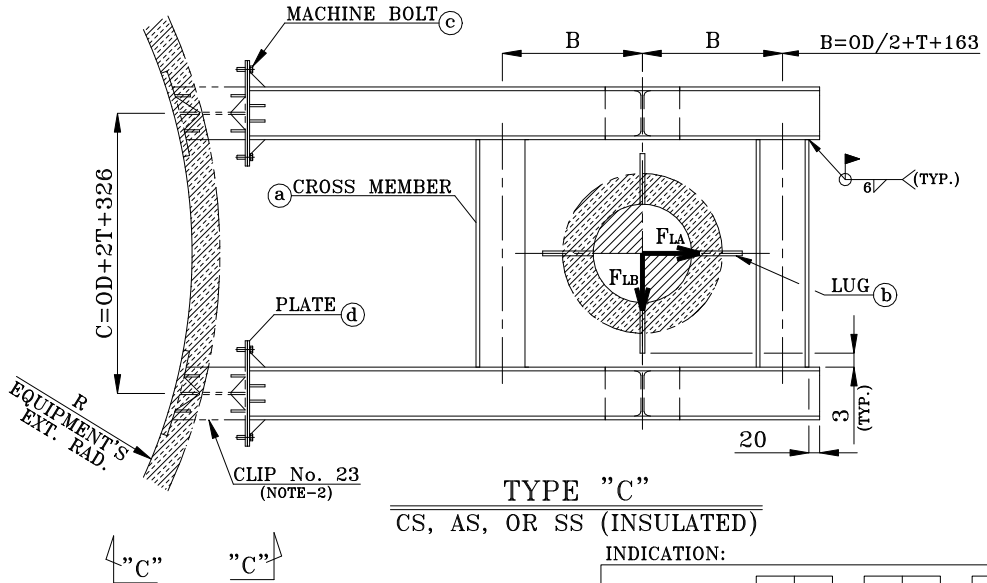
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 351 از 394





TYPE "C"
CS, AS, OR SS (INSULATED)

"C" "C"

INDICATION:

SH-07-□□-□□-□□□
(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF CLIP SEE (G-03).
3- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE C CS,AS,SS) 44" ~ 56"	21
SH-07	22

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

HIRGAN ENERGY

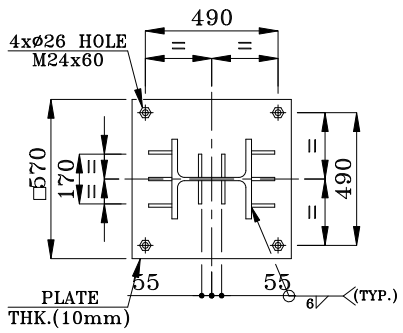
شماره پیمان:

053-073-9184

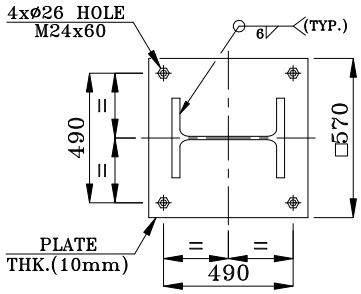
STANDARD PIPE SUPPORT DRAWINGS

شماره صفحه: 352 از 394

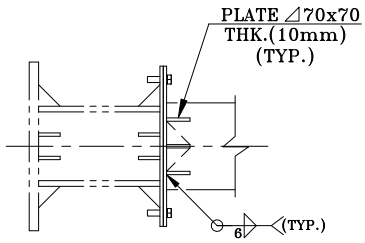
نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0001	DW	PI	120	PEDCO	GCS	BK



VIEW "A"~"A"



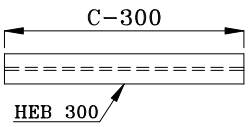
VIEW "B"~"B"



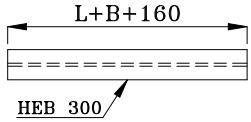
VIEW "C"~"C"

NPS MARK:(3)

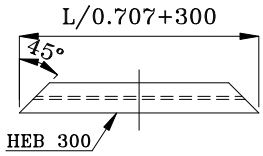
NPS MARK	RUN PIPE SIZE
44	44"
46	46"
48	48"
50	50"
52	52"
54	54"
56	56"



DETAIL OF CROSS MEMBER



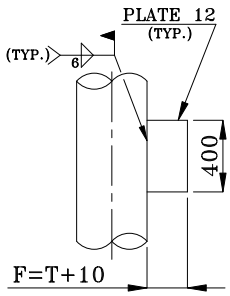
DETAIL OF BRACKET



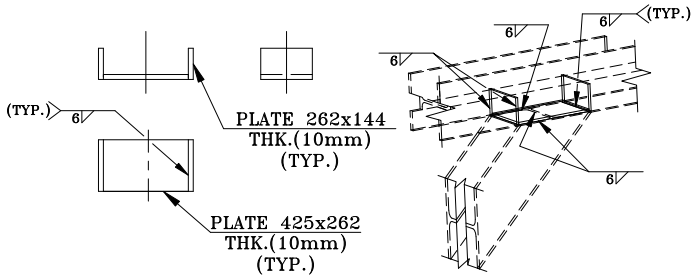
DETAIL OF BRAICING

LENGTH MARK:(4)

MARK	L	ALLOW. LOAD(kg)	
		F_{LA}	F_{LB}
01	1400		10000
02	1500	32000	8200
03	1600		
04	1700		
05	1800		6400
06	1900		
07	2000		



DETAIL OF LUG



DETAIL "D"

INSULATION THK. MARK:(5)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4	5

TYPE "C"

CS, AS, OR SS (INSULATED)

MATERIAL MARK:(2)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
	MARK	A	B	C
0°C TO 350°C	ⓐ	ASTM A36	ASTM A36	ASTM A36
	ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	A325	A325	A325
	ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SH-07-□□-□□□-□□□□

(1) (2) (3) (4) (5)

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE C CS,AS,SS) 44" ~ 56"	22
SH-07	22

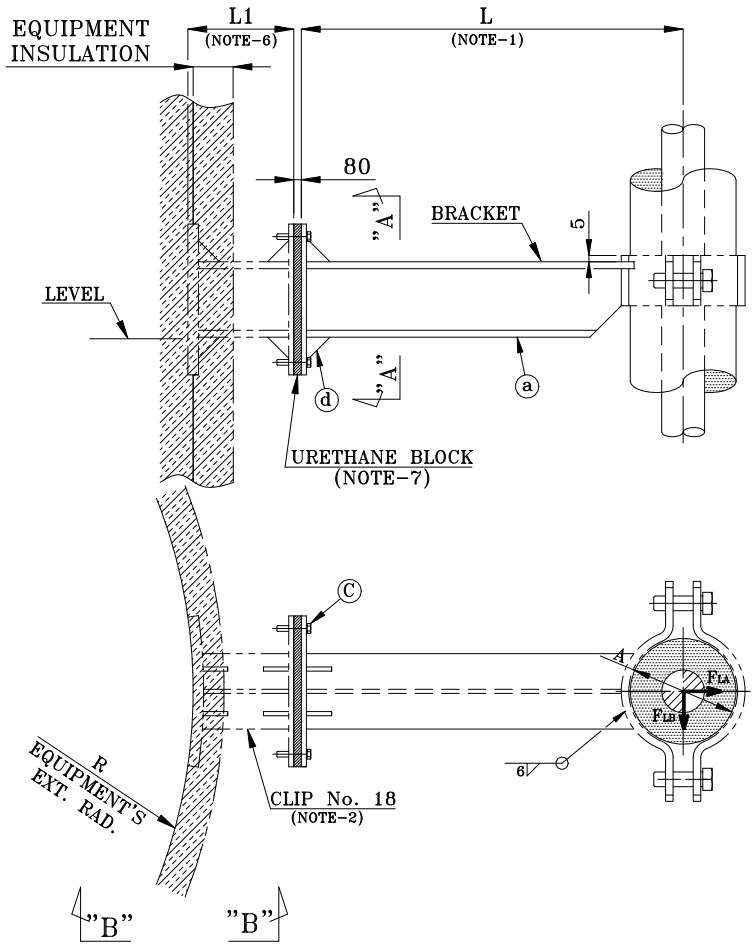
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

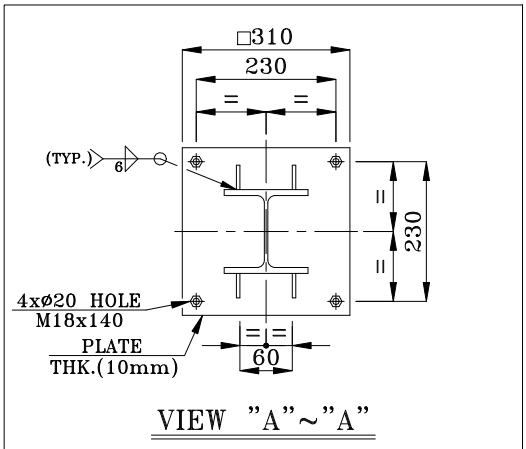
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

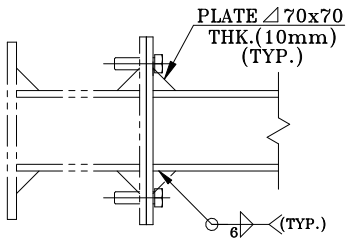
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 353 از 394

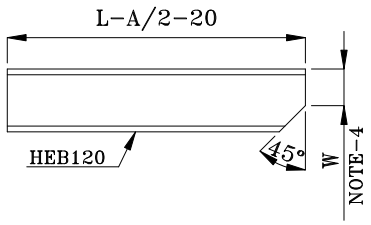




VIEW "A"~"A"



VIEW "B"~"B"



DETAIL OF BRACKET

NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	2"	2 1/2"	3"	4"	5"	6"
			02	2A	03	04	05	06
			A (FOR EACH PIPE SIZE)					
1	25-50	T=50	163	192	192	224	251	274
2	51-100	T=100	274	279	292	324	351	374
3	101-150	T=150	374	392	392	430	451	474
4	151-200	T=200	474	492	492	530	548	578
5	201-250	T=250	–	–	–	–	–	–
6	251-300	T=300	–	–	–	–	–	–

LENGTH MARK:(4)

MARK	L	ALLOW.LOAD(kg)	
		F_{LA}	F_{LB}
1	700	600	500
2	800		
3	900		
4	1000		
5	1100		

MATERIAL MARK:(1)

DES. TEMP	MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	B	C
	ⓐ	ASTM A36	ASTM A36	ASTM A36
	ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	A325	A325	A325
	ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SH-08-□□□-□□
(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-INSULATION MARK
4-LENGTH MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF CLIP SEE (G-03).
3- SEPARATED TAG IS REQUIRED FOR COLD INSULATION PIPE CLAMP (SK-03).
4- W IS EQUAL TO CLAMP WIDE.
5- ALLOWABLE LOAD OF CLAMP SHALL BE CHECKED SEPARATELY.
6- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.
7- FOR DETAIL OF URETHANE BLOCK SEE(G-05).

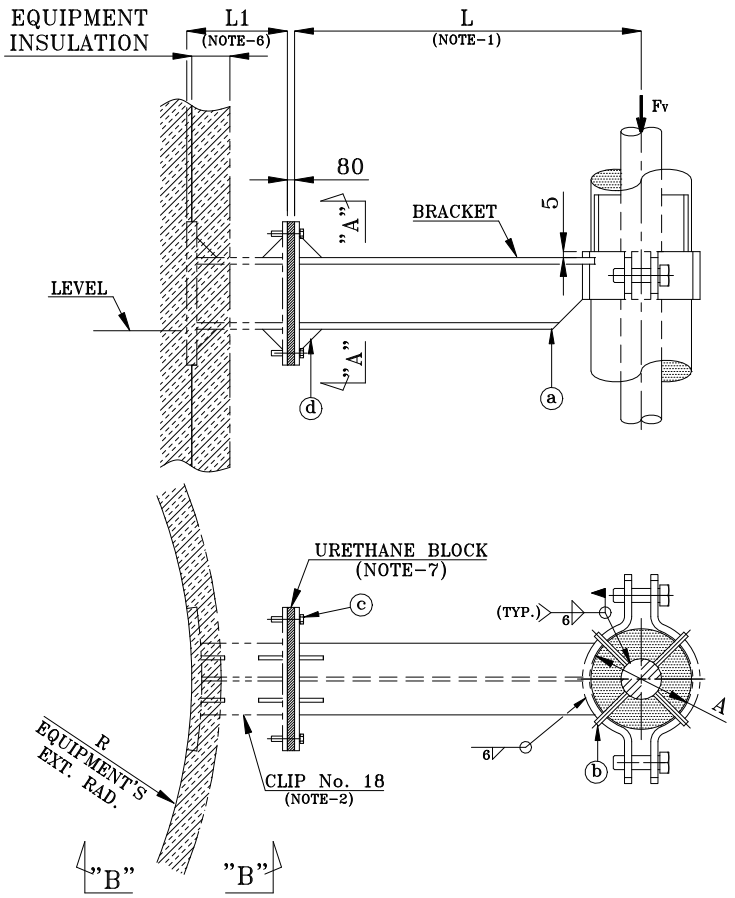
SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT CLAMP TYPE,DOUBLE GUIDE (COLD INSULATION) 2" ~ 6"	1
SH-08	1

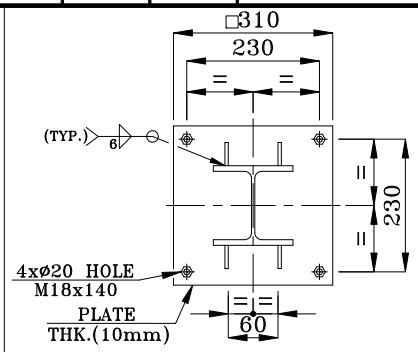
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 354 از 394

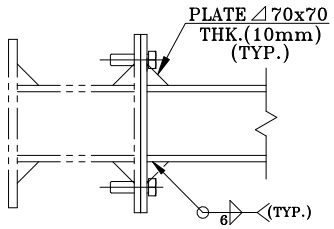
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

053-073-9184

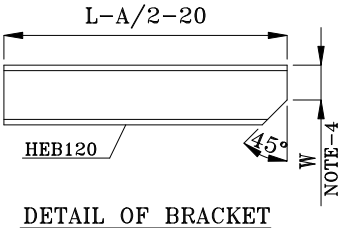




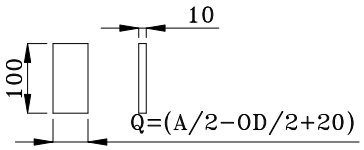
VIEW "A"~"A"



VIEW "B"~"B"



DETAIL OF BRACKET



DETAIL OF LUG

NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	2"	2 1/2"	3"	4"	5"	6"
			02	2A	03	04	05	06
			A (FOR EACH PIPE SIZE)					
1	25-50	T=50	163	192	192	224	251	274
2	51-100	T=100	274	279	292	324	351	374
3	101-150	T=150	374	392	392	430	451	474
4	151-200	T=200	474	492	492	530	548	578
5	201-250	T=250	-	-	-	-	-	-
6	251-300	T=300	-	-	-	-	-	-

LENGTH MARK:(4)

MARK	L	ALLOW.LOAD(kg) Fv
1	700	720
2	800	
3	900	
4	1000	560
5	1100	

MATERIAL MARK:(1)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	B	C
	ⓐ	ASTM A36	ASTM A36	ASTM A36
	ⓑ	A283 Gr.C	A387 Gr.91 Cl.2	A240 Gr.316
	ⓒ	A325	A325	A325
	ⓓ	A283 Gr.C	A283 Gr.C	A283 Gr.C

INDICATION:

SH-09-□□□-□□
(1) (2) (3) (4)

1-MATERIAL MARK
2-NPS MARK
3-INSULATION MARK
4-LENGTH MARK

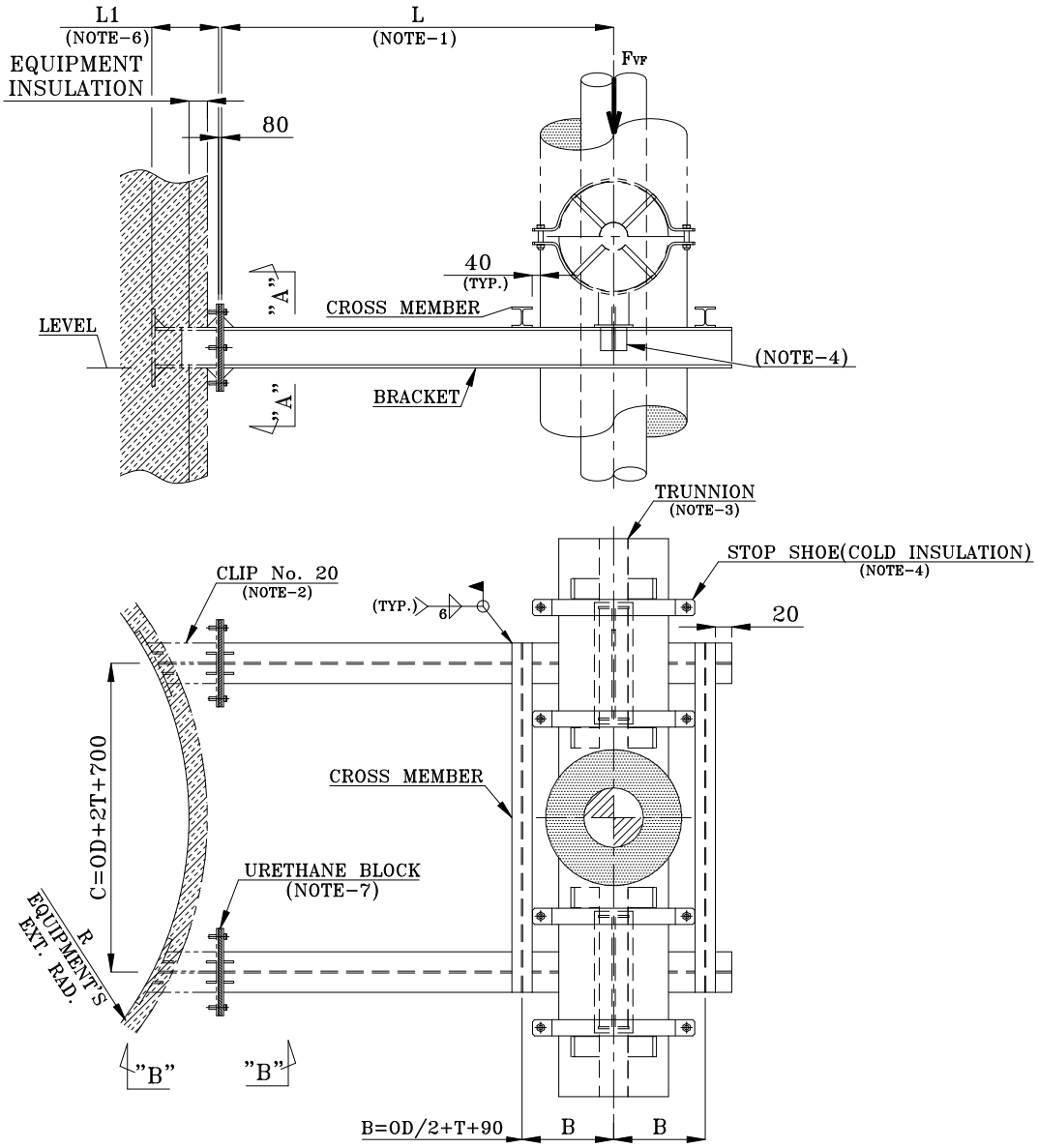
NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF CLIP SEE (G-03).
3- SEPARATED TAG IS REQUIRED FOR COLD INSULATION PIPE CLAMP (SK-03).
4- W IS EQUAL TO CLAMP WIDE.
5- ALLOWABLE LOAD OF CLAMP SHALL BE CHECKED SEPARATELY.
6- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.
7- FOR DETAIL OF URETHANE BLOCK SEE(G-05).

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT CLAMP TYPE,SEMI ANCHOR (COLD INSULATION) 2" ~ 6"	1
SH-09	1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 355 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	



INDICATION:

SH-10-□□-□□□

(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

4- SEPARATED TAG IS REQUIRED FOR STOP SHOE (SB-13) STOP SHOE SHALL BE INSTALLED WITHOUT STOPPER.

5- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION AND STOP SHOE SHALL BE CHECKED SEPARATELY.

6- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

7- FOR DETAIL OF URETHANE BLOCK SEE(G-05).

MATERIAL: STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT REST (COLD INSULATION) 2" ~ 6"	1
SH-10	8

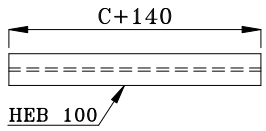
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

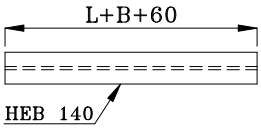
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

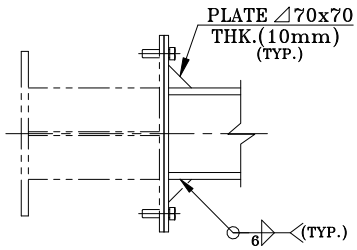
شماره صفحه: 356 از 394



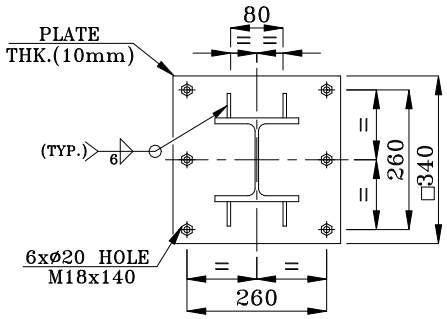
DETAIL OF CROSS MEMBER



DETAIL OF BRACKET



VIEW "B"~"B"



VIEW "A"~"A"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg) Fvf
01	600	1200
02	700	
03	800	
04	900	900
05	1000	
06	1100	
07	1200	650
08	1300	
09	1400	
10	1500	600
11	1600	
12	1700	
13	1800	400
14	1900	
15	2000	

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
02	2"
04	4"
06	6"

INSULATION THK. MARK:(3)

COLD INSULATION THK.	25-50	51-100	101-150	151-200
CRADLE THK.	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4

INDICATION:

SH-10-□□-□□□
(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

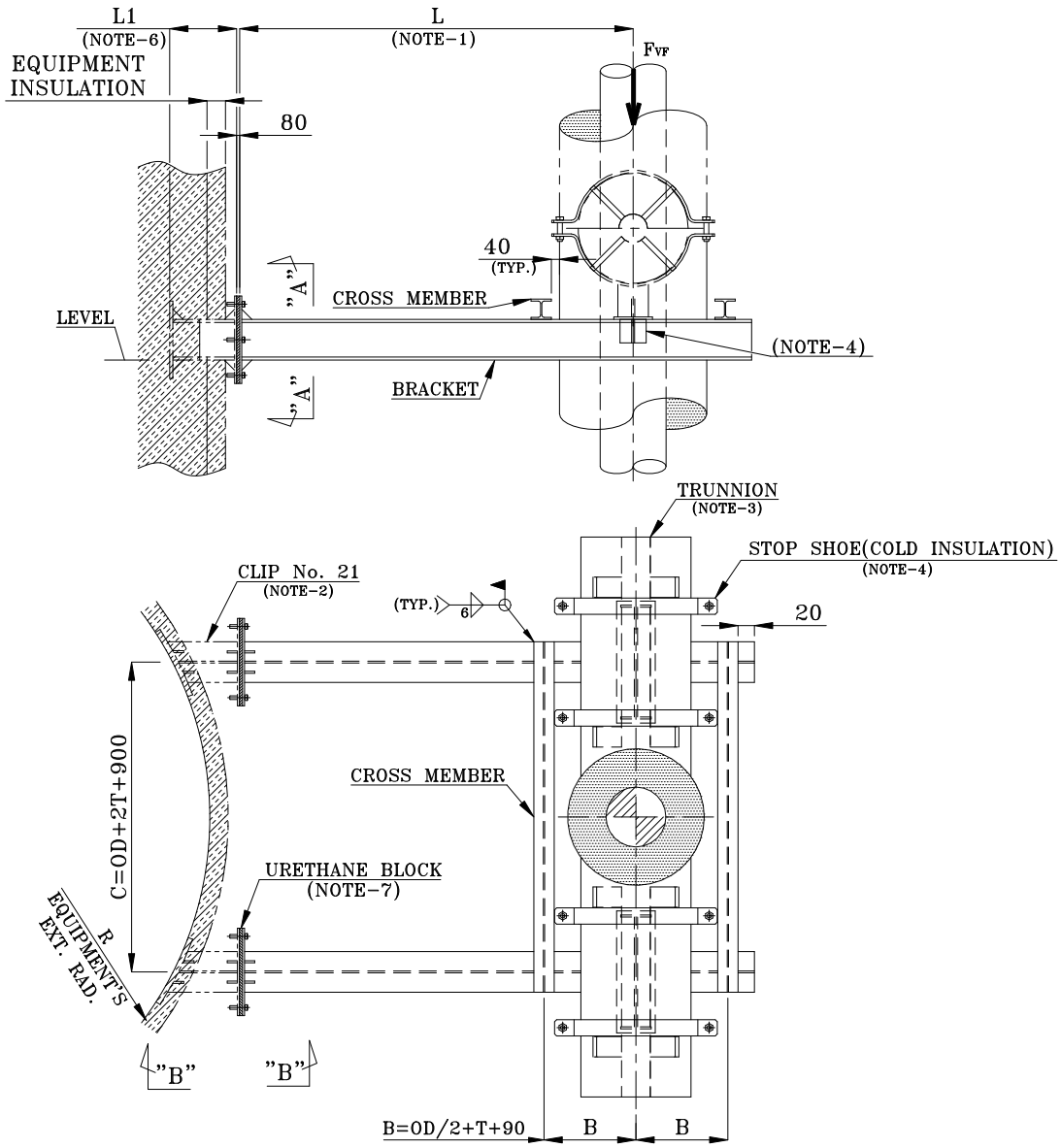
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF CLIP SEE (G-03).
3- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).
4- SEPARATED TAG IS REQUIRED FOR STOP SHOE (SB-13) STOP SHOE SHALL BE INSTALLED WITHOUT STOPPER.
5- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION AND STOP SHOE SHALL BE CHECKED SEPARATELY.
6- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.
7- FOR DETAIL OF URETHANE BLOCK SEE(G-05).

MATERIAL: STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT REST (COLD INSULATION) 2" ~ 6"	2
SH-10	8

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 357 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	



INDICATION:

SH-10-[ ][ ]-[ ][ ][ ]

(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

4- SEPARATED TAG IS REQUIRED FOR STOP SHOE (SB-13) STOP SHOE SHALL BE INSTALLED WITHOUT STOPPER.

5- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION AND STOP SHOE SHALL BE CHECKED SEPARATELY.

6- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

7- FOR DETAIL OF URETHANE BLOCK SEE(G-05).

MATERIAL: STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT REST (COLD INSULATION) 8" ~ 12"	3
SH-10	8

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

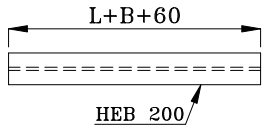
HIRGAN ENERGY

شماره پیمان:

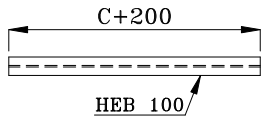
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

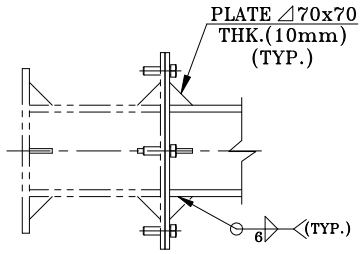
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



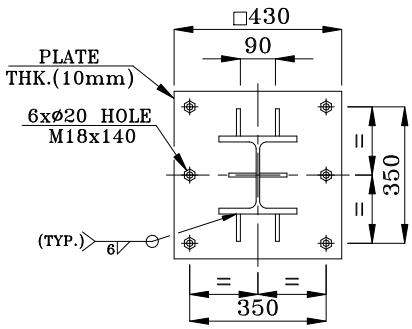
DETAIL OF BRACKET



DETAIL OF CROSS MEMBER



VIEW "B"~"B"



VIEW "A"~"A"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg) Fvf
01	700	5500
02	800	
03	900	4300
04	1000	
05	1100	
06	1200	3400
07	1300	
08	1400	
09	1500	2800
10	1600	
11	1700	
12	1800	2300
13	1900	
14	2000	

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
08	8"
10	10"
12	12"

INSULATION THK. MARK:(3)

COLD INSULATION THK.	25-50	51-100	101-150	151-200	201-250
CRADLE THK.	T=50	T=100	T=150	T=200	T=250
INSULATION THK. MARK	1	2	3	4	5

INDICATION:

SH-10-[ ][ ]-[ ][ ][ ]

(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

4- SEPARATED TAG IS REQUIRED FOR STOP SHOE (SB-13) STOP SHOE SHALL BE INSTALLED WITHOUT STOPPER.

5- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION AND STOP SHOE SHALL BE CHECKED SEPARATELY.

6- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

7- FOR DETAIL OF URETHANE BLOCK SEE(G-05).

MATERIAL: STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:
BRACKET ON EQUIPMENT REST
(COLD INSULATION)
8" ~ 12"

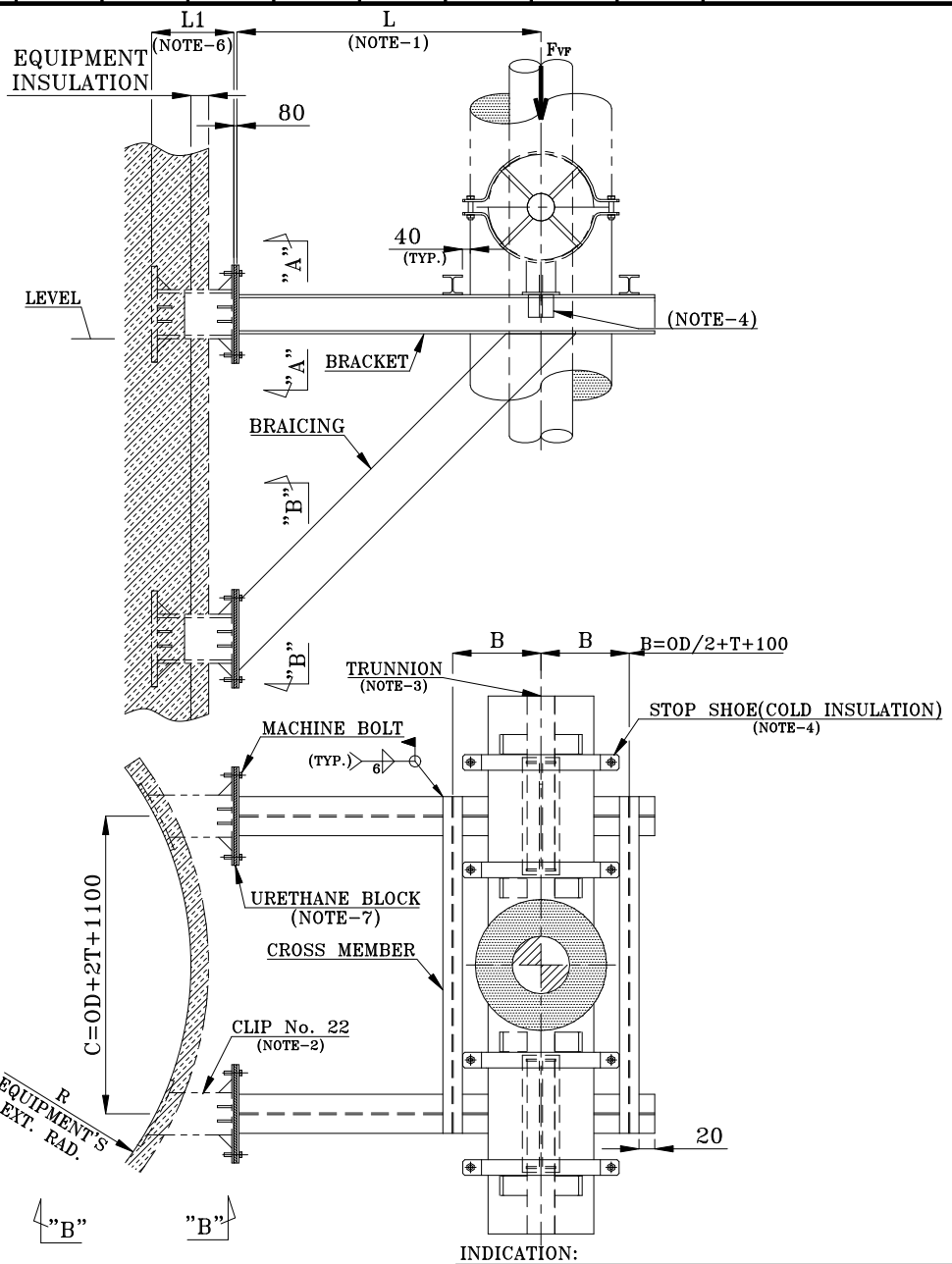
SH-10

SHEET 4

8

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 359 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	



INDICATION:

SH-10-[ ][ ]-[ ][ ][ ]

(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

4- SEPARATED TAG IS REQUIRED FOR STOP SHOE (SB-13) STOP SHOE SHALL BE INSTALLED WITHOUT STOPPER.

5- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION AND STOP SHOE SHALL BE CHECKED SEPARATELY.

6- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

7- FOR DETAIL OF URETHANE BLOCK SEE(G-05).

MATERIAL: STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT REST (COLD INSULATION) 14" ~ 24"	5
SH-10	8

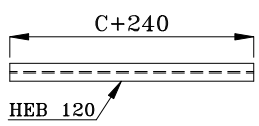
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

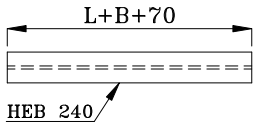
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

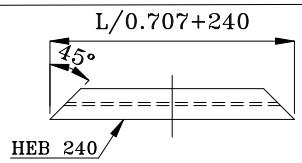
شماره صفحه: 360 از 394



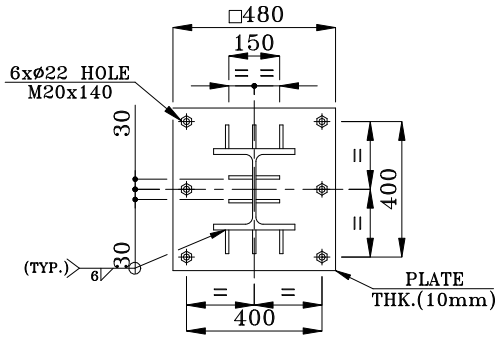
DETAIL OF CROSS MEMBER



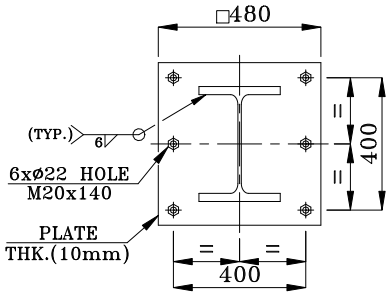
DETAIL OF BRACKET



DETAIL OF BRAICING



VIEW "A"~"A"



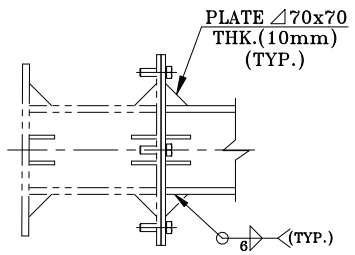
VIEW "B"~"B"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg) Fvf
01	900	13800
02	1000	
03	1100	
04	1200	10000
05	1300	
06	1400	
07	1500	7700
08	1600	
09	1700	
10	1800	5900
11	1900	
12	2000	

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
14	14"
16	16"
18	18"
20	20"
22	22"
24	24"



VIEW "C"~"C"

INSULATION THK. MARK:(3)

COLD INSULATION THK.	25-50	51-100	101-150	151-200	201-250	251-300
CRADLE THK.	T=50	T=100	T=150	T=200	T=250	T=300
INSULATION THK. MARK	1	2	3	4	5	6

INDICATION:

SH-10-□□-□□□
(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF CLIP SEE (G-03).
3- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).
4- SEPARATED TAG IS REQUIRED FOR STOP SHOE (SB-13) STOP SHOE SHALL BE INSTALLED WITHOUT STOPPER.
5- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION AND STOP SHOE SHALL BE CHECKED SEPARATELY.
6- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.
7- FOR DETAIL OF URETHANE BLOCK SEE(G-05).

MATERIAL: STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.C

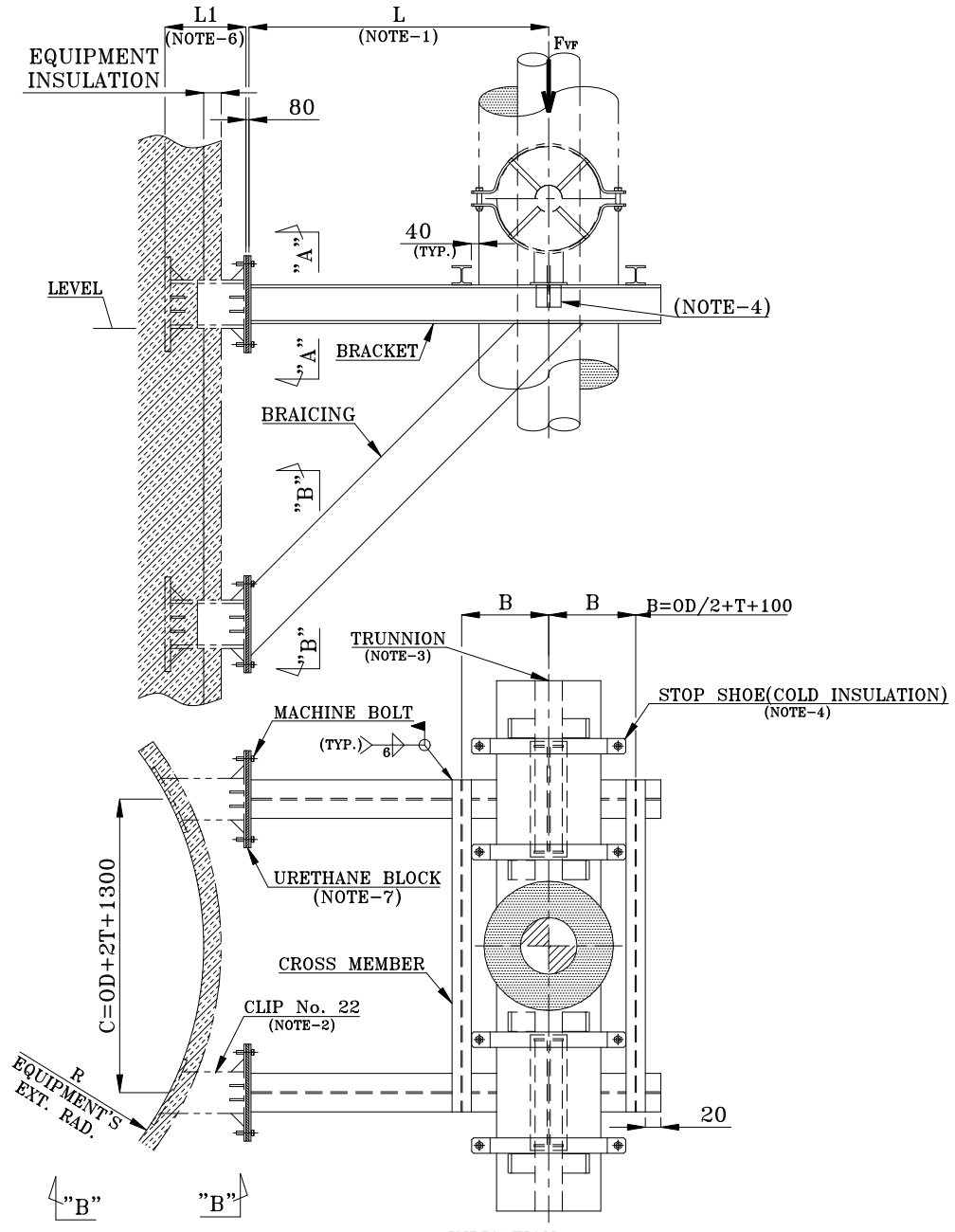
SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT REST (COLD INSULATION) 14" ~ 24"	6
SH-10	8

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



INDICATION:

SH-10-□□-□□□
(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).

4- SEPARATED TAG IS REQUIRED FOR STOP SHOE (SB-13) STOP SHOE SHALL BE INSTALLED WITHOUT STOPPER.

5- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION AND STOP SHOE SHALL BE CHECKED SEPARATELY.

6- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

7- FOR DETAIL OF URETHANE BLOCK SEE(G-05).

MATERIAL: STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT REST (COLD INSULATION) 26" ~ 42"	7
SH-10	8

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

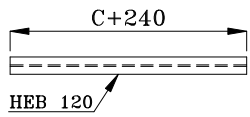
HIRGAN ENERGY

شماره پیمان:

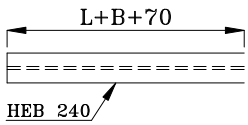
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

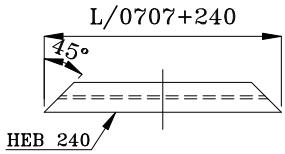
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



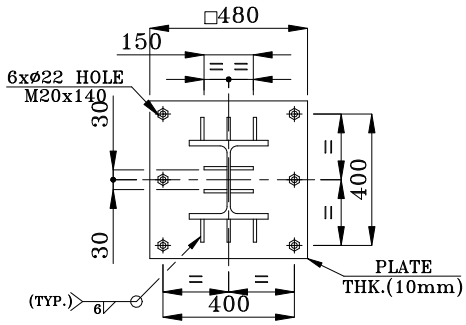
DETAIL OF CROSS MEMBER



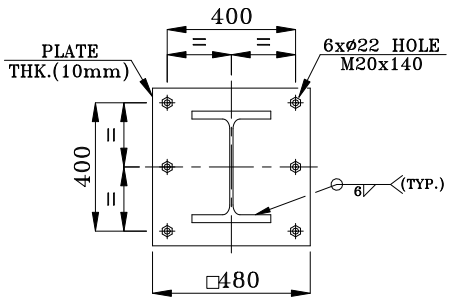
DETAIL OF BRACKET



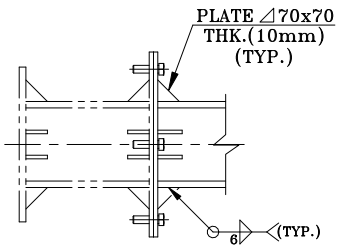
DETAIL OF BRAICING



VIEW "A"~"A"



VIEW "B"~"B"



VIEW "C"~"C"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg) Fvf
01	1100	15500
02	1200	11400
03	1300	
04	1400	
05	1500	8600
06	1600	
07	1700	
08	1800	6600
09	1900	
10	2000	

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
26	26"
28	28"
30	30"
32	32"
34	34"
36	36"
38	38"
40	40"
42	42"

INSULATION THK. MARK:(3)

COLD INSULATION THK.	25-50	51-100	101-150	151-200	201-250	251-300
CRADLE THK.	T=50	T=100	T=150	T=200	T=250	T=300
INSULATION THK. MARK	1	2	3	4	5	6

INDICATION:

SH-10-[ ][ ]-[ ][ ][ ]

(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF CLIP SEE (G-03).
3- SEPARATED TAG IS REQUIRED FOR TRUNNION (SG-05) OR (SG-06).
4- SEPARATED TAG IS REQUIRED FOR STOP SHOE (SB-13) STOP SHOE SHALL BE INSTALLED WITHOUT STOPPER.
5- THE ALLOWABLE LOADS ARE CALCULATED JUST FOR FRAME CONFIGURATION. ALLOWABLE LOAD OF TRUNNION AND STOP SHOE SHALL BE CHECKED SEPARATELY.
6- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.
7- FOR DETAIL OF URETHANE BLOCK SEE(G-05).

MATERIAL: STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT REST (COLD INSULATION) 26" ~ 42"	8
SH-10	8

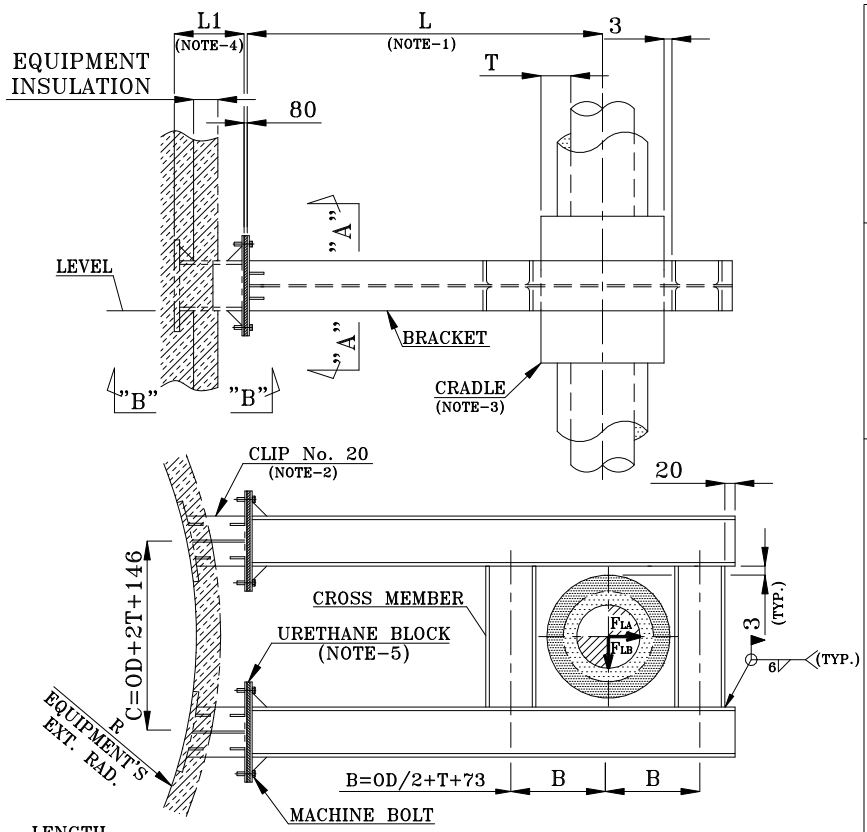
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

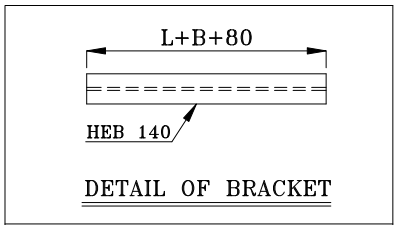
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

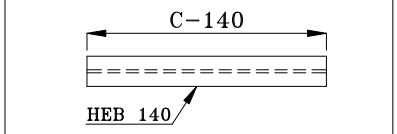
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 363 از 394

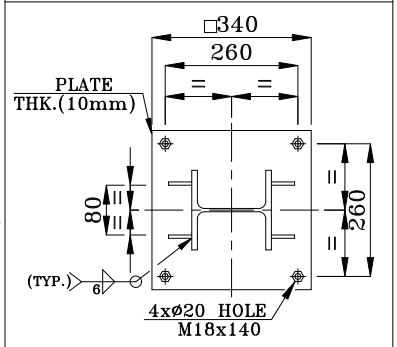




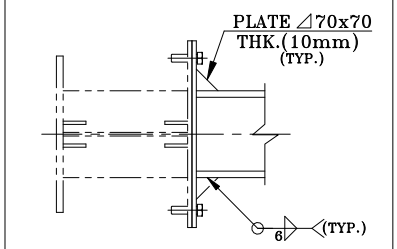
DETAIL OF BRACKET



DETAIL OF CROSS MEMBER



VIEW "A"~"A"



VIEW "B"~"B"

LENGTH MARK:(4)

MARK	L	ALLOW. LOAD(kg) FLA	ALLOW. LOAD(kg) FLB
01	600	16000	3300
02	700		
03	800		
04	900		
05	1000		2500
06	1100		
07	1200		
08	1300		1900
09	1400		
10	1500		
11	1600		1500
12	1700		
13	1800		
14	1900		1200
15	2000		

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE
02	2"
04	4"
06	6"

INSULATION THK. MARK:(3)

COLD INSULATION THK.	25-50	51-100	101-150	151-200
CRADLE THK.	T=50	T=100	T=150	T=200
INSULATION THK. MARK	1	2	3	4

INDICATION:

SH-11-[ ][ ][ ] - [ ][ ][ ][ ]
(1) (2) (3)

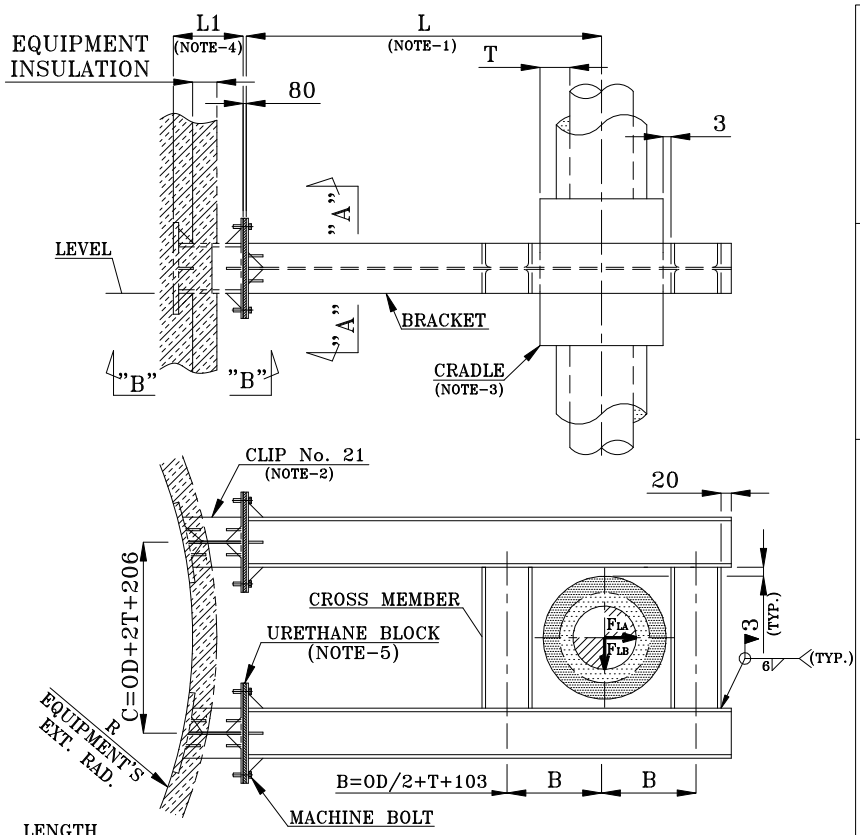
1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

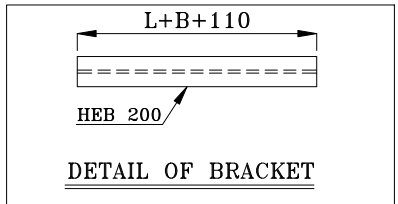
NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF CLIP SEE (G-03).
3- FOR DETAIL OF CRADLE SEE (G-04).
4- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.
5- FOR DETAIL OF URETHANE BLOCK SEE(G-05).

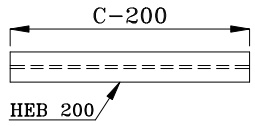
MATERIAL:
STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.B

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT DOUBLE GUIDE (COLD INSULATION) 2" ~ 6"	1
SH-11	6

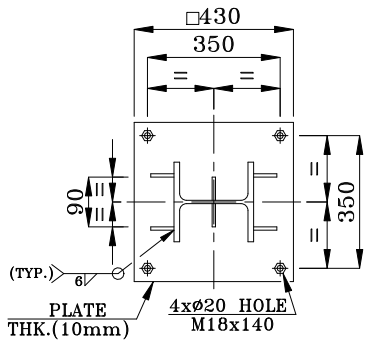




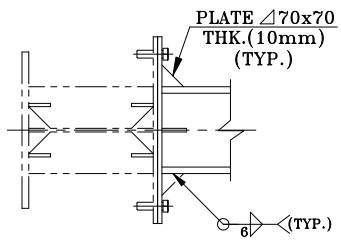
DETAIL OF BRACKET



DETAIL OF CROSS MEMBER



VIEW "A"~"A"



VIEW "B"~"B"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg) F_{LA}	ALLOW. LOAD(kg) F_{LB}
01	600	30000	6500
02	700		
03	800		
04	900		4900
05	1000		
06	1100		
07	1200		3800
08	1300		
09	1400		
10	1500		3000
11	1600		
12	1700		
13	1800		2500
14	1900		
15	2000		

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
08	8"
10	10"
12	12"

INSULATION THK. MARK:(3)

COLD INSULATION THK.	25-50	51-100	101-150	151-200	201-250
CRADLE THK.	T=50	T=100	T=150	T=200	T=250
INSULATION THK. MARK	1	2	3	4	5

INDICATION:

SH-11-□□-□□□ (1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF CLIP SEE (G-03).
3- FOR DETAIL OF CRADLE SEE (G-04).
4- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.
5- FOR DETAIL OF URETHANE BLOCK SEE(G-05).

MATERIAL:

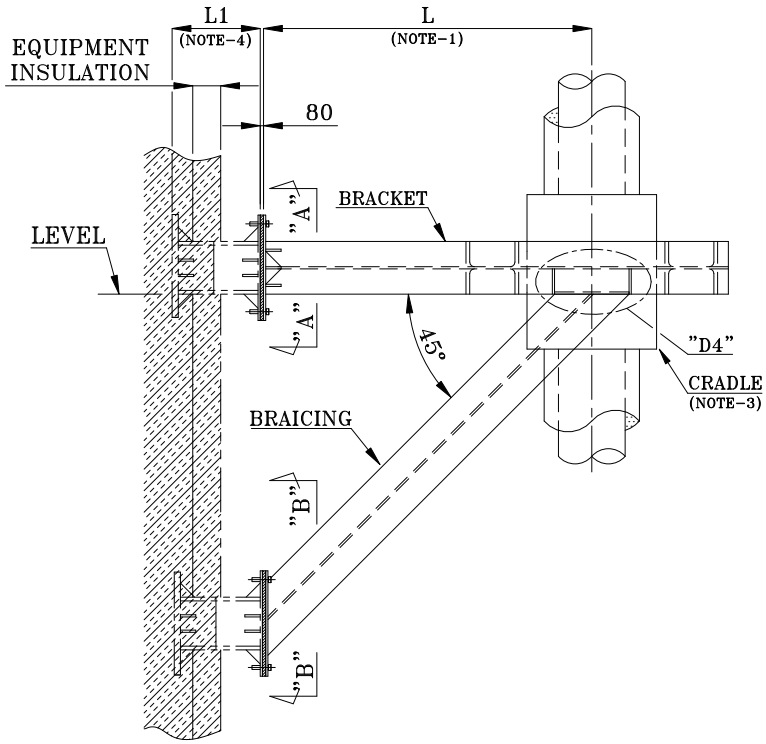
STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.B

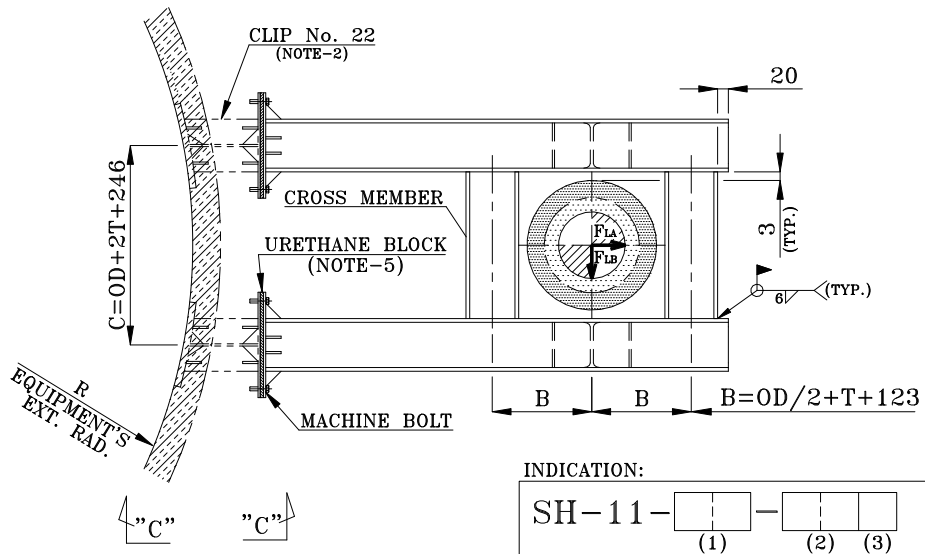
SUPPORT DESCRIPTION:
BRACKET ON EQUIPMENT
DOUBLE GUIDE
(COLD INSULATION)
8" ~ 12"
SH-11

SHEET 2 6

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 365 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	





INDICATION:

SH-11-□□-□□□

(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- FOR DETAIL OF CRADLE SEE (G-04).

4- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

5- FOR DETAIL OF URETHANE BLOCK SEE(G-05).

MATERIAL:

STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.B

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT DOUBLE GUIDE (COLD INSULATION) 14" ~ 24"	3
SH-11	6

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

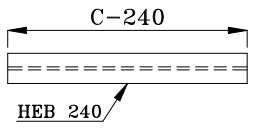
HIRGAN ENERGY

شماره پیمان:

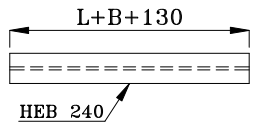
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

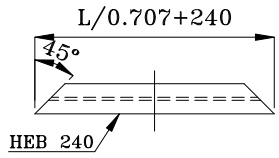
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



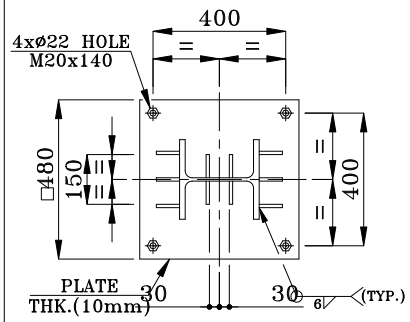
DETAIL OF CROSS MEMBER



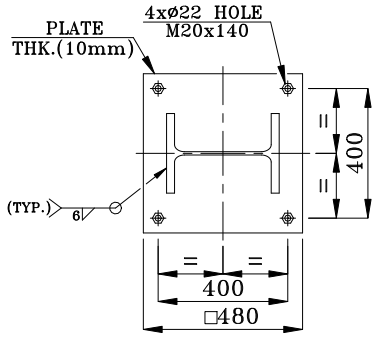
DETAIL OF BRACKET



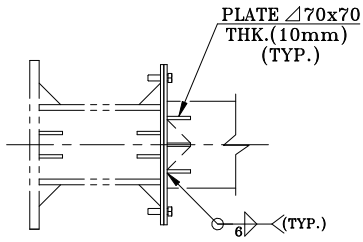
DETAIL OF BRAICING



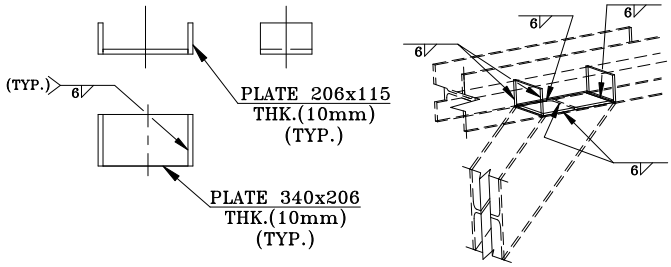
VIEW "A"~"A"



VIEW "B"~"B"



VIEW "C"~"C"



DETAIL "D"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg) F_{LA}	F_{LB}
01	800	36000	7800
02	900		
03	1000		
04	1100		
05	1200		5900
06	1300		
07	1400		
08	1500		4700
09	1600		
10	1700		
11	1800		3600
12	1900		
13	2000		

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
14	14"
16	16"
18	18"
20	20"
22	22"
24	24"

INSULATION THK. MARK:(3)

COLD INSULATION THK.	25-50	51-100	101-150	151-200	201-250	251-300
CRADLE THK.	T=50	T=100	T=150	T=200	T=250	T=300
INSULATION THK. MARK	1	2	3	4	5	6

INDICATION:

SH-11-[ ][ ] [ ][ ][ ]

(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- FOR DETAIL OF CRADLE SEE (G-04).

4- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

5- FOR DETAIL OF URETHANE BLOCK SEE(G-05).

MATERIAL:

STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.B

SUPPORT DESCRIPTION:
BRACKET ON EQUIPMENT
DOUBLE GUIDE
(COLD INSULATION)
14" ~ 24"
SH-11

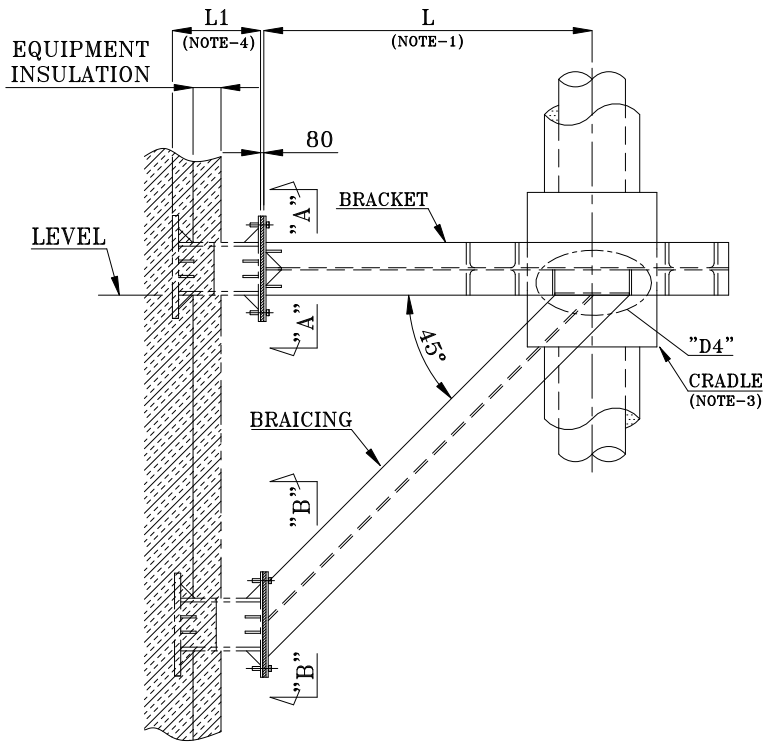
SHEET 4

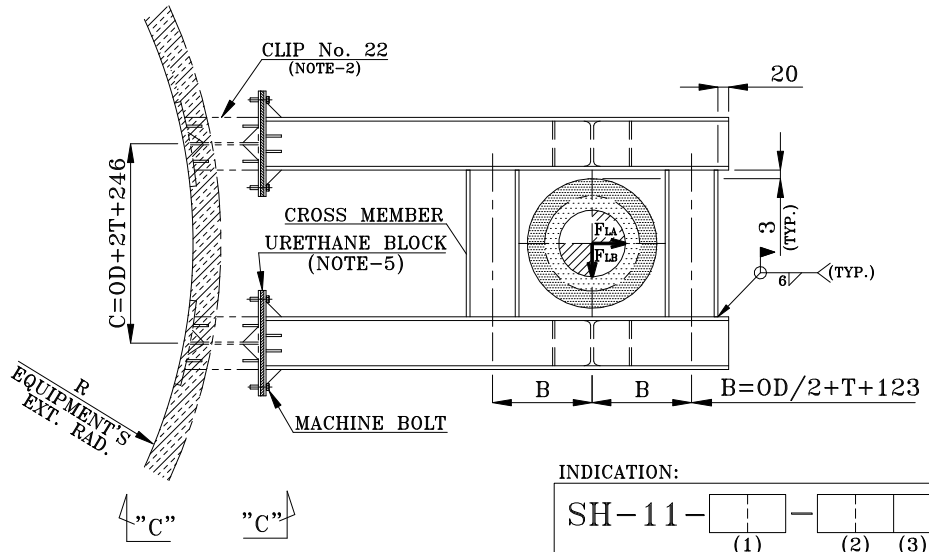
6

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 367 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02





INDICATION:

SH-11-□□-□□□

(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF CLIP SEE (G-03).

3- FOR DETAIL OF CRADLE SEE (G-04).

4- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

5- FOR DETAIL OF URETHANE BLOCK SEE(G-05).

MATERIAL:

STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.B

SUPPORT DESCRIPTION:	SHEET
BRACKET ON EQUIPMENT DOUBLE GUIDE (COLD INSULATION) 26" ~ 42"	5
SH-11	6

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

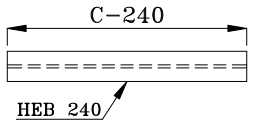
HIRGAN ENERGY

شماره پیمان:

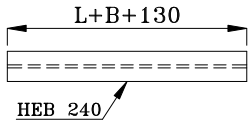
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

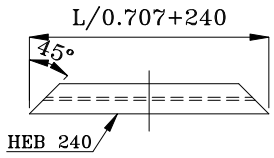
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



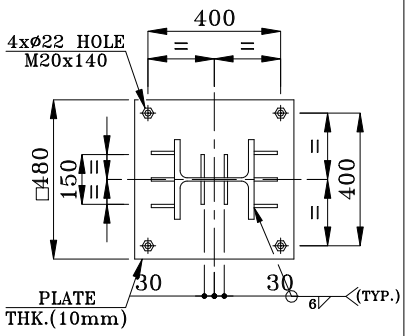
DETAIL OF CROSS MEMBER



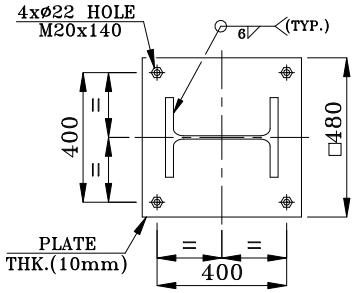
DETAIL OF BRACKET



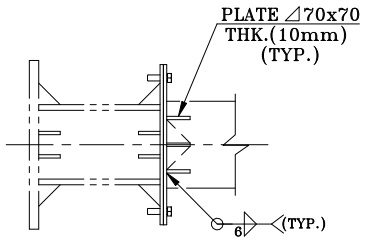
DETAIL OF BRAICING



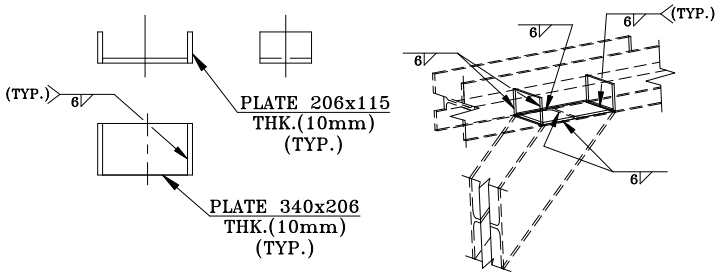
VIEW "A"~"A"



VIEW "B"~"B"



VIEW "C"~"C"



DETAIL "D"

LENGTH MARK:(2)

MARK	L	ALLOW. LOAD(kg) F_{LA}	ALLOW. LOAD(kg) F_{LB}
01	1000	27000	9200
02	1100		
03	1200		7000
04	1300		
05	1400		
06	1500		5500
07	1600		
08	1700		
09	1800		4300
10	1900		
11	2000		

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
26	26"
28	28"
30	30"
32	32"
34	34"
36	36"
38	38"
40	40"
42	42"

INSULATION THK. MARK:(3)

COLD INSULATION THK.	25-50	51-100	101-150	151-200	201-250	251-300
CRADLE THK.	T=50	T=100	T=150	T=200	T=250	T=300
INSULATION THK. MARK	1	2	3	4	5	6

INDICATION:

SH-11-□□-□□□

(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:

1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF CLIP SEE (G-03).
3- FOR DETAIL OF CRADLE SEE (G-04).
4- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.
5- FOR DETAIL OF URETHANE BLOCK SEE(G-05).

MATERIAL:

STANDARD PROFILE: ASTM A36, BOLT & NUT: A325, PLATE: A283 Gr.B

SUPPORT DESCRIPTION:
BRACKET ON EQUIPMENT
DOUBLE GUIDE
(COLD INSULATION)
26" ~ 42"
SH-11

SHEET 6

6

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

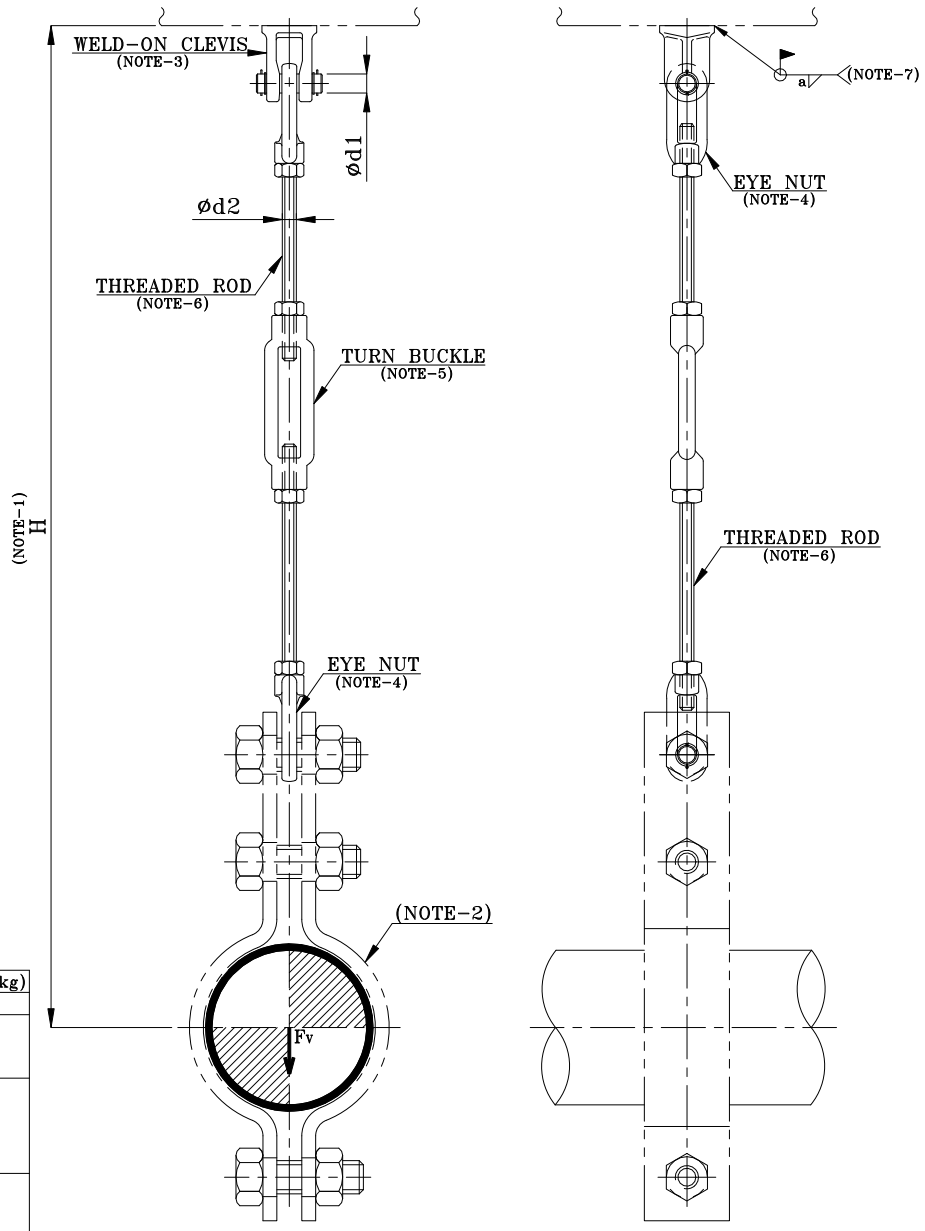
HIRGAN ENERGY

شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



HEIGHT MARK:(2)

MARK	H
01	1000
02	1100
03	1200
04	1300
05	1400
06	1500
07	1600
08	1700
09	1800
10	1900
11	2000
12	2100
13	2200
14	2300
15	2400
16	2500

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE	WELD-ON CLEVIS(ød1)	EYE NUT (ød2)	ALLOW. LOAD(kg) Fv
02	2"	16	M12	220
03	3"	16	M12	
04	4"	20	M16	400
06	6"	20	M16	
08	8"	20	M16	
10	10"	24	M20	580
12	12"	24	M20	
14	14"	24	M20	800
16	16"	24	M20	
18	18"	33	M24	1300
20	20"	33	M24	
24	24"	33	M24	1200

INDICATION:

SI-01- [ ] (1) - [ ] (2)

1-NPS MARK
2-HEIGHT MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- SEPARATED TAG IS REQUIRED FOR CLAMP (CATEGORY SK).

3- FOR DETAIL OF WELD-ON CLEVIS SEE (G-09).

4- FOR DETAIL OF EYE NUT SEE (G-11).

5- FOR DETAIL OF TURN BUCKLE SEE (G-08).

6- FOR DETAIL OF THREADED ROD SEE (G-12).

7- THE MINIMUM WELD THICKNESS FOR CLEVIS TO EXISTING IS CONSIDERED IN DRAWING (G-09).

SUPPORT DESCRIPTION:	SHEET
RIGID HANGER (CLAMP TYPE) 2" ~ 24"	1
SI-01	1

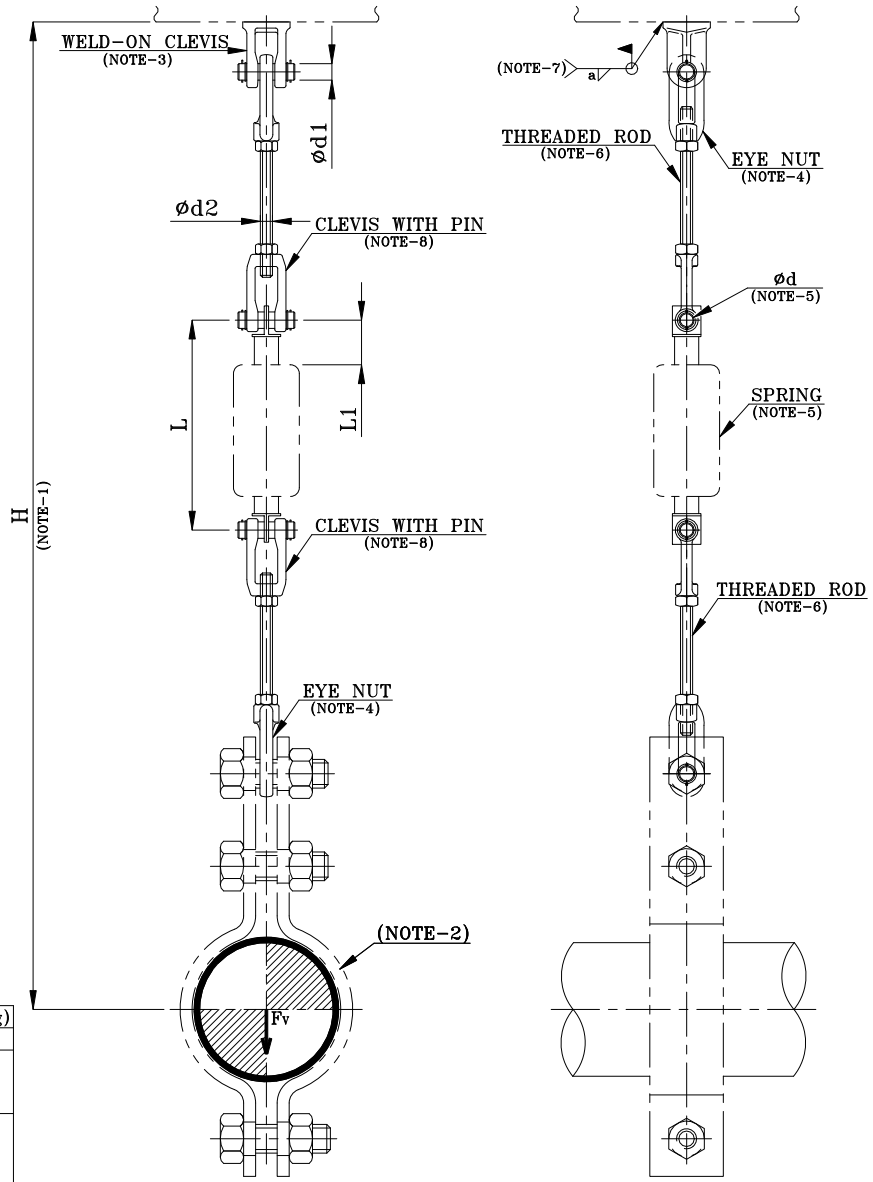
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 370 از 394



HEIGHT MARK:(2)

MARK	H
01	1000
02	1100
03	1200
04	1300
05	1400
06	1500
07	1600
08	1700
09	1800
10	1900
11	2000
12	2100
13	2200
14	2300
15	2400
16	2500

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE	WELD-ON CLEVIS(ød1)	EYE NUT (ød2)	ALLOW. LOAD(kg) Fv
02	2"	16	M12	220
03	3"	16	M12	
04	4"	20	M16	400
06	6"	20	M16	
08	8"	20	M16	
10	10"	24	M20	580
12	12"	24	M20	
14	14"	24	M20	800
16	16"	24	M20	
18	18"	33	M24	1300
20	20"	33	M24	
24	24"	33	M24	1200

INDICATION:

SI-02- [ ] - [ ]
(1) (2)

1-NPS MARK
2-HEIGHT MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.
2- SEPARATED TAG IS REQUIRED FOR CLAMP (CATEGORY SK).
3- FOR DETAIL OF WELD-ON CLEVIS SEE (G-09).
4- FOR DETAIL OF EYE NUT SEE (G-11).
5- SPRING SHALL BE FURNISHED BY VENDOR, BUT DIMENSIONS L, L1 AND ød SHALL BE CALCULATED AND SPECIFIED BY SUPPORT ENGINEER.
6- FOR DETAIL OF THREADED ROD SEE (G-12).
7- THE MINIMUM WELD THICKNESS FOR CLEVIS TO EXISTING IS CONSIDERED IN DRAWING (G-09).
8- FOR DETAIL OF CLEVIS WITH PIN SEE (G-10).

SUPPORT DESCRIPTION:	SHEET
SPRING HANGER (CLAMP TYPE) 2" ~ 24"	1
SI-02	1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

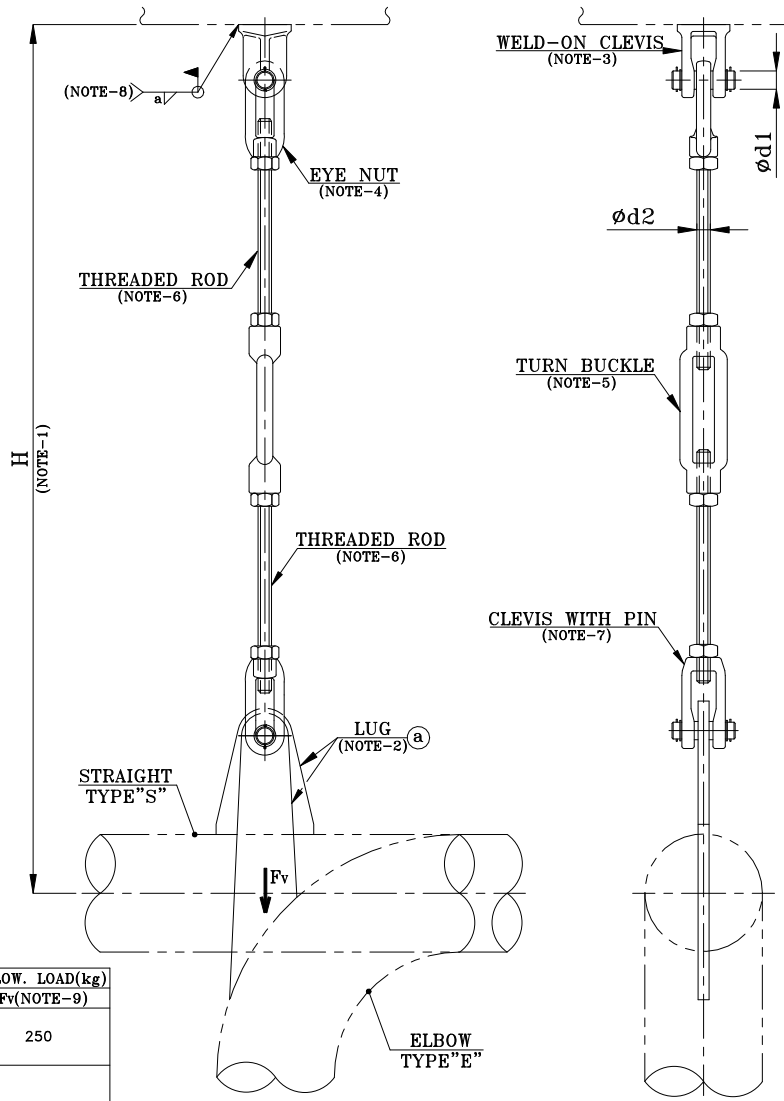
شماره صفحه: 371 از 394

HEIGHT MARK:(4)

MARK	H
01	1000
02	1100
03	1200
04	1300
05	1400
06	1500
07	1600
08	1700
09	1800
10	1900
11	2000
12	2100
13	2200
14	2300
15	2400
16	2500

MATERIAL MARK:(2)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL
0°C TO 350°C	MARK	A
	ⓐ	ASTM A36
	ⓑ	–
350°C TO 500°C	MARK	B
	ⓐ	–
	ⓑ	–



NPS MARK:(3)

NPS MARK	RUN PIPE SIZE	WELD-ON CLEVIS(ød1)	EYE NUT (ød2)	LUG FOR STRAIGHT PIPE	ALLOW. LOAD(kg) Fv(NOTE-9)
02	2"	16	M12	12.5	250
03	3"	16	M12	12.5	
04	4"	20	M16	16.5	500
06	6"	20	M16	16.5	
08	8"	20	M16	16.5	
10	10"	24	M20	20.5	1000
12	12"	24	M20	20.5	
14	14"	24	M20	20.5	
16	16"	24	M20	20.5	
18	18"	33	M24	24.5	2000
20	20"	33	M24	24.5	
24	24"	33	M24	24.5	

INDICATION:

SI-03- □□ – □□ – □□
(1) (2) (3) (4)

1-TYPE OF RUN PIPE
2-MATERIAL MARK
3-NPS MARK
4-HEIGHT MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.

2- FOR DETAIL OF LUG SEE (G-13) OR (G-14).

3- FOR DETAIL OF WELD-ON CLEVIS SEE (G-09). 4- FOR DETAIL OF EYE NUT SEE (G-11).

5- FOR DETAIL OF TURN BUCKLE SEE (G-08). 6- FOR DETAIL OF THREADED ROD SEE (G-12).

7- FOR DETAIL OF CLEVIS WITH PIN SEE (G-10).

8- THE MINIMUM WELD THICKNESS FOR CLEVIS TO EXISTING IS CONSIDERED IN DRAWING (G-09).

9- ALLOW. LOADS ARE CALCULATED AT TEMP. 80°C, THESE LOADS WILL BE REDUCED AS FOLLOW:
IF 80<OPR. TEMP<250 THEN ALLOWABLE LOADS= 0.7 x TABULATED ALLOWABLE LOADS
IF 250≤OPR. TEMP≤350 THEN ALLOWABLE LOADS= 0.5 x TABULATED ALLOWABLE LOADS

SUPPORT DESCRIPTION:	SHEET
RIGID HANGER (CS-WITHOUT PWHT) 2" ~ 24"	1
SI-03	1

NISOC

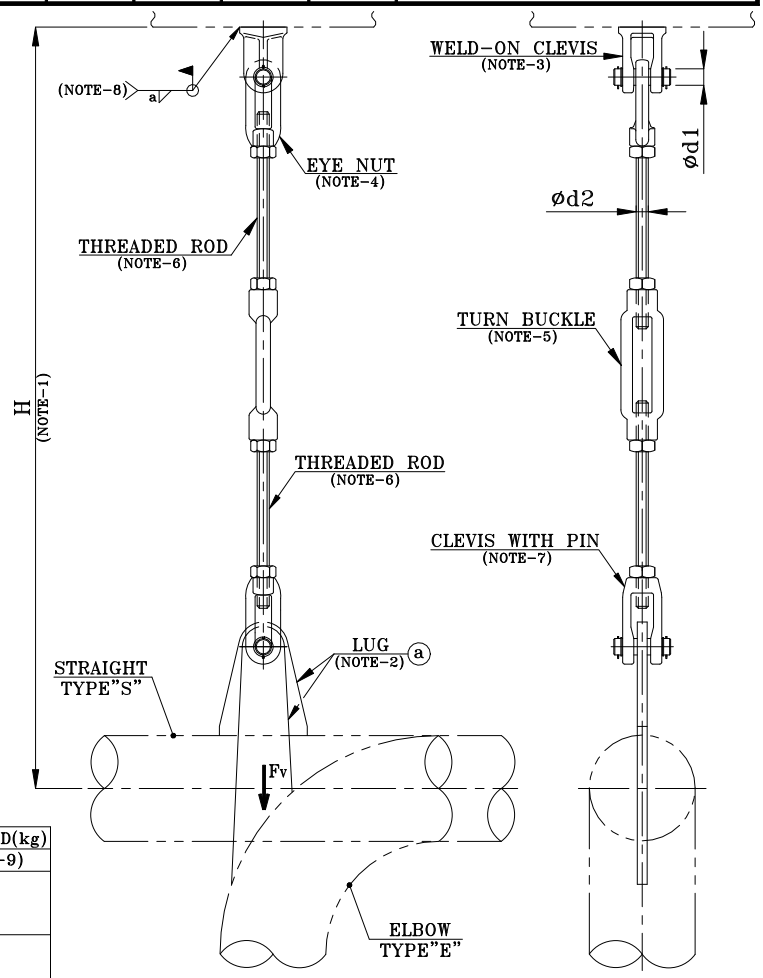
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



HEIGHT MARK:(4)

MARK	H
01	1000
02	1100
03	1200
04	1300
05	1400
06	1500
07	1600
08	1700
09	1800
10	1900
11	2000
12	2100
13	2200
14	2300
15	2400
16	2500

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE	WELD-ON CLEVIS(ød1)	EYE NUT (ød2)	LUG FOR STRAIGHT PIPE	ALLOW. LOAD(kg) Fv(NOTE-9)
02	2"	16	M12	12.5	250
03	3"	16	M12	12.5	
04	4"	20	M16	16.5	500
06	6"	20	M16	16.5	
08	8"	20	M16	16.5	
10	10"	24	M20	20.5	1000
12	12"	24	M20	20.5	
14	14"	24	M20	20.5	
16	16"	24	M20	20.5	
18	18"	33	M24	24.5	2000
20	20"	33	M24	24.5	
24	24"	33	M24	24.5	

MATERIAL MARK:(2)

DES. TEMP	MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	C	E
	ⓐ	ASTM A36	A387 Gr.91 Cl.2	A240 Gr.316
	ⓑ	–	–	–
350°C TO 500°C	MARK	B	D	F
	ⓐ	–	A387 Gr.91 Cl.2	A240 Gr.316
	ⓑ	–	–	–

INDICATION:

SI-04- □□ – □□ – □□
(1) (2) (3) (4)

1-TYPE OF RUN PIPE
2-MATERIAL MARK
3-NPS MARK
4-HEIGHT MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF LUG SEE (G-13) OR (G-14).
3- FOR DETAIL OF WELD-ON CLEVIS SEE (G-09).
4- FOR DETAIL OF EYE NUT SEE (G-11). 5- FOR DETAIL OF TURN BUCKLE SEE (G-08).
6- FOR DETAIL OF THREADED ROD SEE (G-12). 7- FOR DETAIL OF CLEVIS WITH PIN SEE (G-10).
8- THE MINIMUM WELD THICKNESS FOR CLEVIS TO EXISTING IS CONSIDERED IN DRAWING (G-09).
9- ALLOW. LOADS ARE CALCULATED AT TEMP. 80°C, THESE LOADS WILL BE REDUCED AS FOLLOW:
IF 80<OPR. TEMP<250 THEN ALLOWABLE LOADS= 0.7 x TABULATED ALLOWABLE LOADS
IF 250≤OPR. TEMP≤500 THEN ALLOWABLE LOADS= 0.5 x TABULATED ALLOWABLE LOADS

SUPPORT DESCRIPTION:	SHEET
RIGID HANGER (CS-WITH PWHT, AS, SS) 2" ~ 24"	1
SI-04	1

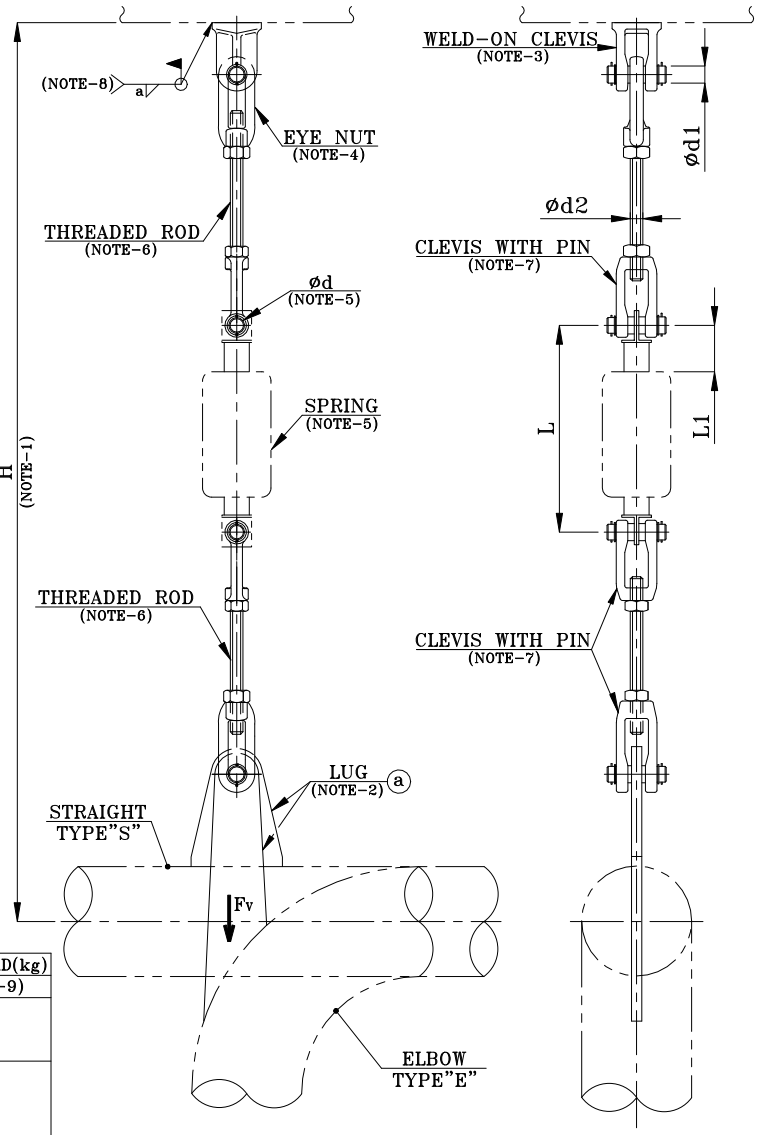
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 373 از 394



HEIGHT MARK:(4)

MARK	H
01	1000
02	1100
03	1200
04	1300
05	1400
06	1500
07	1600
08	1700
09	1800
10	1900
11	2000
12	2100
13	2200
14	2300
15	2400
16	2500

MATERIAL MARK:(2)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL
0°C TO 350°C	MARK	A
	ⓐ	ASTM A36
	ⓑ	–
350°C TO 500°C	MARK	B
	ⓐ	–
	ⓑ	–

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE	WELD-ON CLEVIS(ød1)	EYE NUT (ød2)	LUG FOR STRAIGHT PIPE	ALLOW. LOAD(kg) Fv(NOTE-9)
02	2"	16	M12	12.5	250
03	3"	16	M12	12.5	
04	4"	20	M16	16.5	500
06	6"	20	M16	16.5	
08	8"	20	M16	16.5	
10	10"	24	M20	20.5	1000
12	12"	24	M20	20.5	
14	14"	24	M20	20.5	
16	16"	24	M20	20.5	
18	18"	33	M24	24.5	2000
20	20"	33	M24	24.5	
24	24"	33	M24	24.5	

INDICATION:

SI-05- □□ - □□ - □□
(1) (2) (3) (4)

1-TYPE OF RUN PIPE
2-MATERIAL MARK
3-NPS MARK
4-HEIGHT MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD. 2- FOR DETAIL OF LUG SEE (G-13) OR (G-14).

3- FOR DETAIL OF WELD-ON CLEVIS SEE (G-09). 4- FOR DETAIL OF EYE NUT SEE (G-11).

5- SPRING SHALL BE FURNISHED BY VENDOR, BUT DIMENSIONS L, L1 AND ød SHALL BE CALCULATED AND SPECIFIED BY SUPPORT ENGINEER.

6- FOR DETAIL OF THREADED ROD SEE (G-12). 7- FOR DETAIL OF CLEVIS WITH PIN SEE (G-10).

8- THE MINIMUM WELD THICKNESS FOR CLEVIS TO EXISTING IS CONSIDERED IN DRAWING (G-09).

9- ALLOW. LOADS ARE CALCULATED AT TEMP. 80°C, THESE LOADS WILL BE REDUCED AS FOLLOW:
IF 80<OPR. TEMP<250 THEN ALLOWABLE LOADS= 0.7 x TABULATED ALLOWABLE LOADS
IF 250≤OPR. TEMP≤350 THEN ALLOWABLE LOADS= 0.5 x TABULATED ALLOWABLE LOADS

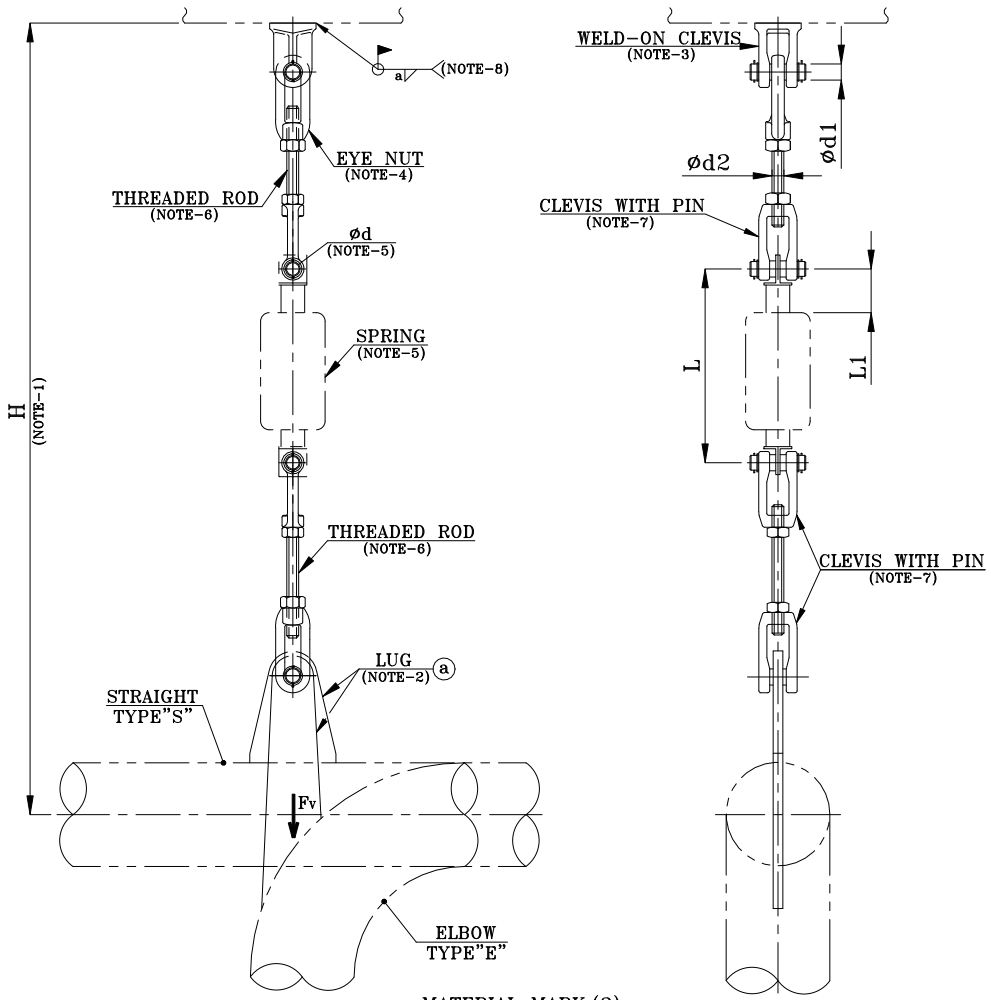
SUPPORT DESCRIPTION:	SHEET
SPRING HANGER (CS-WITHOUT PWHT) 2" ~ 24"	1
SI-05	1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 374 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

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HEIGHT MARK:(4)

MARK	H
01	1000
02	1100
03	1200
04	1300
05	1400
06	1500
07	1600
08	1700
09	1800
10	1900
11	2000
12	2100
13	2200
14	2300
15	2400
16	2500

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE	WELD-ON CLEVIS(ød1)	(ød2)	LUG FOR STRAIGHT PIPE	ALLOW. LOAD(kg) Fv(NOTE-9)
02	2"	16	M12	12.5	250
03	3"	16	M12	12.5	
04	4"	20	M16	16.5	500
06	6"	20	M16	16.5	
08	8"	20	M16	16.5	
10	10"	24	M20	20.5	1000
12	12"	24	M20	20.5	
14	14"	24	M20	20.5	
16	16"	24	M20	20.5	
18	18"	33	M24	24.5	2000
20	20"	33	M24	24.5	
24	24"	33	M24	24.5	

MATERIAL MARK:(2)

DES. TEMP	MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	C	E
	ⓐ	ASTM A36	A387 Gr.91 Cl.2	A240 Gr.316
	ⓑ	–	–	–
350°C TO 500°C	MARK	B	D	F
	ⓐ	–	A387 Gr.91 Cl.2	A240 Gr.316
	ⓑ	–	–	–

INDICATION:

SI-06- □□ – □□ – □□

(1) (2) (3) (4)

1-TYPE OF RUN PIPE
2-MATERIAL MARK
3-NPS MARK
4-HEIGHT MARK

NOTE:

1- DIMENSION "H" CAN BE ADJUSTED AT FIELD. 2- FOR DETAIL OF LUG SEE (G-13) OR (G-14).

3- FOR DETAIL OF WELD-ON CLEVIS SEE (G-09). 4- FOR DETAIL OF EYE NUT SEE (G-11).

5- SPRING SHALL BE FURNISHED BY VENDOR, BUT DIMENSIONS L, L1 AND ød SHALL BE CALCULATED AND SPECIFIED BY SUPPORT ENGINEER.

6- FOR DETAIL OF THREADED ROD SEE (G-12). 7- FOR DETAIL OF CLEVIS WITH PIN SEE (G-10).

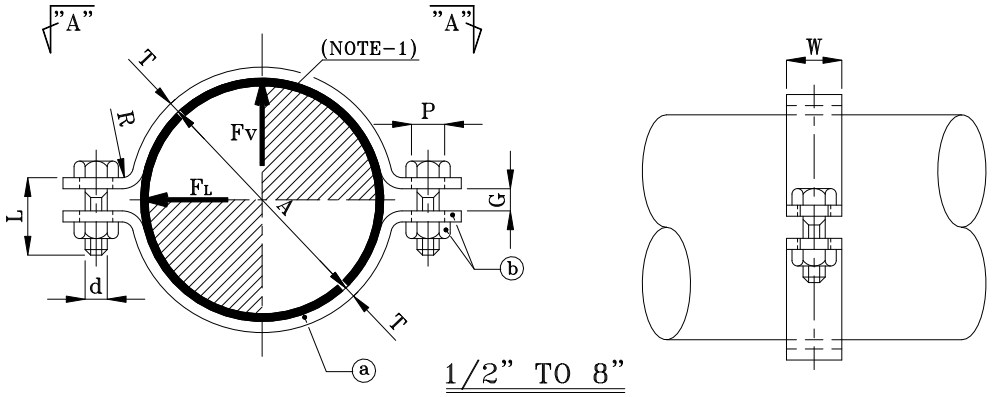
8- THE MINIMUM WELD THICKNESS FOR CLEVIS TO EXISTING IS CONSIDERED IN DRAWING (G-09).

9- ALLOW. LOADS ARE CALCULATED AT TEMP. 80°C, THESE LOADS WILL BE REDUCED AS FOLLOW:
IF 80<OPR. TEMP<250 THEN ALLOWABLE LOADS= 0.7 x TABULATED ALLOWABLE LOADS
IF 250≤OPR. TEMP≤500 THEN ALLOWABLE LOADS= 0.5 x TABULATED ALLOWABLE LOADS

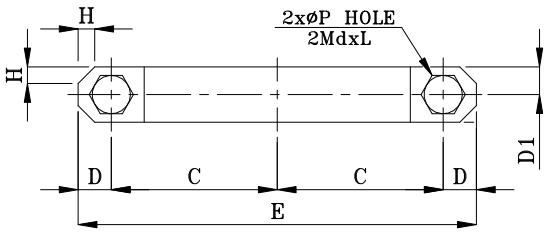
SUPPORT DESCRIPTION:	SHEET
SPRING HANGER (CS-WITH PWHT, AS, SS) 2" ~ 24"	1
SI-06	1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

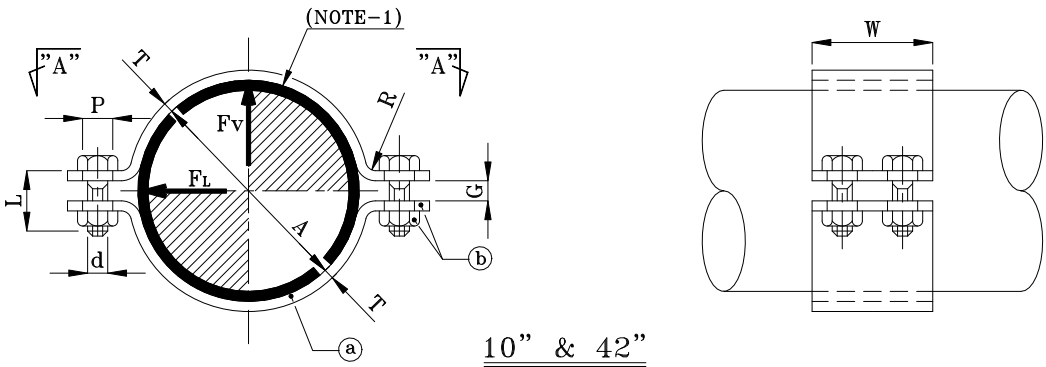
شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 375 از 394
	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02



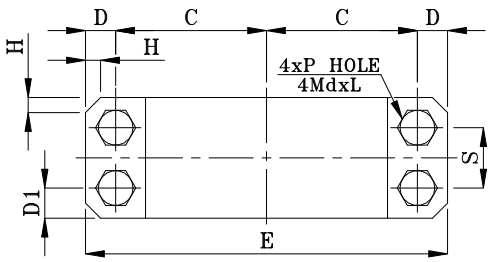
1/2" TO 8"



VIEW "A"~"A"



10" & 42"



VIEW "A"~"A"

INDICATION:

SK-01-□□□
(1) (2)

1-MATERIAL MARK
2-NPS MARK

NOTE:

1- FOR AS AND SS PIPES, ANTI CORROSION TAPE SHALL BE APPLIED BETWEEN PIPE AND CLAMP, FOR RUN PIPE WITH TEMP. MORE THAN 350°, THIN STAINLESS STEEL OR ALLOY STEEL SHEET WITH THICKNESS 0.5mm CAN BE USED AS AN ANTI CORROSION ITEM.

SUPPORT DESCRIPTION:	SHEET
SIMPLE CLAMP 1/2" ~ 42"	1
SK-01	2

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 376 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

053-073-9184

NPS MARK: (2)

NPS MARK	RUN PIPE SIZE	CLAMP BODY												MACHINE BOLT MdxL	ALLOWABLE LOAD (kg)	
		A	C	D	E	G	H	D1	S	P	R	W	T		FL	Fv
0A	1/2"	24	25	15	80	15	5	15	0	12	10	30	5	M10x45	150	170
0B	3/4"	29	30	15	90	15	5	15	0	12	10	30	5	M10x45		
01	1"	36	35	15	100	15	5	20	0	12	10	40	5	M10x45		
1A	1 1/2"	51	50	15	130	15	5	20	0	12	10	40	5	M10x45		
02	2"	63	55	15	140	15	5	20	0	16	10	40	8	M14x55	230	400
2A	2 1/2"	76	65	15	160	15	5	20	0	16	10	40	8	M14x55		
03	3"	92	75	15	180	15	5	20	0	16	10	40	8	M14x55		
04	4"	118	95	25	240	25	10	25	0	22	10	50	10	M20x75	350	560
05	5"	146	115	25	280	25	10	25	0	22	10	50	10	M20x75		
06	6"	173	140	35	350	35	10	40	0	22	15	80	12	M20x90	500	1000
08	8"	225	165	35	400	35	10	40	0	22	15	80	12	M20x90		
10	10"	280	205	40	490	40	10	25	50	18	20	100	15	M16x100		1800
12	12"	330	230	40	540	40	10	25	50	18	20	100	15	M16x100		
14	14"	362	260	50	620	50	15	25	50	18	25	100	15	M16x110		
16	16"	414	285	50	670	50	15	30	60	18	25	120	15	M16x110		
18	18"	464	310	50	720	50	15	30	60	18	25	120	15	M16x110		
20	20"	514	350	50	800	50	15	35	60	22	30	130	20	M20x120	600	3000
22	22"	566	375	50	850	50	15	35	60	22	30	130	20	M20x120		
24	24"	616	400	50	900	50	15	35	60	22	30	130	20	M20x120		
26	26"	668	440	55	990	55	20	50	80	22	35	180	25	M20x140	800	4300
28	28"	720	465	55	1040	55	20	50	80	22	35	180	25	M20x140		
30	30"	770	490	55	1090	55	20	50	80	22	35	180	25	M20x140		
32	32"	824	515	55	1140	55	20	50	80	22	40	180	25	M20x140		
34	34"	876	540	55	1190	55	20	45	90	26	40	180	25	M24x140		
36	36"	928	570	55	1250	55	20	45	90	26	40	180	25	M24x140		
38	38"	979	595	55	1300	55	20	45	90	26	40	180	25	M24x140		
40	40"	1030	620	55	1350	55	20	45	90	26	40	180	25	M24x140		
42	42"	1080	645	55	1400	55	20	45	90	26	40	180	25	M24x140		

MATERIAL MARK:(1)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓑ	A325	A325	A325
	ⓒ	–	–	–
350°C TO 400°C	MARK	B	E	H
	ⓐ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓑ	A325	A325	A325
	ⓒ	–	–	–
400°C TO 550°C	MARK	C	F	J
	ⓐ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓑ	–	A193 Gr.B16	A193 Gr.B8CL.1
	ⓒ	–	–	–

INDICATION:

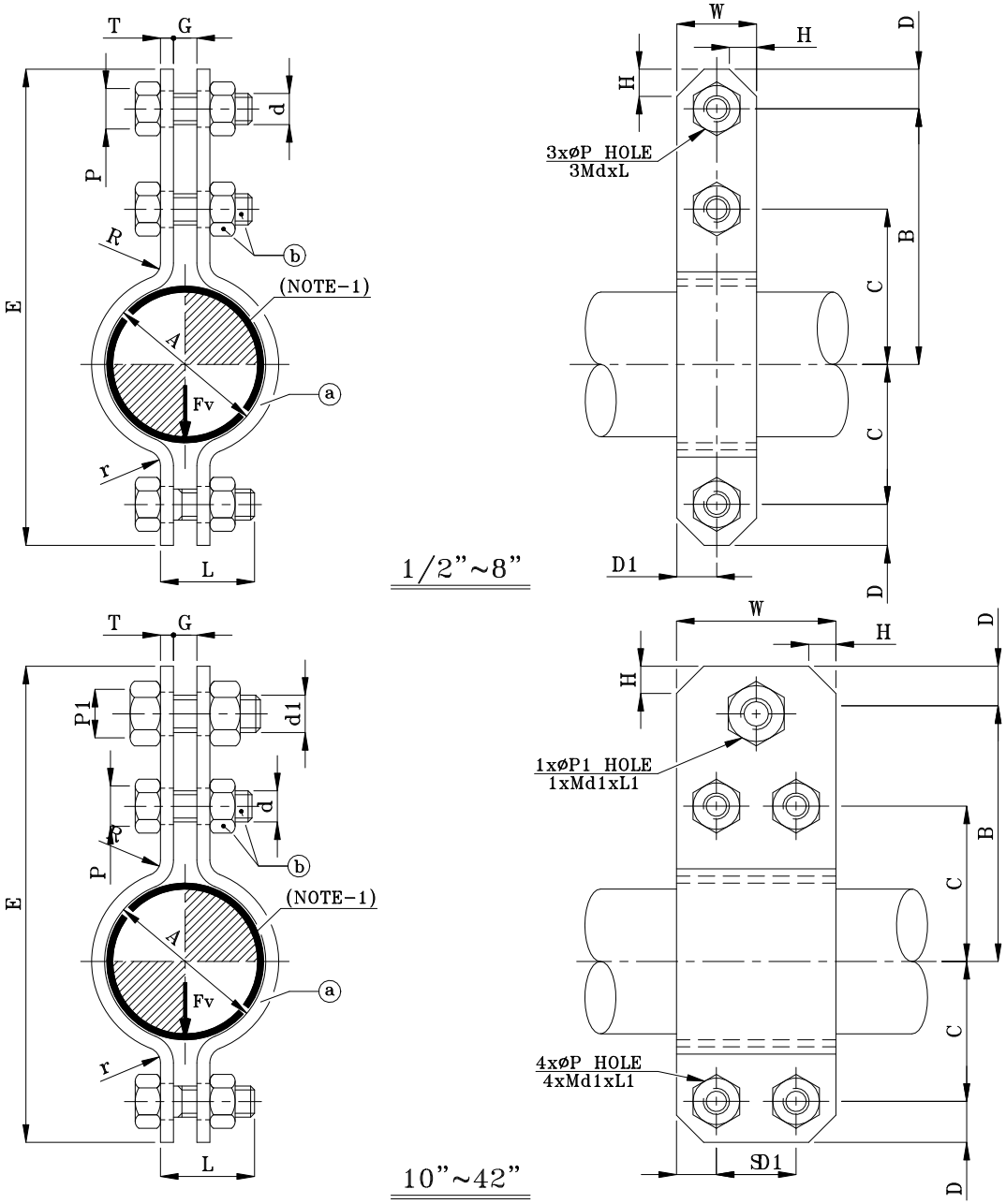
SK-01-[ ][ ][ ]
(1) (2)

1-MATERIAL MARK
2-NPS MARK

SUPPORT DESCRIPTION:	SHEET
SIMPLE CLAMP 1/2" ~ 42"	2
SK-01	2

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 377 از 394
	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	



INDICATION:

SK-02-□□□
(1) (2)

1-MATERIAL MARK
2-NPS MARK

NOTE:

1- FOR AS AND SS PIPES, ANTI CORROSION TAPE SHALL BE APPLIED BETWEEN PIPE AND CLAMP, FOR RUN PIPE WITH TEMP. MORE THAN 350°, THIN STAINLESS STEEL OR ALLOY STEEL SHEET WITH THICKNESS 0.5mm CAN BE USED AS AN ANTI CORROSION ITEM.

SUPPORT DESCRIPTION:	SHEET
HANGING CLAMP 1/2" ~ 42"	1
SK-02	2

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY
شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 378 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

NPS MARK: (2)

NPS MARK	RUN PIPE SIZE	CLAMP BODY														MACHINE BOLT MdxL	MACHINE BOLT Md1xL1	ALLOWABLE LOAD (kg) Fv
		A	B	C	D	E	G	H	P	P1	R	W	T	D1	S			
0A	1/2"	24	75	25	10	120	15	5	12	0	10	30	5	15	0	M10x45	–	140
0B	3/4"	29	90	30	10	140	15	5	12	0	10	30	5	15	0	M10x45	–	
01	1"	36	110	35	15	175	15	5	12	0	10	40	5	20	0	M10x45	–	
1A	1 1/2"	51	135	50	15	215	15	5	12	0	10	40	5	20	0	M10x45	–	
02	2"	63	145	55	15	230	15	5	16	0	10	40	8	20	0	M14x55	–	300
2A	2 1/2"	76	155	65	15	250	15	5	16	0	10	40	8	20	0	M14x55	–	
03	3"	92	165	75	15	270	15	5	16	0	10	40	8	20	0	M14x55	–	
04	4"	118	195	95	25	340	25	10	22	0	10	50	10	25	0	M20x75	–	420
05	5"	146	215	115	25	380	25	10	22	0	10	50	10	25	0	M20x75	–	
06	6"	173	260	140	35	470	35	10	22	0	15	80	12	40	0	M20x90	–	640
08	8"	225	300	165	35	535	35	10	22	0	15	80	12	40	0	M20x90	–	
10	10"	280	345	205	40	630	40	10	18	26	20	100	15	25	50	M16x100	M24x130	840
12	12"	330	370	230	40	680	40	10	18	26	20	100	15	25	50	M16x100	M24x130	
14	14"	362	420	260	50	780	50	15	18	26	25	100	15	25	50	M16x110	M24x130	
16	16"	414	445	285	50	830	50	15	18	26	25	120	15	30	60	M16x110	M24x130	
18	18"	464	470	310	50	880	50	15	18	26	25	120	15	30	60	M16x110	M24x130	
20	20"	514	520	350	50	970	50	15	22	32	30	130	20	35	60	M20x120	M30x140	1100
22	22"	566	550	375	50	1025	50	15	22	32	30	130	20	35	60	M20x120	M30x140	
24	24"	616	580	400	50	1080	50	15	22	32	30	130	20	35	60	M20x120	M30x140	
26	26"	668	630	440	55	1180	55	20	22	32	35	180	25	50	80	M20x140	M30x150	1300
28	28"	720	660	465	55	1235	55	20	22	32	35	180	25	50	80	M20x140	M30x150	
30	30"	770	690	490	55	1290	55	20	22	32	35	180	25	50	80	M20x140	M30x150	
32	32"	824	715	515	55	1340	55	20	22	32	40	180	25	50	80	M20x140	M30x150	
34	34"	876	740	540	55	1390	55	20	26	35	40	180	25	45	90	M24x140	M33x150	
36	36"	928	770	570	55	1450	55	20	26	35	40	180	25	45	90	M24x140	M33x150	
38	38"	979	795	595	55	1500	55	20	26	35	40	180	25	45	90	M24x140	M33x150	
40	40"	1030	820	620	55	1550	55	20	26	35	40	180	25	45	90	M24x140	M33x150	
42	42"	1080	845	645	55	1600	55	20	26	35	40	180	25	45	90	M24x140	M33x150	

MATERIAL MARK:(1)

DES. TEMP / MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0°C TO 350°C	MARK	A	D	G
	ⓐ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓑ	A325	A325	A325
	ⓒ	–	–	–
350°C TO 400°C	MARK	B	E	H
	ⓐ	A285 Gr.C	A285 Gr.C	A285 Gr.C
	ⓑ	A325	A325	A325
	ⓒ	–	–	–
400°C TO 550°C	MARK	C	F	J
	ⓐ	–	A387 Gr.91 CL.2	A240 Gr.316
	ⓑ	–	A193 Gr.B16	A193 Gr.B8 CL.1
	ⓒ	–	–	–

INDICATION:

SK-02-[ ][ ][ ]
(1) (2)

1-MATERIAL MARK
2-NPS MARK

SUPPORT DESCRIPTION:	SHEET
HANGING CLAMP 1/2" ~ 42" SK-02	2 2

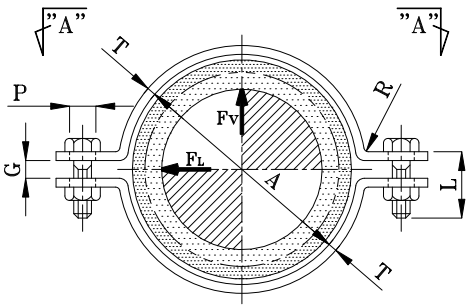
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

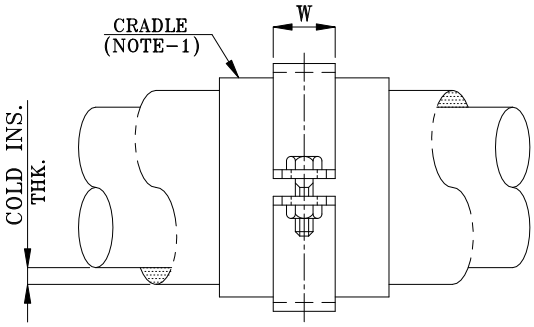
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

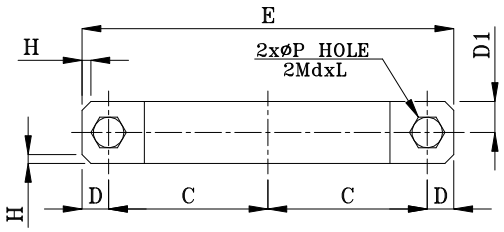
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 379 از 394





TYPE "A"



VIEW "A"~"A"

DIMENSION TABLE

CLAMP BODY											MACHINE BOLT MdxL	ALLOWABLE LOAD (kg)	
A	C	D	E	G	H	P	R	W	T	D1		FL	Fv
136	105	25	260	32	5	14	10	40	5	20	M12x65	120	240
163	120	25	290	32	5	14	10	40	5	20	M12x65		
224	150	25	350	32	5	14	10	40	5	20	M12x65		
236	155	25	360	32	5	14	10	40	5	20	M12x65		
251	160	25	370	32	5	14	10	40	5	20	M12x65		
324	220	30	500	38	10	16	15	50	8	25	M14x80		210
336	230	30	520	38	10	16	15	50	8	25	M14x80		
351	270	30	600	45	10	16	20	50	8	25	M14x90	120	
451	310	30	680	45	10	16	20	50	8	25	M14x90		

NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	1/2"	3/4"	1"	1 1/2"
			0A	0B	01	1A
			A (FOR EACH PIPE SIZE)			
1	25-50	T=50	136	136	136	163
2	51-100	T=100	224	236	236	251
3	101-150	T=150	324	336	336	351
4	151-200	T=200	-	-	-	451
5	201-250	T=250	-	-	-	-
6	251-300	T=300	-	-	-	-

INDICATION:

SK-03-□-□□□
(1) (2) (3)

1-TYPE MARK
2-NPS MARK
3-INSULATION THK. MARK

NOTE:
1- FOR DETAIL OF CRADLE SEE (G-04).

MATERIAL:
BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
SIMPLE COLD CLAMP 1/2" ~ 1 1/2"	1
SK-03	4

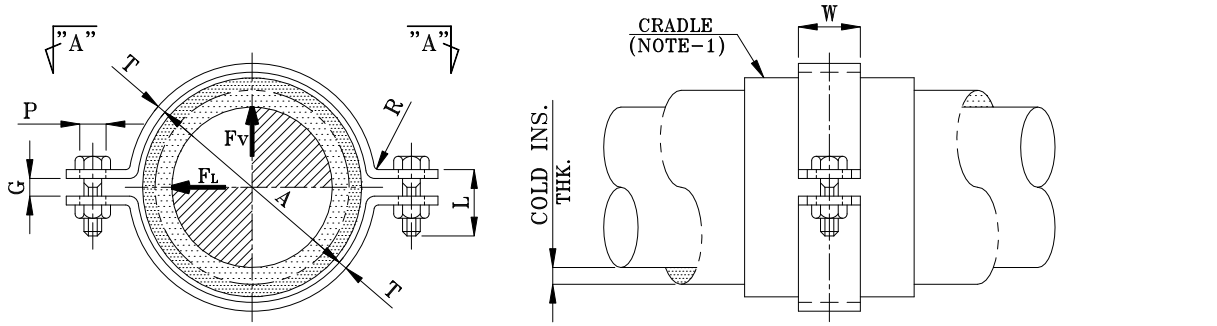
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

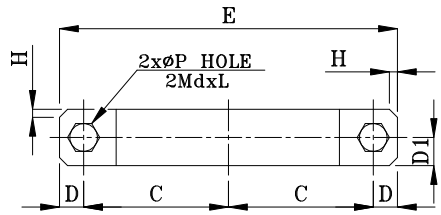
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

شماره صفحه: 380 از 394



TYPE "B"



VIEW "A"~"A"

DIMENSION TABLE

CLAMP BODY											MACHINE BOLT MdxL	ALLOWABLE LOAD (kg)	
A	C	D	E	G	H	P	R	W	T	D1		FL	Fv
165	120	30	300	32	10	16	10	50	10	25	M14x80	280	740
192	130	30	320	32	10	16	10	50	10	25	M14x80		
220	150	30	360	32	10	16	10	50	10	25	M14x80		
251	160	35	390	32	10	22	10	50	10	25	M20x90		
265	190	35	450	38	10	22	15	80	10	40	M20x90		
279	195	35	460	38	10	22	15	80	10	40	M20x90		
292	200	35	470	38	10	22	15	80	10	40	M20x90		
320	220	35	510	38	10	22	15	80	10	40	M20x90		
351	260	35	610	45	10	22	20	80	12	40	M20x100	220	640
365	270	35	590	45	10	22	20	80	12	40	M20x100		
392	280	35	610	45	10	22	20	80	12	40	M20x100		
420	290	35	650	45	10	22	20	80	12	40	M20x100		
451	310	40	700	55	10	22	25	80	12	40	M20x110		
465	320	40	720	55	10	22	25	80	12	40	M20x110		
492	330	40	740	55	10	22	25	80	12	40	M20x110		
520	350	40	780	55	10	22	25	80	12	40	M20x110		
548	360	40	800	55	10	22	25	80	12	40	M20x110		

NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	2"	2 1/2"	3"	4"	5"
			02	2A	03	04	05
			A (FOR EACH PIPE SIZE)				
1	25-50	T=50	165	192	192	220	251
2	51-100	T=100	265	279	292	320	351
3	101-150	T=150	365	392	392	420	451
4	151-200	T=200	465	492	492	520	548
5	201-250	T=250	-	-	-	-	-
6	251-300	T=300	-	-	-	-	-

INDICATION:

SK-03-□-□□□
(1) (2) (3)

1-TYPE MARK
2-NPS MARK
3-INSULATION THK. MARK

NOTE:
1- FOR DETAIL OF CRADLE SEE (G-04).

MATERIAL:
BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
SIMPLE COLD CLAMP 2" ~ 5"	2
SK-03	4

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

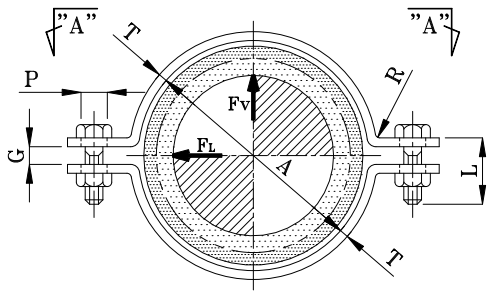
HIRGAN ENERGY

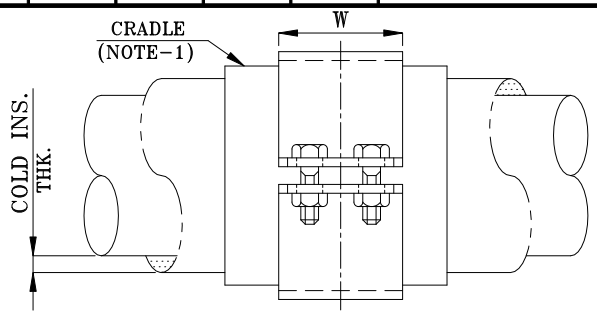
شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

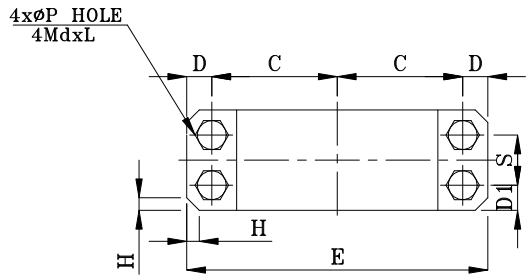




TYPE "C"

DIMENSION TABLE

CLAMP BODY												MACHINE BOLT MdxL	ALLOWABLE LOAD (kg)	
A	C	D	E	G	H	P	R	W	T	D1	S		FL	Fv
274	190	40	460	38	15	18	15	100	15	25	50	M16x105	430	1300
324	220	40	520	38	10	18	15	100	15	25	50	M16x105		
374	260	40	600	45	10	18	20	100	15	25	50	M16x105		
378	270	40	620	45	10	18	20	100	15	25	50	M16x105		
430	290	40	660	45	10	18	20	100	15	25	50	M16x105		
462	320	40	720	55	10	18	25	100	15	25	50	M16x115		
474	320	40	720	55	10	18	25	100	15	25	50	M16x115		
478	330	40	740	55	10	18	25	100	15	25	50	M16x115		
512	350	40	780	55	10	18	25	100	15	25	50	M16x115		
530	350	40	780	55	10	18	25	100	15	25	50	M16x115		
562	390	40	860	60	10	18	30	100	15	25	50	M16x115		
574	390	40	860	60	10	18	30	100	15	25	50	M16x115		
578	390	40	860	60	10	18	30	100	15	25	50	M16x115		
612	415	50	930	60	15	22	30	120	20	30	60	M20x130	550	2500
630	415	50	930	60	15	22	30	120	20	30	60	M20x130		
662	440	50	980	60	15	22	30	120	20	30	60	M20x130		
678	440	50	980	60	15	22	30	120	20	30	60	M20x130		
712	465	50	1030	60	15	22	30	120	20	30	60	M20x130		
730	465	50	1030	60	15	22	30	120	20	30	60	M20x130		
762	495	50	1090	60	15	22	30	120	20	30	60	M20x130		
778	495	50	1090	60	15	22	30	120	20	30	60	M20x130		
812	520	50	1140	60	15	22	30	120	20	30	60	M20x130		
830	520	50	1140	60	15	22	30	120	20	30	60	M20x130		
862	540	50	1180	60	15	22	30	120	20	30	60	M20x130		
912	565	50	1230	60	15	22	30	120	20	30	60	M20x130		
962	595	50	1290	60	15	22	35	120	20	30	60	M20x130		



VIEW "A"~"A"

NPS MARK & INS.
THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	6"	8"	10"	12"	14"	16"	18"
			06	08	10	12	14	16	18
			A (FOR EACH PIPE SIZE)						
1	25-50	T=50	274	324	378	430	462	512	562
2	51-100	T=100	374	430	478	530	562	612	662
3	101-150	T=150	474	530	578	630	662	712	762
4	151-200	T=200	574	630	678	730	762	812	862
5	201-250	T=250	-	730	778	830	862	912	962
6	251-300	T=300	-	-	-	-	-	-	-

INDICATION:

SK-03-□-□□□

(1) (2) (3)

1-TYPE MARK
2-NPS MARK
3-INSULATION THK. MARK

NOTE:

1- FOR DETAIL OF CRADLE SEE (G-04).

MATERIAL:

BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:

SIMPLE COLD CLAMP

6" ~ 18"

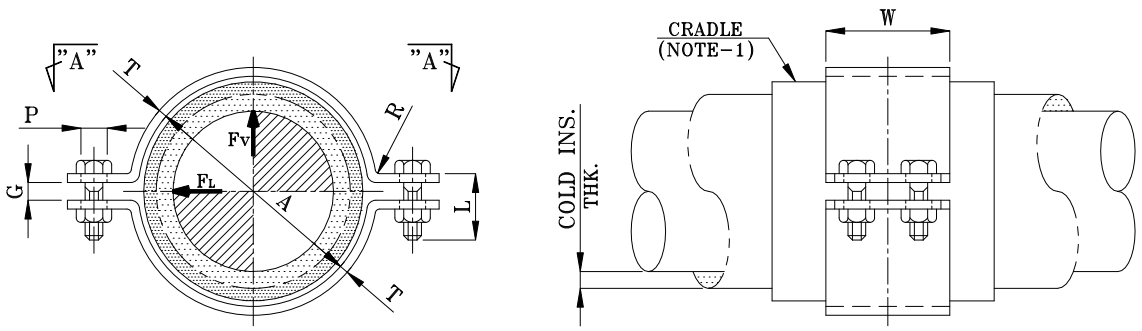
SK-03

SHEET 3 4

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 382 از 394

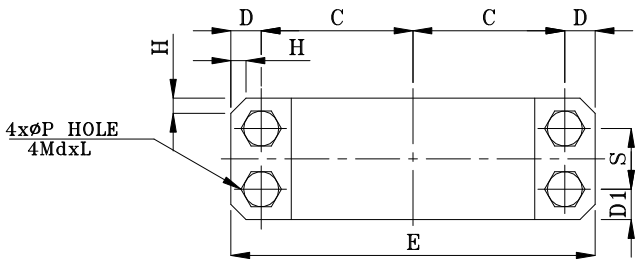
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



TYPE "D"

DIMENSION TABLE

CLAMP BODY												MACHINE BOLT MdxL	ALLOWABLE LOAD (kg)	
A	C	D	E	G	H	P	R	W	T	D1	S		FL	Fv
614	415	50	930	60	15	22	30	130	20	35	60	M20x130	650	3600
664	440	50	980	60	15	22	30	130	20	35	60	M20x130		
715	465	50	1030	60	15	22	30	130	20	35	60	M20x130		
765	495	50	1090	60	15	22	30	130	20	35	60	M20x130		
815	520	50	1140	60	15	22	30	130	20	35	60	M20x130		
865	540	60	1200	60	20	26	30	180	25	50	80	M24x145	800	5500
868	540	60	1200	60	20	26	30	180	25	50	80	M24x145		
915	565	60	1250	60	20	26	30	180	25	50	80	M24x145		
965	595	60	1310	60	20	26	35	180	25	50	80	M24x145		
968	595	60	1310	60	20	26	35	180	25	50	80	M24x145		
1015	620	60	1360	60	20	26	35	180	25	50	80	M24x145		
1065	645	60	1410	60	20	26	35	180	25	50	80	M24x145		
1068	645	60	1410	60	20	26	35	180	25	50	80	M24x145		
1115	670	60	1460	60	20	26	35	180	25	50	80	M24x145		
1165	700	60	1520	60	20	26	40	180	25	50	80	M24x145		2900
1168	700	60	1520	60	20	26	40	180	25	50	80	M24x145		
1215	725	60	1570	60	20	26	40	180	25	50	80	M24x145		
1265	750	60	1620	60	20	26	40	180	25	50	80	M24x145		
1268	750	60	1620	60	20	26	40	180	25	50	80	M24x145		
1316	775	60	1670	60	20	26	40	180	25	50	80	M24x145		
1368	800	60	1720	60	20	26	40	180	25	50	80	M24x145		



VIEW "A"~"A"

NPS MARK & INS.
THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS.THK THK.	CRADLE THK.	20"	22"	24"	26"	28"	30"
			20	22	24	26	28	30
			A (FOR EACH PIPE SIZE)					
1	25-50	T=50	614	664	715	765	815	868
2	51-100	T=100	715	765	815	865	915	968
3	101-150	T=150	815	865	915	965	1015	1068
4	151-200	T=200	915	965	1015	1065	1115	1168
5	201-250	T=250	1015	1065	1115	1165	1215	1268
6	251-300	T=300	1115	1165	1215	1265	1316	1368

INDICATION:

SK-03-□-□□□
(1) (2) (3)

1-TYPE MARK
2-NPS MARK
3-INSULATION THK. MARK

NOTE:

1- FOR DETAIL OF CRADLE SEE (G-04).

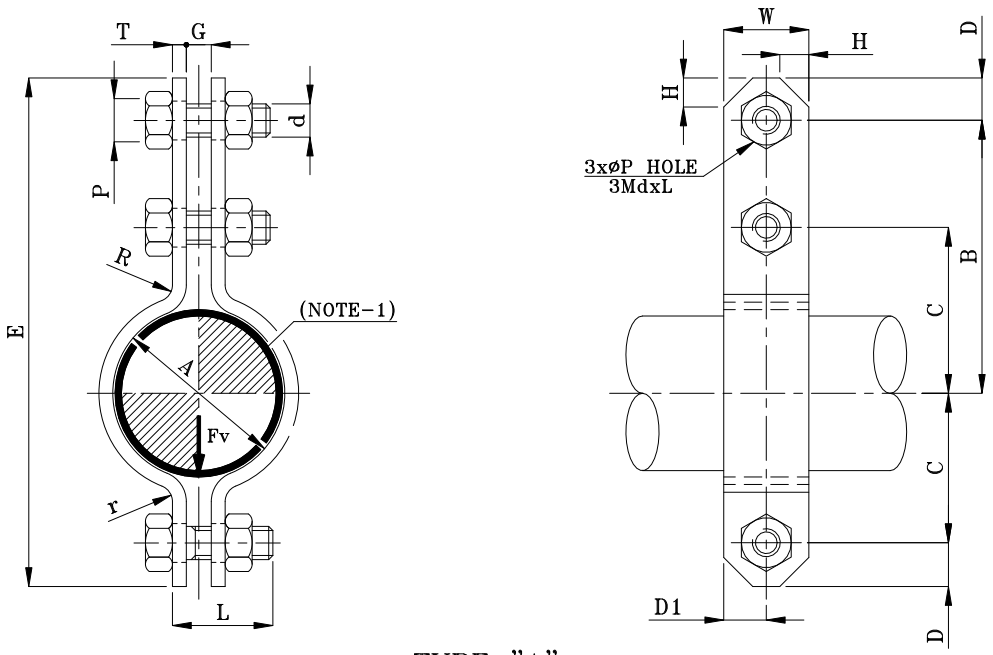
MATERIAL:

BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
SIMPLE COLD CLAMP 20" ~ 30"	4
SK-03	4

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 383 از 394
	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	



TYPE "A"

DIMENSION TABLE

CLAMP BODY												MACHINE BOLT MdxL	ALLOWABLE LOAD (kg)
A	B	C	D	E	G	H	P	R	W	T	D1		Fv
136	175	105	25	330	32	5	14	10	40	5	20	M12x65	300
163	190	120	25	360	32	5	14	10	40	5	20	M12x65	
224	220	150	25	420	32	5	14	10	40	5	20	M12x65	
236	225	155	25	430	32	5	14	10	40	5	20	M12x65	
251	230	160	25	440	32	5	14	10	40	5	20	M12x65	
324	290	220	30	570	38	10	16	15	50	8	25	M14x80	140
336	300	230	30	590	38	10	16	15	50	8	25	M14x80	
351	340	270	30	670	45	10	16	20	50	8	25	M14x90	
451	380	310	30	750	55	10	16	20	50	8	25	M14x90	

NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	1/2"	3/4"	1"	1 1/2"
			0A	0B	01	1A
			A (FOR EACH PIPE SIZE)			
1	25-50	T=50	136	136	136	163
2	51-100	T=100	224	236	236	251
3	101-150	T=150	324	336	336	351
4	151-200	T=200	-	-	-	451
5	201-250	T=250	-	-	-	-
6	251-300	T=300	-	-	-	-

INDICATION:

SK-04-□-□□□
(1) (2) (3)

1-TYPE MARK
2-NPS MARK
3-INSULATION THK. MARK

NOTE:

1- FOR DETAIL OF CRADLE SEE (G-04).

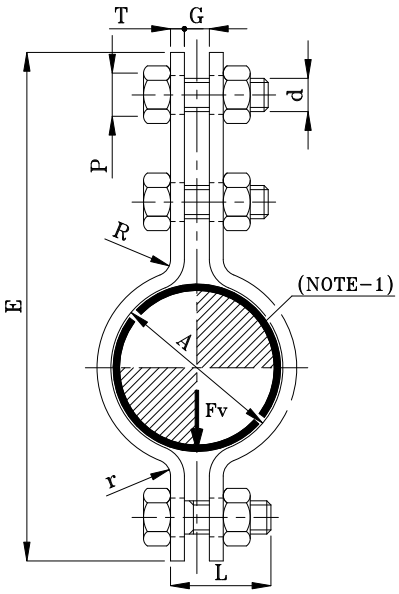
MATERIAL:

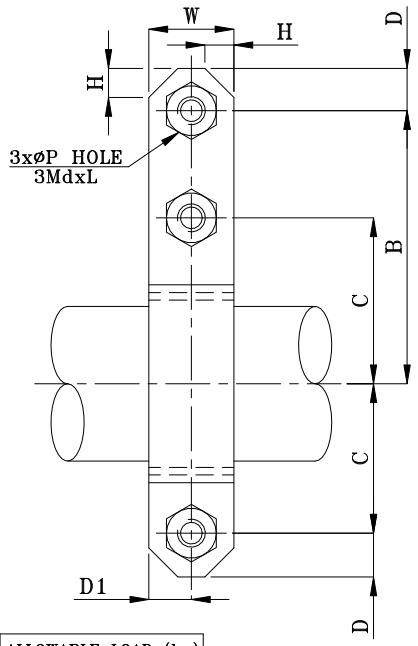
BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
HANGING COLD CLAMP 1/2" ~ 1 1/2"	1
SK-04	5

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 384 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02





TYPE "B"

DIMENSION TABLE

CLAMP BODY												MACHINE BOLT MdxL	ALLOWABLE LOAD (kg)
A	B	C	D	E	G	H	P	R	W	T	D1		Fv
163	230	120	30	410	32	10	16	10	50	10	25	M14x80	450
192	240	130	30	430	32	10	16	10	50	10	25	M14x80	
224	260	150	30	470	32	10	16	10	50	10	25	M14x80	
251	270	160	35	500	32	10	22	10	50	10	25	M20x90	
274	300	190	35	560	38	10	22	15	80	10	40	M20x90	
279	305	195	35	570	38	10	22	15	80	10	40	M20x90	
292	310	200	35	580	38	10	22	15	80	10	40	M20x90	
324	330	220	35	620	38	10	22	15	80	10	40	M20x90	
351	360	270	35	720	45	10	22	20	80	12	40	M20x100	500
374	370	260	35	700	45	10	22	20	80	12	40	M20x100	
392	380	270	35	720	45	10	22	20	80	12	40	M20x100	
430	400	290	35	760	45	10	22	20	80	12	40	M20x100	
451	420	310	40	810	55	10	22	25	80	12	40	M20x110	380
474	430	320	40	830	55	10	22	25	80	12	40	M20x110	
492	440	330	40	850	55	10	22	25	80	12	40	M20x110	
530	460	350	40	890	55	10	22	25	80	12	40	M20x110	
548	470	360	40	910	55	10	22	25	80	12	40	M20x110	

NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	2"	2 1/2"	3"	4"	5"
			02	2a	03	04	05
			A (FOR EACH PIPE SIZE)				
1	25-50	T=50	163	192	192	224	251
2	51-100	T=100	274	279	292	324	351
3	101-150	T=150	374	392	392	430	451
4	151-200	T=200	474	492	492	530	548
5	201-250	T=250	-	-	-	-	-
6	251-300	T=300	-	-	-	-	-

INDICATION:

SK-04-□-□□□

(1) (2) (3)

1-TYPE MARK
2-NPS MARK
3-INSULATION THK. MARK

NOTE:

1- FOR DETAIL OF CRADLE SEE (G-04).

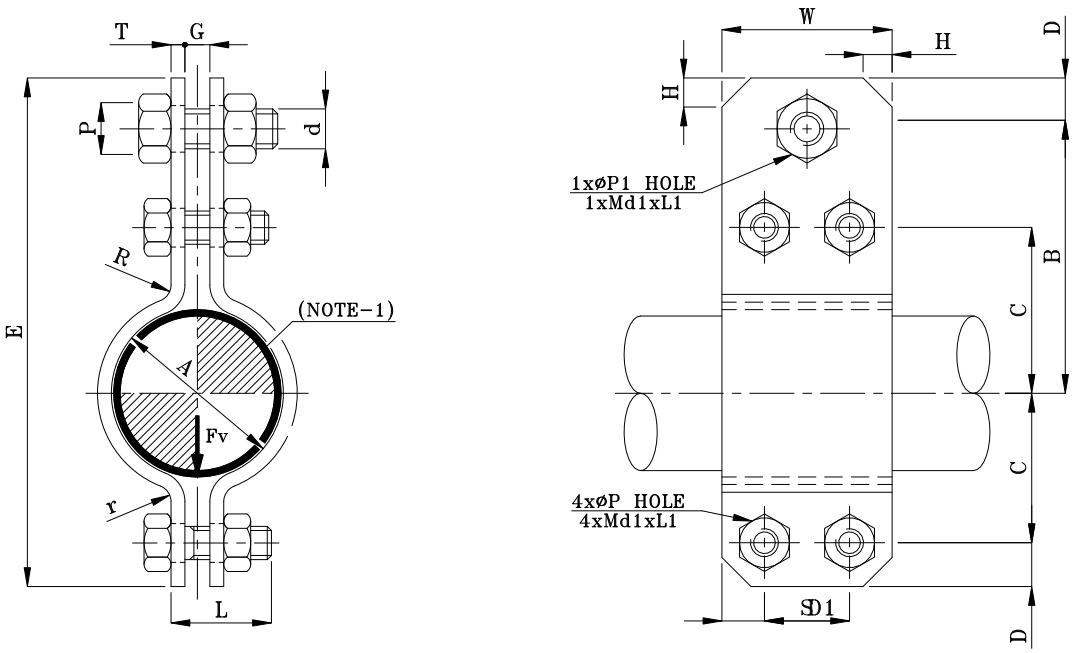
MATERIAL:

BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
HANGING COLD CLAMP 2" ~ 5"	2
SK-04	5

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 385 از 394
	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	



TYPE "C"

INDICATION:

SK-04-□-□□□

(1) (2) (3)

1-TYPE MARK
2-NPS MARK
3-INSULATION THK. MARK

NOTE:

1- FOR DETAIL OF CRADLE SEE (G-04).

MATERIAL:

BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
HANGING COLD CLAMP 6" ~ 18"	3
SK-04	5

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

STANDARD PIPE SUPPORT DRAWINGS

شماره پیمان: 053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 386 از 394
	BK	GCS	PEDCO	120	PI	DW	0001	D02	

TYPE "C"

DIMENSION TABLE

A	CLAMP BODY												MACHINE BOLT MdxL	MACHINE BOLT Md1xL1	ALLOWABLE LOAD (kg) Fv
	B	C	D	E	G	H	P	R	W	T	D1	S			
274	360	190	40	630	38	15	18	15	100	15	25	50	M16x105	M24x130	960
324	390	220	40	690	38	10	18	15	100	15	25	50	M16x105	M24x130	
374	430	260	40	770	45	10	18	20	100	15	25	50	M16x105	M24x130	
392	440	270	40	790	45	10	18	20	100	15	25	50	M16x105	M24x130	
430	460	290	40	830	45	10	18	20	100	15	25	50	M16x105	M24x130	
474	490	320	40	890	55	10	18	25	100	15	25	50	M16x115	M24x140	740
492	500	330	40	910	55	10	18	25	100	15	25	50	M16x115	M24x140	
530	520	350	40	950	55	10	18	25	100	15	25	50	M16x115	M24x140	
578	560	390	40	1030	60	10	18	30	100	15	25	50	M16x115	M24x140	
630	585	415	50	1100	60	15	22	30	120	20	30	60	M20x130	M30x150	1070
678	610	440	50	1150	60	15	22	30	120	20	30	60	M20x130	M30x150	
730	635	465	50	1200	60	15	22	30	120	20	30	60	M20x130	M30x150	
778	635	495	50	1260	60	15	22	30	120	20	30	60	M20x130	M30x150	
830	690	520	50	1310	60	15	22	30	120	20	30	60	M20x130	M30x150	
870	710	540	50	1350	60	15	22	30	120	20	30	60	M20x130	M30x150	
920	735	565	50	1400	60	15	22	30	120	20	30	60	M20x130	M30x150	
970	765	595	50	1460	60	15	22	35	120	20	30	60	M20x130	M30x150	

NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	6"	8"	10"	12"	14"	16"	18"
			06	08	10	12	14	16	18
			A (FOR EACH PIPE SIZE)						
1	25-50	T=50	274	324	392	430	474	530	578
2	51-100	T=100	374	430	492	530	578	630	678
3	101-150	T=150	474	530	578	630	678	730	778
4	151-200	T=200	578	630	678	730	778	830	870
5	201-250	T=250	-	730	778	830	870	920	970
6	251-300	T=300	-	-	-	-	-	-	-

INDICATION:

SK-04-□-□□□

(1) (2) (3)

1-TYPE MARK
2-NPS MARK
3-INSULATION THK. MARK

NOTE:

1- FOR DETAIL OF CRADLE SEE (G-04).

MATERIAL:

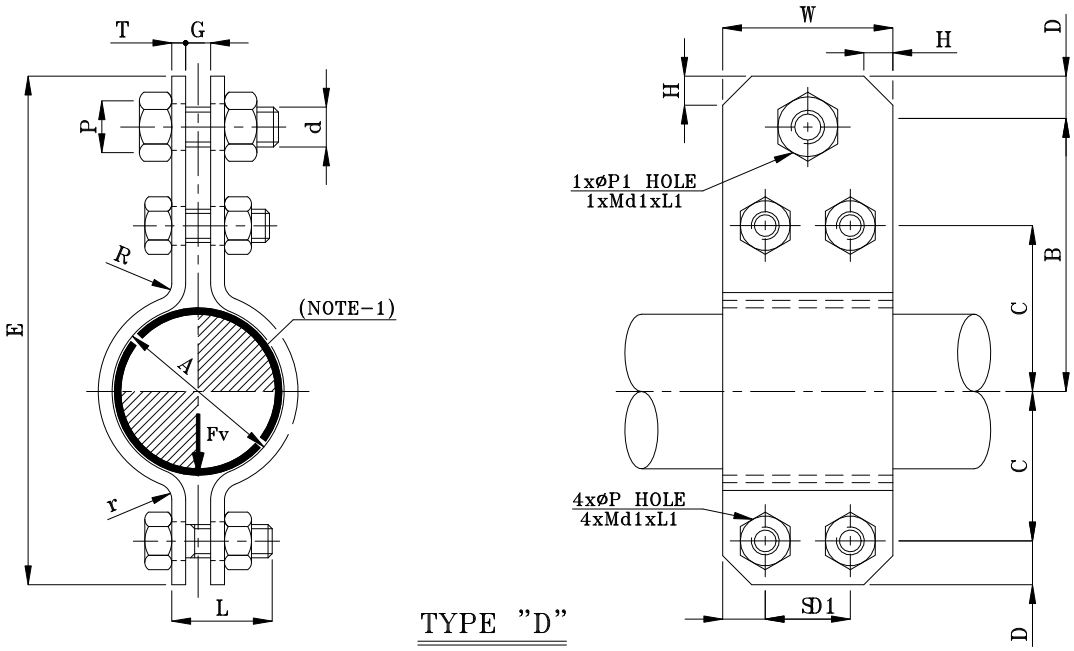
BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
HANGING COLD CLAMP 6" ~ 18"	4
SK-04	5

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 387 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



TYPE "D"

DIMENSION TABLE

CLAMP BODY													MACHINE BOLT MdxL	MACHINE BOLT Md1xL1	ALLOWABLE LOAD (kg)
A	B	C	D	E	G	H	P	R	W	T	D1	S			Fv
630	615	415	50	1130	60	15	22	30	130	20	35	60	M20x130	M30x150	1100
678	640	440	50	1180	60	15	22	30	130	20	35	60	M20x130	M30x150	
730	665	465	50	1230	60	15	22	30	130	20	35	60	M20x130	M30x150	
778	695	495	50	1290	60	15	22	30	130	20	35	60	M20x130	M30x150	
830	720	520	50	1340	60	15	22	30	130	20	35	60	M20x130	M30x150	
870	740	540	60	1400	60	20	26	30	180	25	50	80	M24x145	M33x170	1500
920	765	565	60	1450	60	20	26	30	180	25	50	80	M24x145	M33x170	
970	795	595	60	1510	60	20	26	35	180	25	50	80	M24x145	M33x170	
1020	860	620	60	1600	60	20	26	35	180	25	50	80	M24x145	M33x170	
1070	885	645	60	1650	60	20	26	35	180	25	50	80	M24x145	M33x170	
1120	910	670	60	1700	60	20	26	35	180	25	50	80	M24x145	M33x170	
1170	940	700	60	1760	60	20	26	40	180	25	50	80	M24x145	M33x170	
1220	965	725	60	1810	60	20	26	40	180	25	50	80	M24x145	M33x170	
1270	990	750	60	1860	60	20	26	40	180	25	50	80	M24x145	M33x170	
1320	1015	775	60	1910	60	20	26	40	180	25	50	80	M24x145	M33x170	
1370	1040	800	60	1960	60	20	26	40	180	25	50	80	M24x145	M33x170	

NPS MARK & INS. THK. MARK:(2)&(3)

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	20"	22"	24"	26"	28"	30"
			20	22	24	26	28	30
			A (FOR EACH PIPE SIZE)					
1	25-50	T=50	630	678	730	778	830	870
2	51-100	T=100	730	778	830	870	920	970
3	101-150	T=150	830	870	920	970	1020	1070
4	151-200	T=200	920	970	1020	1070	1120	1170
5	201-250	T=250	1020	1070	1120	1170	1220	1270
6	251-300	T=300	1120	1170	1220	1270	1320	1370

INDICATION:

SK-04-□-□□□
(1) (2) (3)

1-TYPE MARK
2-NPS MARK
3-INSULATION THK. MARK

NOTE:

1- FOR DETAIL OF CRADLE SEE (G-04).

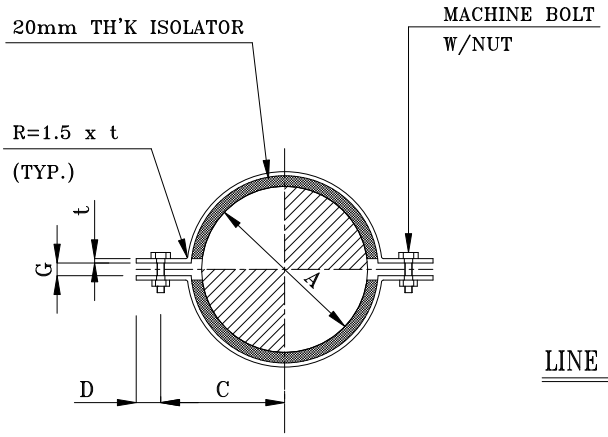
MATERIAL:

BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:	SHEET
HANGING COLD CLAMP 20" ~ 30"	5
SK-04	5

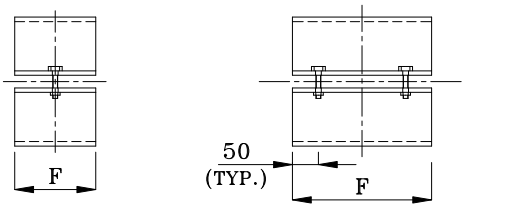
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 388 از 394
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D02



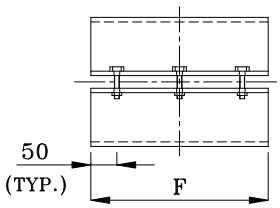
A : PIPE OD

C : A/2 + J + 20



LINE SIZE 2" ~ 18"

LINE SIZE 20" ~ 38"



LINE SIZE 40" ~ ABOVE

SIZE MARK	PIPE SIZE	J	D	F	G	t	BOLT SIZE
02	2	31	20	80	16	6	M12
2A	2 1/2	35	20	90	20	6	M16
03	3	35	20	90	20	6	M16
3A	3 1/2	49	25	120	24	9	M20
04	4	49	25	120	24	9	M20
06	6	49	25	140	24	9	M20
08	8	49	25	200	24	9	M20
10	10	60	30	200	30	12	M24
12	12	60	30	250	30	12	M24
14	14	60	30	250	30	12	M24
16	16	78	35	300	36	16	M30
18	18	78	35	300	36	16	M30

SIZE MARK	PIPE SIZE	J	D	F	G	t	BOLT SIZE
20	20	94	40	350	42	19	M36
24	24	94	40	380	42	19	M36
26	26	107	50	380	48	22	M42
28	28	107	50	430	48	22	M42
30	30	107	50	430	48	22	M42
32	32	107	50	480	48	22	M42
34	34	139	65	480	56	25	M42
36	36	139	65	530	56	25	M42
40	40	139	65	640	56	25	M42
44	44	139	65	640	56	25	M42
48	48	139	65	690	56	25	M42

INDICATION:

SK-05-□ (1)

1-SIZE MARK

NOTE:

1. FOR UN-INSULATED COLD LINES USE CLAMED SHOE WITH SK-05.
2. MATERIAL
   CLAMP : A283 GR.C
   ISOLATOR : RUBBER ELASTOMER (WORKING TEMP. RANGE: -70°C ~ 350°C & -130°C UNDER 15 MINUTE)
3. FINISH : PROTECTIVE COATINGS SHALL BE DONE AS PER "PAINT SPECIFICATION".
4. ALL DIMENSIONS ARE IN mm.

SUPPORT DESCRIPTION:	SHEET
UN-INSULATED COLD LINES CLAMP 2" ~ 48"	1
SK-05	1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 389 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

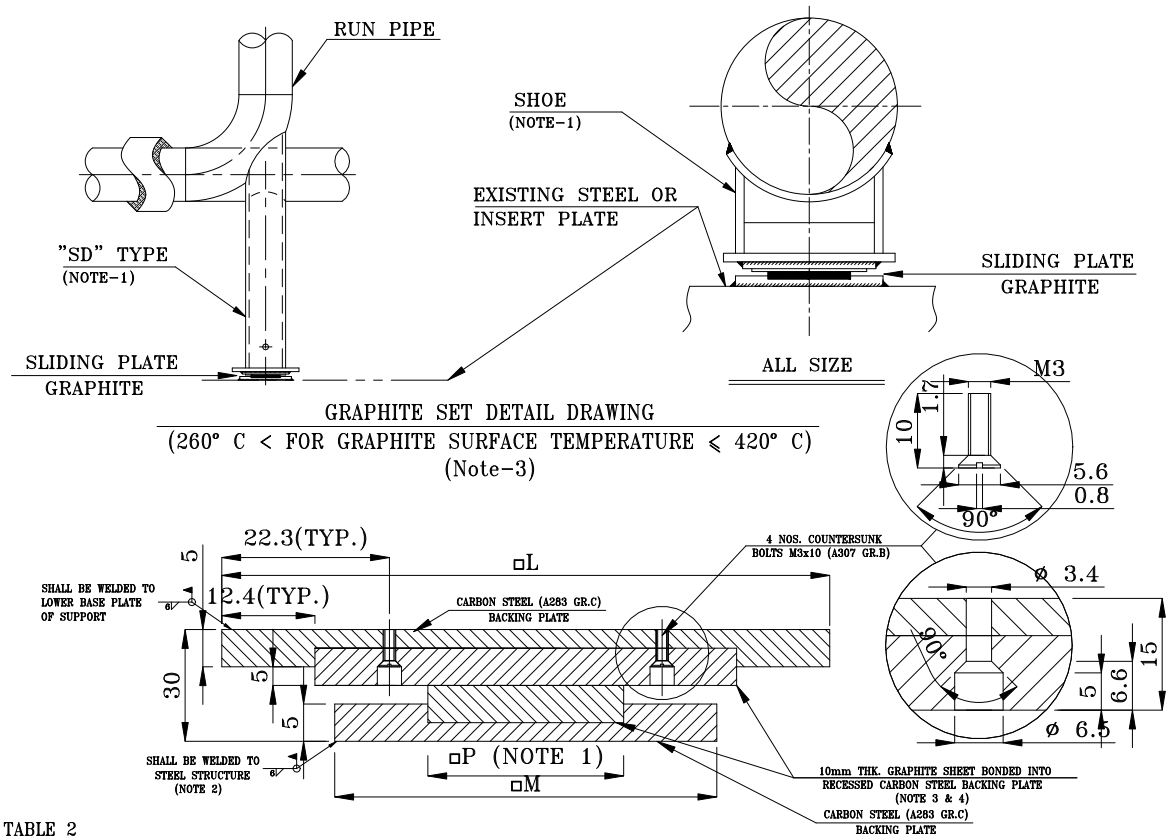


TABLE 2

SIZE	RECOMMENDED LOADING (KN)	M mm	P mm	L mm (NOTE 5)			
				A	B	C	D
1	UP TO 19	90	40	130	150	180	100+2xMOVEMENT
2	19-55	120	70	160	180	210	130+2xMOVEMENT
3	55-170	170	120	210	230	260	180+2xMOVEMENT
4	170-300	210	160	250	270	300	220+2xMOVEMENT
5	300-480	250	200	290	310	340	260+2xMOVEMENT
6	480-650	300	250	340	350	390	310+2xMOVEMENT

NOTE 1: THE SHOULDERS OF THE RECESS PLATE SHALL BE SHARP AND SQUARE TO RESTRICT THE FLOW OF GRAPHITE.

NOTE 2: FIRST SIDE SHALL NOT BE FULLY WELDED BEFORE REMAINING THREE SIDES BEING TACK WELDED.
COVERING GRAPHITE DURING WELDING IS STRONGLY RECOMMENDED.

NOTE 3: THE GRAPHITE SURFACE SHALL BE MAITAINED CLEAN AND FREE FROM CREVICES, GRIT, DIRT AND GREASE.

NOTE 4: THE GRAPHITE SPECIFICATION SHALL BE SENT BY VENDOR FOR PURCHASER'S REVIEW AND APPROVAL.

NOTE 5: A: FOR MAXIMUM ALLOWABLE MOVEMENT = 15 mm.
B: FOR MAXIMUM ALLOWABLE MOVEMENT = 25 mm.
C: FOR MAXIMUM ALLOWABLE MOVEMENT = 40 mm.
D: FOR MOVEMENT ABOVE 40 mm.

INDICATION:

SL-01- □□ - □ - □ - □□□ - □
(1) (2) (3) (4)

1-ZONE NO.
2-SIZE NO.
3-"L" DESIGNATION.
4-SERIAL NO.

NOTE:

1- SEPARATEG TAG. IS REQUIRED FOR SHOE OR "SD".
2- BOTTOM PLATE OF SHOE/"SD TYPE" SHALL COVER THE UPPER PLATE OF SLIDING PLATE. THIS ITEM SHALL BE CHECKED DURING SUPPORT DESIGN.
3- GRAPHITE SLIDING PLATES ONLY WILL BE USED FOR HIGH TEMPERATURE LINES AND SENIOR STRESS ENGINEER APPROVAL IS REQUIRED.

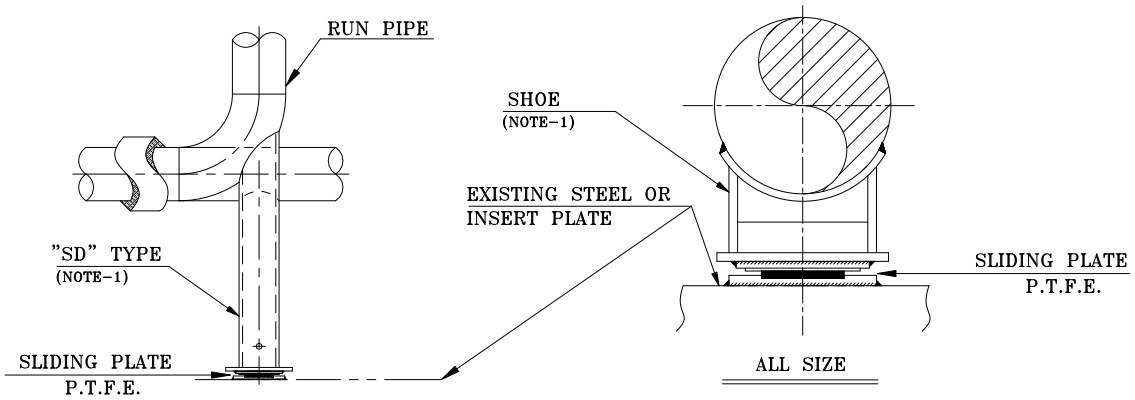
SUPPORT DESCRIPTION:	SHEET
SLIDING PLATE (GRAPHITE WITH SHOE/"SD")	1
SL-01	1

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



PTFE SET DETAIL DRAWING
(FOR PTFE SURFACE TEMPERATURE ⩽ 260° C)

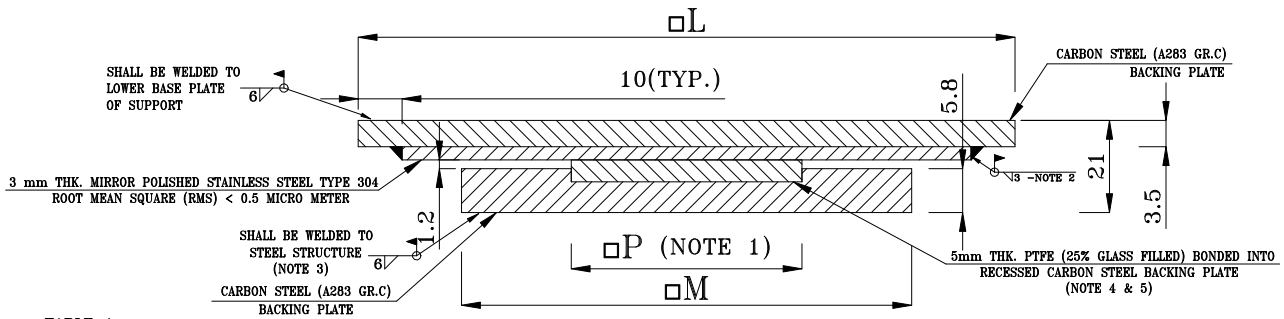


TABLE 1

SIZE	RECOMMENDED LOADING (KN)	M mm	P mm	L mm (NOTE 6)			
				A	B	C	D
1	UP TO 5	90	40	100	120	150	70+2xMOVEMENT
2	5-16	120	70	130	150	180	100+2xMOVEMENT
3	16-45	170	120	180	200	230	150+2xMOVEMENT
4	45-80	210	160	220	240	270	190+2xMOVEMENT
5	80-130	250	200	260	280	310	230+2xMOVEMENT
6	130-200	300	250	310	330	360	280+2xMOVEMENT
7	200-400	400	350	410	430	460	380+2xMOVEMENT
8	400-650	500	450	510	530	560	480+2xMOVEMENT

NOTE 6: A: FOR MAXIMUM ALLOWABLE MOVEMENT = 15 mm.
B: FOR MAXIMUM ALLOWABLE MOVEMENT = 25 mm.
C: FOR MAXIMUM ALLOWABLE MOVEMENT = 40 mm.
D: FOR MOVEMENT ABOVE 40 mm.

NOTE 1: THE SHOULDERS OF THE RECESS PLATE SHALL BE SHARP AND SQUARE TO RESTRICT THE FLOW OF PTFE.

NOTE 2: TIG STITCH WELDING WITH 25 mm LENGTH AT CENTER OF EACH SIDE OF THE S.S. PLATE. THE WELD SHALL NOT BE PROUD OF THE S.S. PLATE.

NOTE 3: FIRST SIDE SHALL NOT BE FULLY WELDED BEFORE REMAINING THREE SIDES BEING TACK WELDED.
USING WETTED CLOTH FOR COOLING AND COVERING PTFE DURING WELDING IS STRONGLY RECOMMENDED.

NOTE 4: THE PTFE SURFACE SHALL BE MAITAINED CLEAN AND FREE FROM CREVICES, GRIT, DIRT AND GREASE
AND SHALL NOT BE EXPOSED TO DIRECT RAYS OF SUNLIGHT.

NOTE 5: THE PTFE SPECIFICATION SHALL BE SENT BY VENDOR FOR PURCHASER'S REVIEW AND APPROVAL.

INDICATION:

SL-02- □□ (1) - □ (2) - □ (3) - □□□ (4)

1-ZONE NO.
2-SIZE NO.
3-"L" DESIGNATION.
4-SERIAL NO.

NOTE:

1- SEPARATEG TAG. IS REQUIRED FOR SHOE OR "SD".

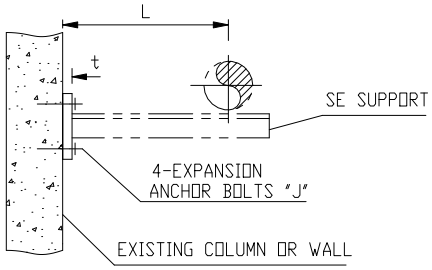
2- BOTTOM PLATE OF SHOE/"SD TYPE" SHALL COVER THE UPPER PLATE OF SLIDING PLATE. THIS ITEM SHALL BE CHECKED DURING SUPPORT DESIGN.

SUPPORT DESCRIPTION:	SHEET
SLIDING PLATE (PTFE WITH SHOE/"SD")	1
SL-02	1

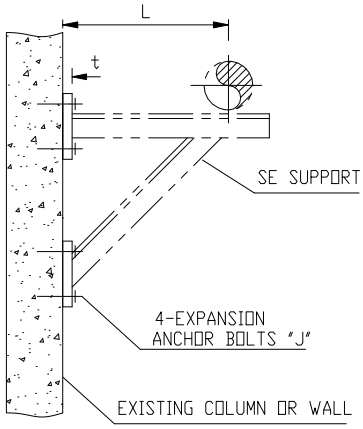
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 391 از 394

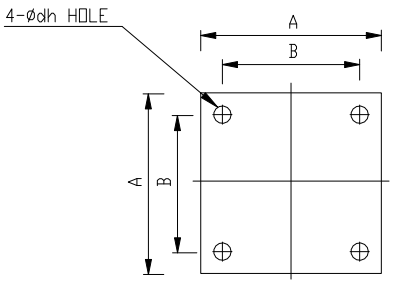
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02



TYPE A



TYPE B



BASE PLATE DETAIL

UNIT (mm)

TYPE MARK	SIZE MARK	BASE PLATE A	B	t	Ødh	J (dxL)	L < 500 W (kg)	500 < L ≤ 1000 W (kg)	1000 < L ≤ 1500 W (kg)
A	01	180	120	6	15	1/2" x 110	280	-	-
	02	260	180	9	18	5/8" x 125	560	340	-
B	01	180	120	6	15	1/2" x 110	-	400	260
	02	260	180	9	18	5/8" x 125	1700	900	500
	03	300	230	9	18	5/8" x 125	2800	1500	1000
	04	300	230	12	18	5/8" x 125	-	5100	3500

NOTE

1- THE EXACT LOCATIONS OF THE EXPANSION ANCHORS FOR PIPE SUPPORTS WILL BE PREDETERMINED BY DEVICES SUCH AS REBAR LOCATORS,etc TO AVOID ANY COINCIDENCES WITH REBARS IN THE CONCRETE COLUMN.

2- MIN. TENSILE STRENGTH OF BOLT (kg/cm^2), T_u =7381
FOR DETAIL OF EXPANSION ANCHOR BOLT SEE 'TABLE-SP1'

3- STRENGTH OF CONCRETE (kg/cm^2) = 210

INDICATION:

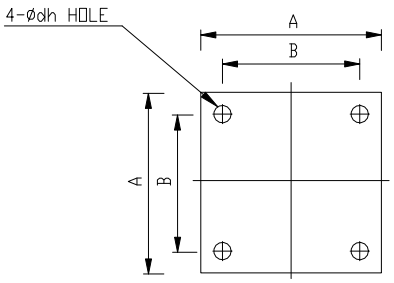
SP-01-□(1)-□□(2)

1-TYPE MARK
2-SIZE MARK

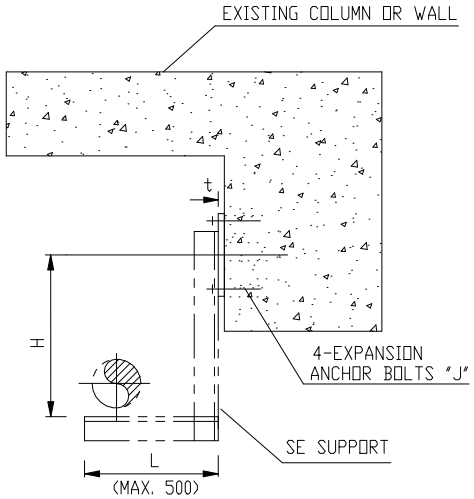
SUPPORT DESCRIPTION:	SHEET
BASE PLATE SP-01	1 4

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 392 از 394
	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D02	



BASE PLATE DETAIL



TYPE C

UNIT (mm)

TYPE MARK	SIZE MARK	BASE PLATE					H < 500	500 < H ≤ 1000	1000 < H ≤ 1500
		A	B	t	Ødh	J (dxL)	W (kg)	W (kg)	W (kg)
C	01	210	150	6	15	1/2" x 110	200	180	140

NOTE

1- THE EXACT LOCATIONS OF THE EXPANSION ANCHORS FOR PIPE SUPPORTS WILL BE PREDETERMINED BY DEVICES SUCH AS REBAR LOCATORS,etc TO AVOID ANY COINCIDENCES WITH REBARS IN THE CONCRETE COLUMN.

2- MIN. TENSILE STRENGTH OF BOLT (kg/cm²), T_u =7381
FOR DETAIL OF EXPANSION ANCHOR BOLT SEE "TABLE-SP1"

3- STRENGTH OF CONCRETE (kg/cm²) = 210

INDICATION:

SP-01-□-□□

(1) (2)

1-TYPE MARK
2-SIZE MARK

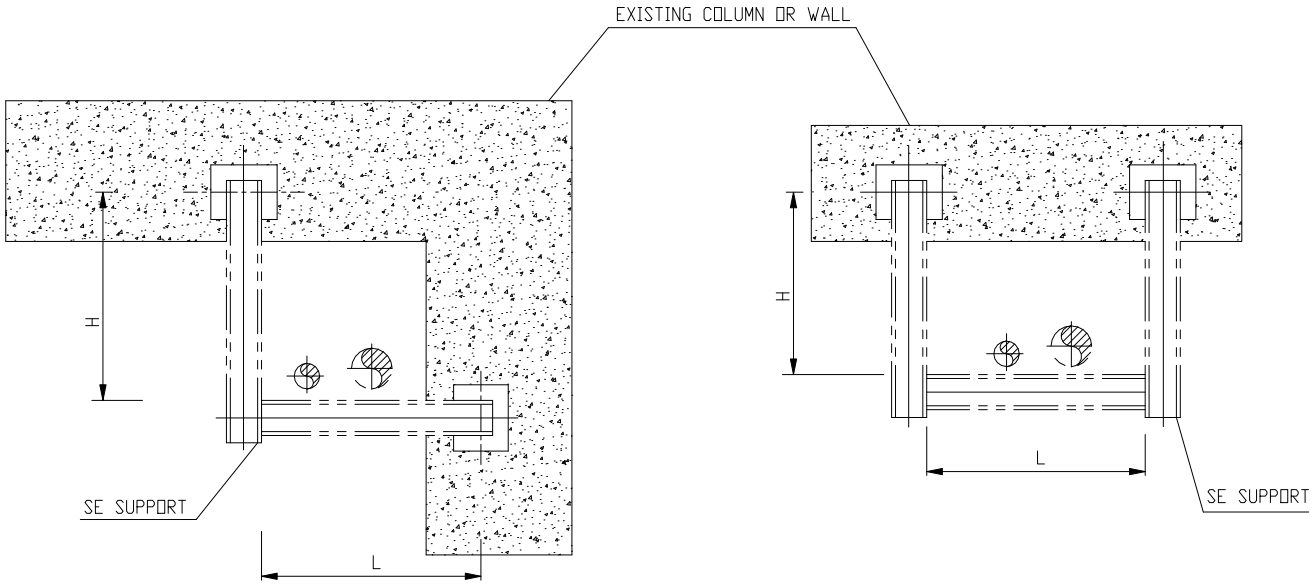
SUPPORT DESCRIPTION:	SHEET
BASE PLATE SP-01	2 4

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 393 از 394

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D02

053-073-9184



TYPE E

TYPE D

UNIT (mm)

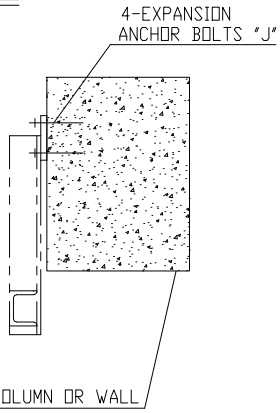
TYPE MARK	SIZE MARK	BASE PLATE A	B	t	Ødh	J (dxL)	H	L < 500 W (kg)	500 < L ≤ 1000 W (kg)	1000 < L ≤ 1500 W (kg)
D	01	180	120	6	15	1/2" x 110	1000	630	630	550
	02	180	120	6	15	1/2" x 110	1500	430	430	500
	03	260	180	9	18	5/8" x 125	1000	1300	1300	1200
	04	260	180	9	18	5/8" x 125	1500	850	830	770
	05	300	230	9	18	5/8" x 125	1000	2200	2100	2000
	06	300	230	9	18	5/8" x 125	1500	1500	1500	-
E	01	180	120	6	15	1/2" x 110	1000	1100	650	280
	02	180	120	6	15	1/2" x 110	1500	1080	590	250
	03	260	180	9	18	5/8" x 125	1000	2000	1300	1150
	04	260	180	9	18	5/8" x 125	1500	2000	1130	1000
	05	300	230	9	18	5/8" x 125	1000	-	2100	1830
	06	300	230	9	18	5/8" x 125	1500	-	1820	1450

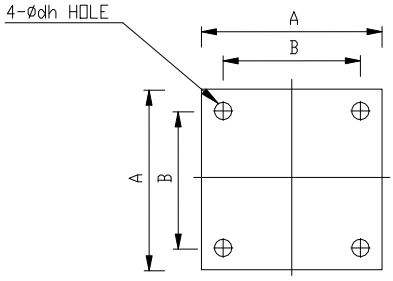
NOTE

1- THE EXACT LOCATIONS OF THE EXPANSION ANCHORS FOR PIPE SUPPORTS WILL BE PREDETERMINED BY DEVICES SUCH AS REBAR LOCATORS,etc TO AVOID ANY COINCIDENCES WITH REBARS IN THE CONCRETE COLUMN.

2- MIN. TENSILE STRENGTH OF BOLT (kg/cm²), T_u =7381
FOR DETAIL OF EXPANSION ANCHOR BOLT SEE "TABLE-SP1"

3- STRENGTH OF CONCRETE (kg/cm²) = 210





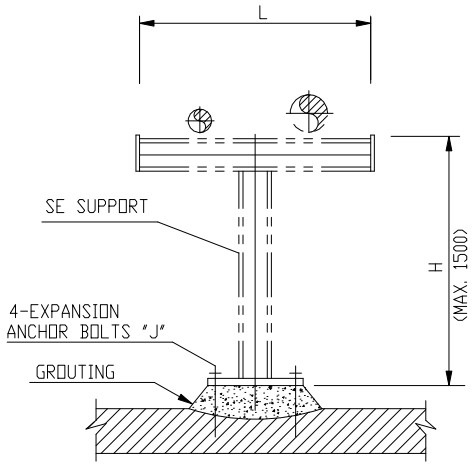
BASE PLATE DETAIL

INDICATION:

SP-01-□-□
(1) (2)

1-TYPE MARK
2-SIZE MARK

SUPPORT DESCRIPTION:	SHEET
BASE PLATE SP-01	3 4



TYPE F

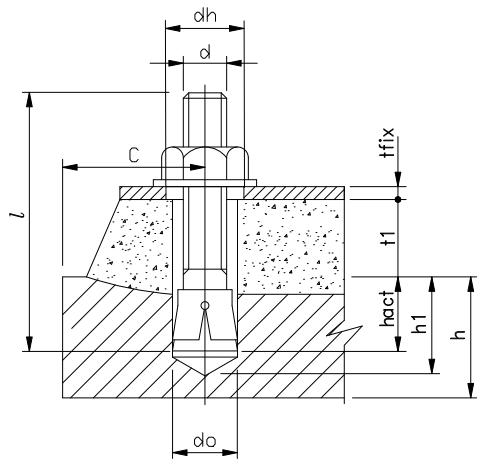
DESIGN APPLICATION OF ANCHOR BOLT

		Anchor Bolt Size (d)		
		3/8″	1/2″	5/8″
Shear stress area (mm^2)	A_b	58	84	157
Min. base concrete th'k (mm)	h_{min}	120	120	150
Min. edge distance (mm)	C_{min}	200	250	300
Min. depth of embedment (mm)	h_{nom}	49	64	84
Drill bit size (mm)	d_o	15	18	24
Plate hole size (mm)	d_h	17	20	26
Anchor Length (mm)	l	100	105	140
Actual Depth of Embedment (mm)	h_{act}	49	64	84
Depth of Drill(mm)	h_1	60	75	95
Min. Tensile Strength of Bolt(kg/cm^2)	T_u	7381	7381	7381
Strength of Concerete(kg/cm^2)		210	210	210
Base plate Th'k(mm)	t_{fix}	9	9	12
Grouting Th'k(mm)	t_1	30	30	30
Anchor Bolt Type		HILTI(HSL-3-G) or EQ.		

TABLE-SP1

UNIT (mm)

TYPE MARK	SIZE MARK	BASE PLATE A	B	t	Ødh	J	H	L ≤ 1000 W (kg)
F	01	180	120	6	12	3/8″	1000	180
	02	240	190	9	14	1/2″	1000	900
	03	300	250	9	14	1/2″	1000	900
	04	260	210	12	18	5/8″	1000	2300
	05	320	270	12	18	5/8″	1000	2500
	06	400	350	12	18	5/8″	1000	3000



INDICATION:

SP-01-□-□

(1) (2)

1-TYPE MARK
2-SIZE MARK

SUPPORT DESCRIPTION:

BASE PLATE

SP-01

SHEET 4