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 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00

طرح نگهداشت و افزایش تولید ۲۷ مخزن

Standard Pipe Support Drawings

نگهداشت و افزایش تولید میدان نفتی بینک

D00	JUNE.2022	IFI	F.Mosayebnejad	M.Fakharian	M.Mehrshad	
REV.	DATE	PURPOSE OF ISSUE/STATUS	PREPARED BY:	CHECKED BY:	APPROVED BY:	CLIENT APPROVAL
CLASS: 4		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 307

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

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شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 3 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
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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 307

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
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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

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.

4.0 GENERAL NOTES

4.1. All Bolts & Nuts shall be provided as hot deep Galvanized.

4.2. All machine bolts shall include suitable washer.

4.3. 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.

4.4. Supports for 2" and above piping shall be defined on piping drawing isometric.

4.5. All lines 1-1/2" and smaller shall be supported by field engineer.

4.6. Special supports shall be prepared where a standard support cannot be fitted.

4.7. Support points shall be adequately located and spaced for optimum load distribution and weight balance.

4.8. As general rule, non-metallic pipe shall be supported on clamped shoes with an isolator band of elastomer between external pipe diameter and clamp.

4.9. Reinforcement pads are considered as cut from pipe.

4.10. As general rule, for support of bare carbon steel pipe, size 24” and larger, shoe shall be installed.

4.11. As general rule, for support of bare carbon steel pipe, size 16” to 20”, pad shall be installed.

4.12. The design and selection of support shall ensure that bare lines do not rest on concrete.

4.13. Clamped supports shall be provided for galvanized, non-metallic, cold insulated and the piping which requires post weld heat treatment (PWHT).

4.14. If any welded attachment is required on either alloy or stress relieved piping, it must be installed in the fabricator's shop.

4.15. Insulated lines should not be supported directly on their insulation but should use cradles or pipe shoes. All insulated lines shall be elevated on cradle or pipe shoes to provide continuous insulation at support.

4.16. To prevent galvanic corrosion, carbon steel clamps on pipe of other metallic materials shall be separated from pipe by using synthetic rubber, glass fiber or other insulation material between clamp and pipe.

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

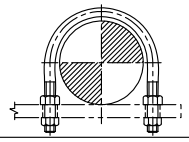
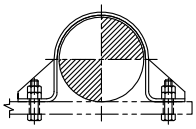
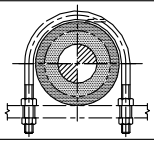
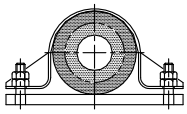
HIRGAN ENERGY

شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

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BK	GCS	PEDCO	120	PI	DW	0001	D00

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE	CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SA	01	U-BOLT	3/8" ~ 24"						
	02	STRAP	1/2" ~ 24"						
	03	U-BOLT (COLD INSULATION)	1/2" ~ 12"						
	04	TIGHT STRAP (COLD INSULATION)	1" ~ 16"						

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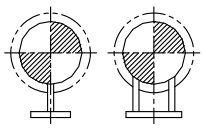
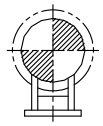
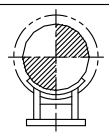
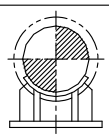
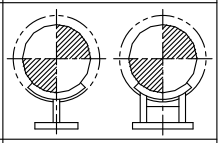
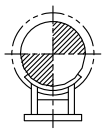
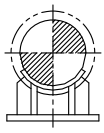
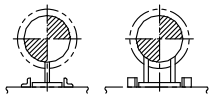
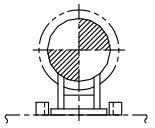
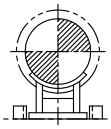
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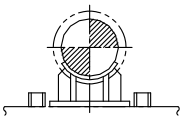
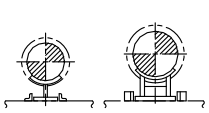
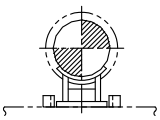
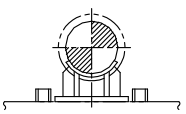
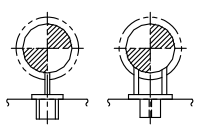
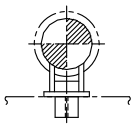
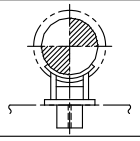
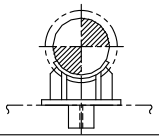
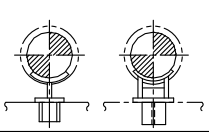
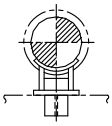
STANDARD PIPE SUPPORT INDEX

SHEET 1 OF 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: 9 از 307

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

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"	

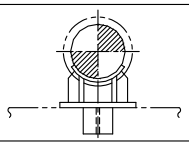
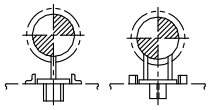
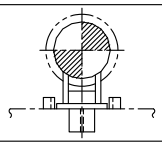
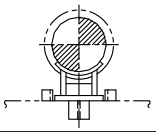
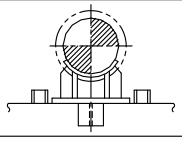
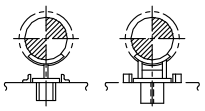
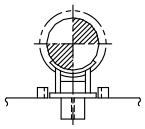
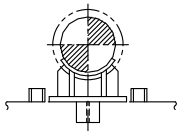
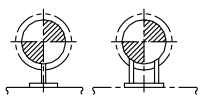
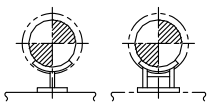
CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SB	03	GUIDE SHOE (CS-WITHOUT PWHT)	38" ~ 56"	
	04	GUIDE SHOE (CS-WITH PWHT, AS, SS)	1/2" ~ 14"	
			16" ~ 36"	
			38" ~ 56"	
	05	STOPPER SHOE (CS-WITHOUT PWHT)	1/2" ~ 14"	
			16" ~ 28"	
			30" ~ 36"	
			38" ~ 56"	
	06	STOPPER SHOE (CS-WITH PWHT, AS, SS)	1/2"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

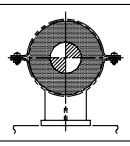
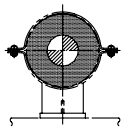
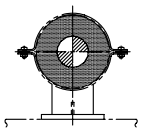
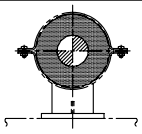
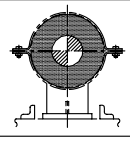
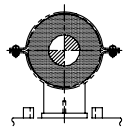
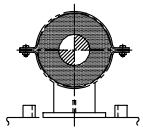
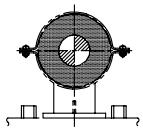
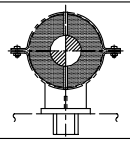
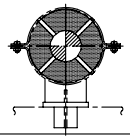
NOTE:

SUPPORT DESCRIPTION:

STANDARD PIPE SUPPORT INDEX

SHEET 1 OF 4

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"	

NOTE:

SUPPORT DESCRIPTION:

STANDARD PIPE SUPPORT INDEX

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"	

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SB	16	GUIDE CLAMPED SHOE	1/2" ~ 6"	
			8" ~ 20"	
			22" ~ 36"	
	17	STOPPER CLAMPED SHOE	1/2" ~ 6"	
			8" ~ 20"	
			22" ~ 36"	
	18	SEMI ANCHOR CLAMPED SHOE	1/2" ~ 6"	
			8" ~ 20"	
			22" ~ 36"	

C

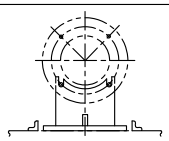
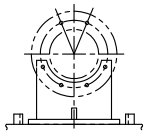
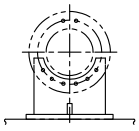
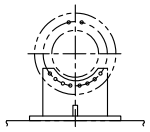
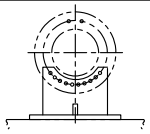
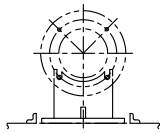
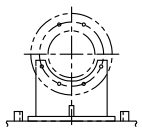
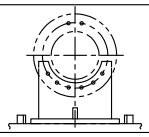
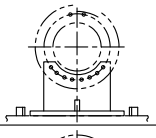
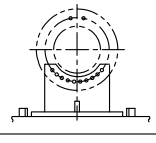
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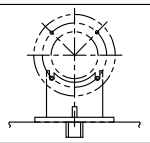
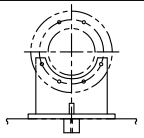
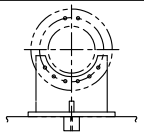
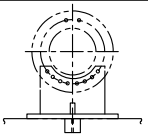
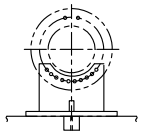
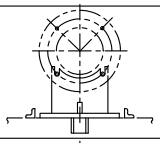
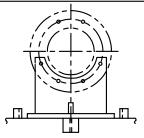
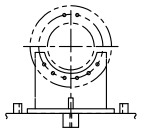
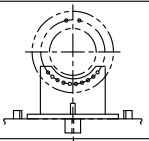
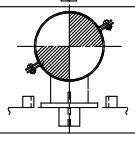
SUPPORT DESCRIPTION:

STANDARD PIPE SUPPORT INDEX

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: 12 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SB	19	SLIDE SHOE ON VALVE FOR GRE LINE	1" ~ 3"	
			4" ~ 14"	
			16" ~ 24"	
			26"	
			28" ~ 40"	
	20	GUIDE SHOE ON VALVE FOR GRE LINE	1" ~ 3"	
			4" ~ 14"	
			16" ~ 24"	
			26"	
			28" ~ 40"	

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SB	21	STOP SHOE ON VALVE FOR GRE LINE	1" ~ 3"	
			4" ~ 14"	
			16" ~ 24"	
			26"	
			28" ~ 40"	
	22	SEMI ANCHOR SHOE ON VALVE FOR GRE LINE	1" ~ 3"	
			4" ~ 14"	
			16" ~ 24"	
			28" ~ 40"	
	23	GUIDE & STOP CLAMPED SHOE WITHOUT LUG FOR HORIZONTAL OR VERTICAL PIPE 1/2"~24 (CS, LTCS, ALLOY STEEL STAINLESS STEEL AND GALVANIZED)		

NOTE:

SUPPORT DESCRIPTION:

STANDARD PIPE SUPPORT INDEX

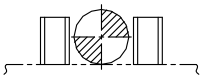
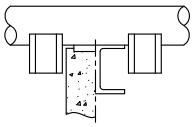
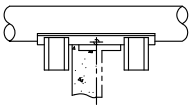
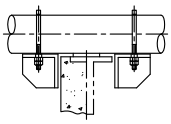
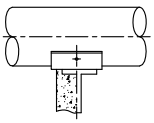
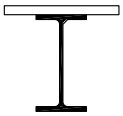
SHEET 4 OF 4

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	D00

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	BASE PLATE ON STEEL SHAPES							
	07	SHIM PLATE	2" ~ 24"						

NOTE:

SUPPORT DESCRIPTION:

STANDARD PIPE SUPPORT
INDEX

SHEET 1 OF 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: 14 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	

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" ~ 16"	
			18" ~ 24"	
	10	ADJUSTABLE GUIDE /LINE STOP/SEMI ANCHOR STOOL (CS-WITH PWHT,AS,SS)	2" ~ 6"	
			8" ~ 16"	
			18" ~ 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"	

NOTE:

SUPPORT DESCRIPTION:

STANDARD PIPE SUPPORT INDEX

SHEET 1 OF 2

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

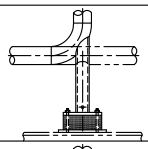
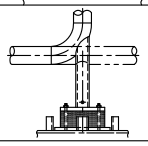
HIRGAN ENERGY

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	D00

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"						

NOTE:

SUPPORT DESCRIPTION:

STANDARD PIPE SUPPORT INDEX

SHEET 2 OF 2

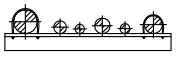
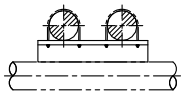
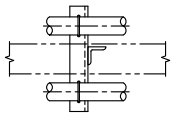
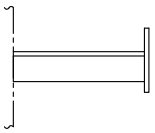
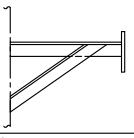
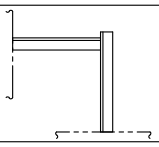
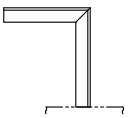
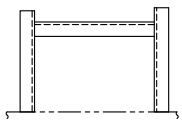
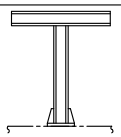
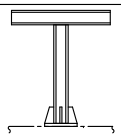
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

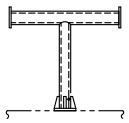
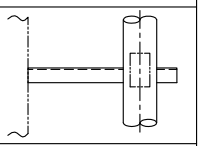
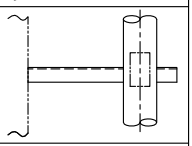
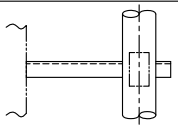
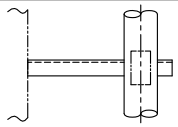
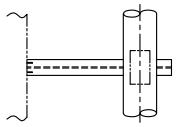
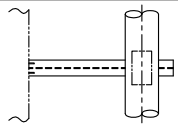
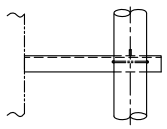
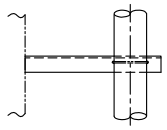
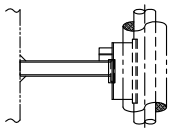
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

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CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SE	01	ANGLE SUPPORT	1/2" ~ 6"	
	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 STRUCTURE HORIZONTAL RUN PIPE (TYPE "A")	-	
		BRACKET ON STRUCTURE HORIZONTAL RUN PIPE (TYPE "B")	-	
		BRACKET ON STRUCTURE HORIZONTAL RUN PIPE (TYPE "C")	-	
		BRACKET ON STRUCTURE HORIZONTAL RUN PIPE (TYPE "D")	-	
		BRACKET ON STRUCTURE HORIZONTAL RUN PIPE (TYPE "E")	-	
		BRACKET ON STRUCTURE HORIZONTAL RUN PIPE (TYPE "F")	-	
	11	BRACKET ON STRUCTURE U-BOLT TYPE SEMI ANCHOR	1/2" ~ 2"	
	12	BRACKET ON STRUCTURE U-BOLT TYPE DOUBLE GUIDE	1/2" ~ 2"	
	13	BRACKET ON STRUCTURE SHOE TYPE SEMI ANCHOR	2" ~ 6"	

NOTE:

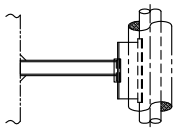
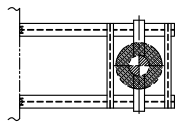
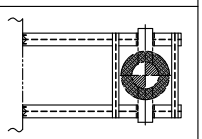
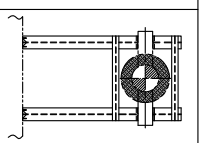
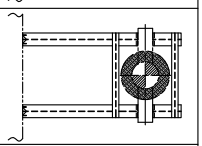
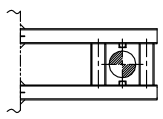
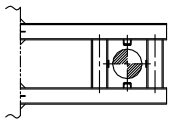
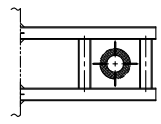
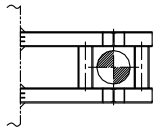
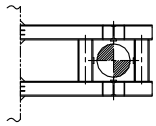
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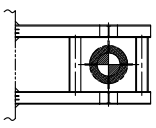
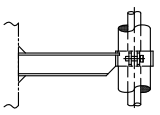
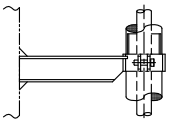
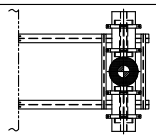
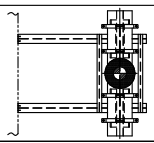
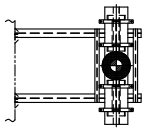
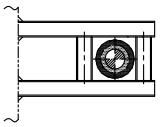
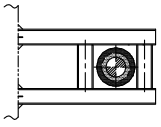
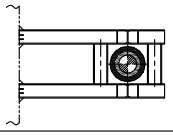
STANDARD PIPE SUPPORT INDEX

SHEET 1 OF 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: 17 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SE	14	BRACKET ON EQUIPMENT SHOE TYPE DOUBLE GUIDE	2" ~ 6"	
	15	BRACKET ON EQUIPMENT REST	8" ~ 12"	
			14" ~ 24"	
			26" ~ 42"	
			44" ~ 56"	
	16	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"	

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SE	16	BRACKET ON EQUIPMENT DOUBLE GUIDE (TYPE C CS,AS,SS)	14" ~ 24"	
	17	BRACKET ON EQUIPMENT CLAMP TYPE,DOUBLE GUIDE (COLD INSULATION)	2" ~ 6"	
	18	BRACKET ON EQUIPMENT CLAMP TYPE, SEMI ANCHOR (COLD INSULATION)	2" ~ 6"	
	19	BRACKET ON EQUIPMENT REST (COLD INSULATION)	2" ~ 6"	
		BRACKET ON EQUIPMENT REST (COLD INSULATION)	8" ~ 12"	
		BRACKET ON EQUIPMENT REST (COLD INSULATION)	14" ~ 24"	
		BRACKET ON EQUIPMENT GUIDE (COLD INSULATION)	2" ~ 6"	
	20	BRACKET ON EQUIPMENT GUIDE (COLD INSULATION)	8" ~ 12"	
		BRACKET ON EQUIPMENT GUIDE (COLD INSULATION)	14" ~ 24"	

NOTE:

SUPPORT DESCRIPTION:

STANDARD PIPE SUPPORT INDEX

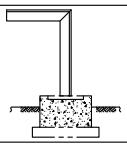
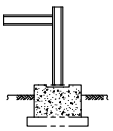
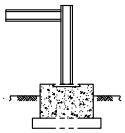
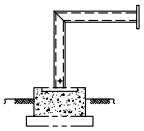
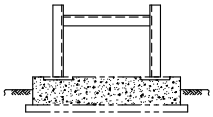
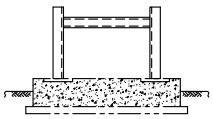
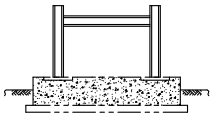
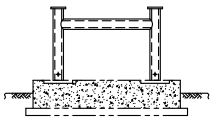
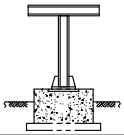
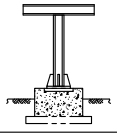
SHEET 2 OF 2

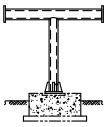
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SF	01	L-TYPE SUPPORT (ANGLE) AT GRADE	-	
	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)	-	

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SF	11	T-TYPE SUPPORT (PIPE)	-	

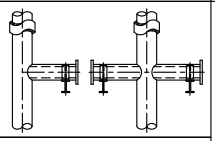
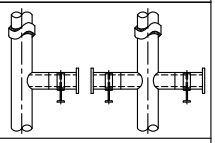
NOTE:

SUPPORT DESCRIPTION:
STANDARD PIPE SUPPORT INDEX

SHEET 1 OF 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: 19 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE	CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SG	05	SINGLE & DOUBLE TRUNNION (CS-WITHOUT PWHT)	2" ~ 36"						
	06	SINGLE & DOUBLE TRUNNION (CS-WITH PWHT, AS, SS)	2" ~ 36"						

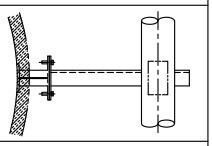
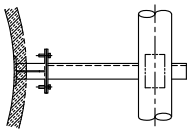
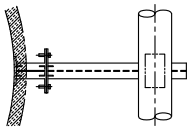
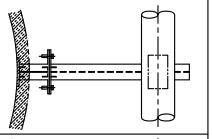
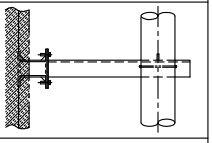
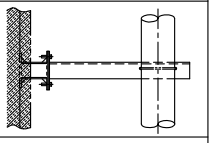
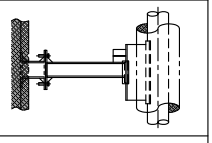
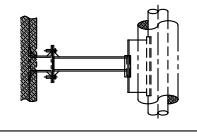
NOTE:	SUPPORT DESCRIPTION: STANDARD PIPE SUPPORT INDEX SHEET 1 OF 1

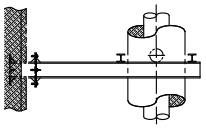
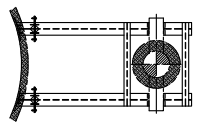
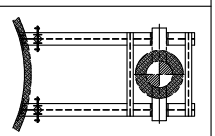
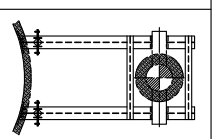
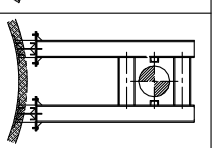
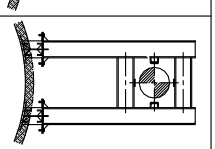
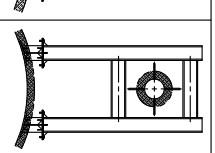
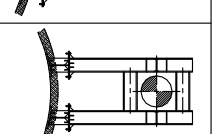
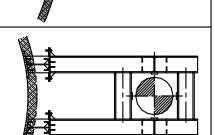
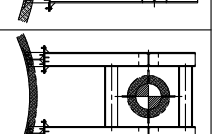
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SH				
	01	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"	

NOTE:

SUPPORT DESCRIPTION:

STANDARD PIPE SUPPORT INDEX

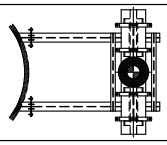
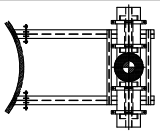
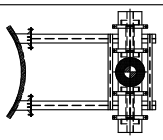
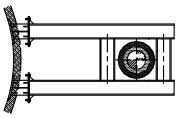
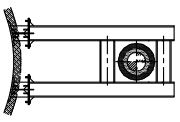
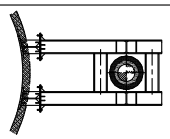
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00

شماره صفحه: 21 از 307

CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE	CATEGORY NAME	SERIAL NO.	TITLE	SIZE	FIGURE
SH	10	BRACKET ON EQUIPMENT REST (COLD INSULATION)	2" ~ 6"						
		BRACKET ON EQUIPMENT REST (COLD INSULATION)	8" ~ 12"						
		BRACKET ON EQUIPMENT REST (COLD INSULATION)	14" ~ 24"						
	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"						

NOTE:

SUPPORT DESCRIPTION:
STANDARD PIPE SUPPORT INDEX

SHEET 2 OF 2

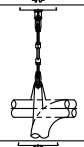
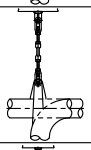
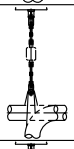
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00

شماره صفحه: 22 از 307

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	RIGID HANGER (CS-WITHOUT PWHT)	2" ~ 24"						
	06	RIGID HANGER (CS-WITH PWHT, AS, SS)	2" ~ 24"						

NOTE:

SUPPORT DESCRIPTION:

STANDARD PIPE SUPPORT INDEX

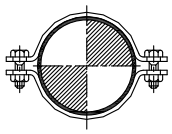
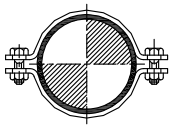
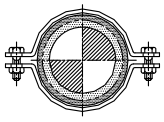
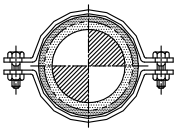
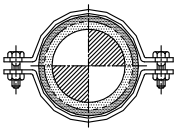
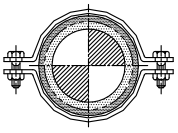
SHEET 1 OF 1

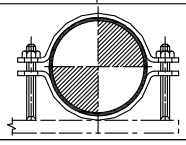
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00

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	WELDED CLAMP	1/2" ~ 8"	

NOTE:

SUPPORT DESCRIPTION:

STANDARD PIPE SUPPORT
INDEX

SHEET 1 OF 1

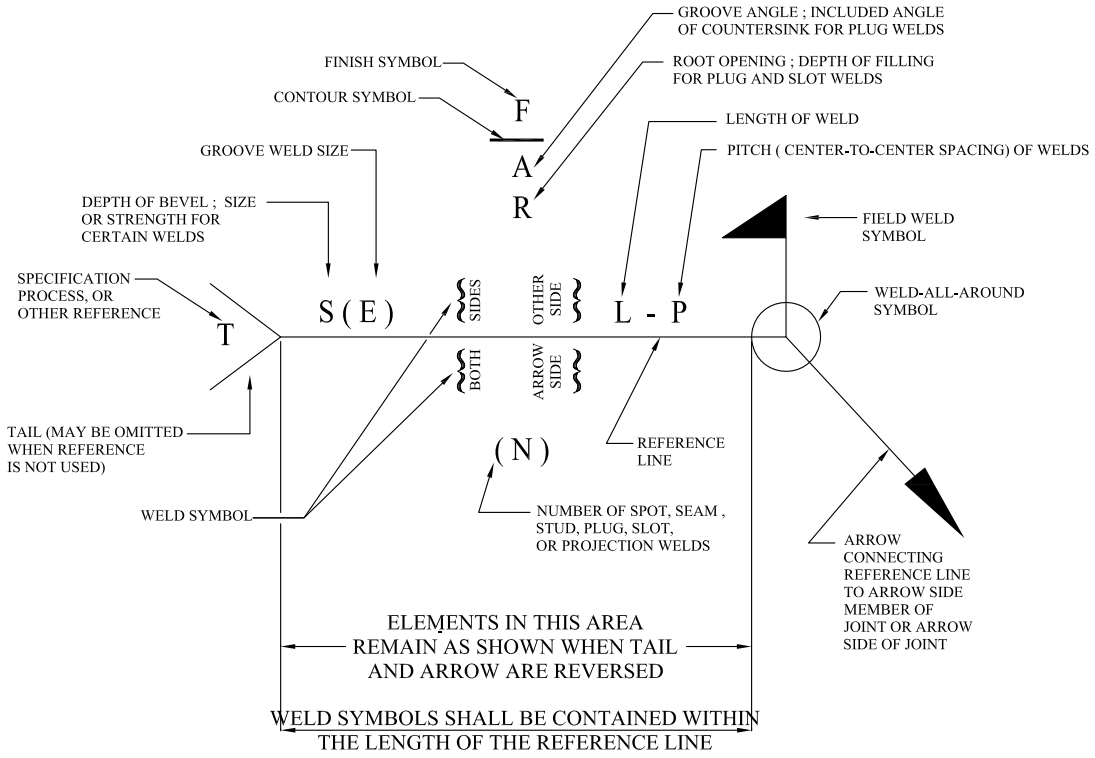


FIGURE 1- STANDARD LOCATION OF ELEMENTS OF A WELDING SYMBOL

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

NOTE:

SUPPORT DESCRIPTION:

WELDING SYMBOLES G-01

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

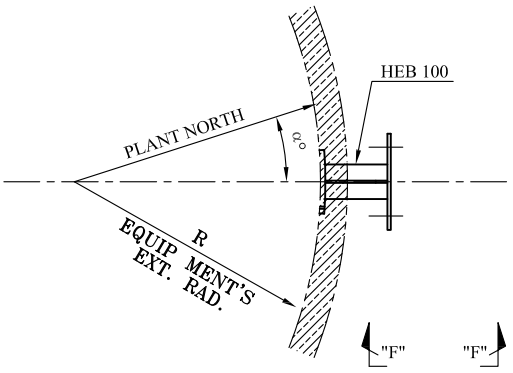
NOTE:

SUPPORT DESCRIPTION:

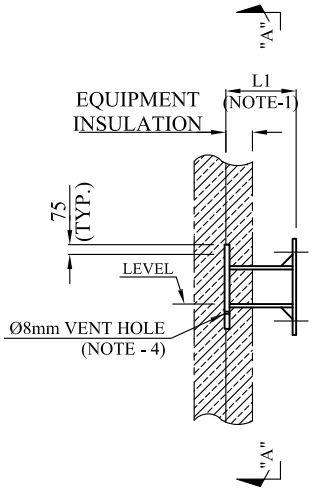
WELDING SYMBOLES G-01

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

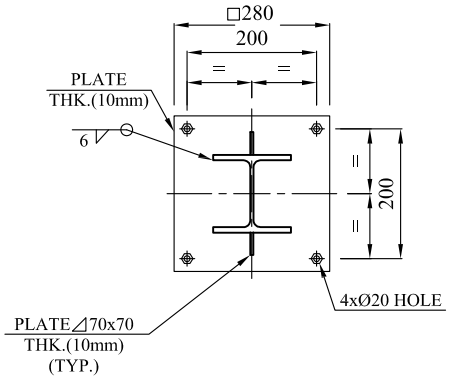
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 26 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



CLIP No. 17



VIEW F - F



VIEW "A"~"A"

NOTE:

1- DIMENSIONS "L" 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 .

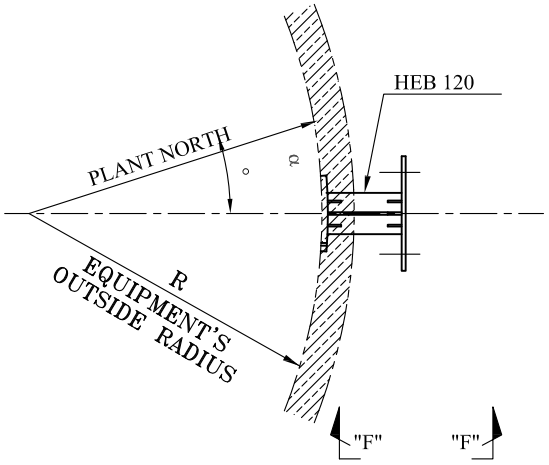
SUPPORT DESCRIPTION:

VESSEL CLIP
G-03

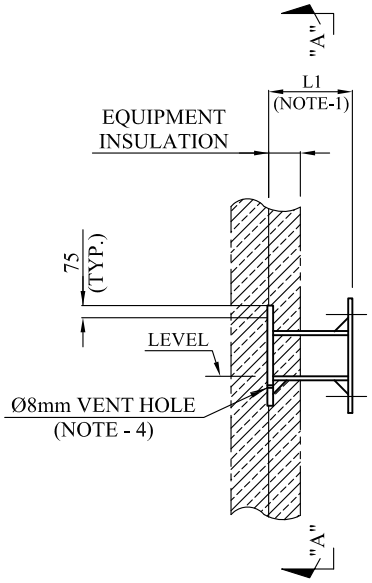
SHEET 1 OF 8

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

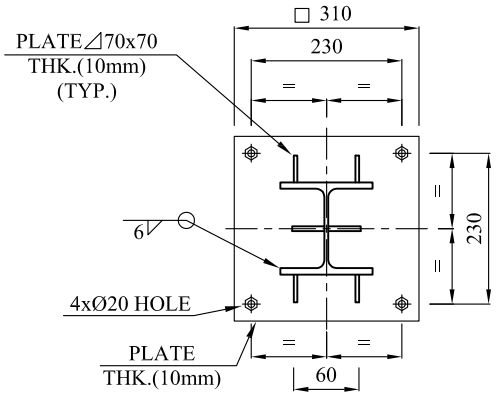
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 27 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



CLIP No. 18



VIEW F - F



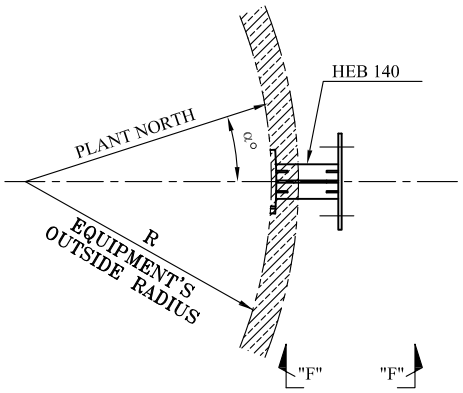
VIEW "A" ~ "A"

NOTE:

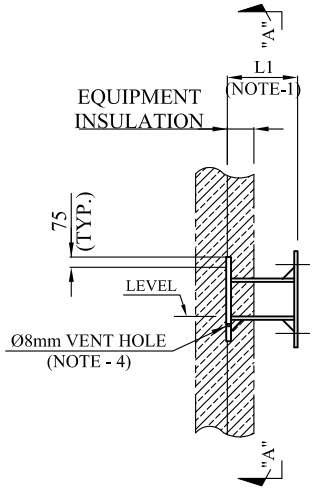
1- DIMENSIONS "L" SHALL BE CALCULATED AS FOLLOW:
FOR EQUIPMENT INSULATION THICKNESS < 80mm, L1=200mm
FOR EQUIPMENT INSULATION THICKNESS > 80mm, L1=250mm
2- VESSEL VENDOR SHALL CALCULATE WEAR PAD THICKNESS AND WELD THICKNESS OF WEAR PAD.
3- VESSEL VENDOR SHALL CHECK LOCAL STRESS FOR VESSEL.
4- VENT HOLE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

SUPPORT DESCRIPTION:

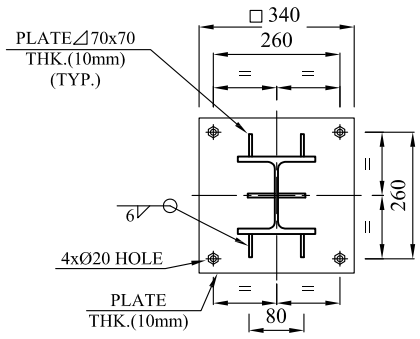
VESSEL CLIP
G-03



CLIP No. 19



VIEW F - F



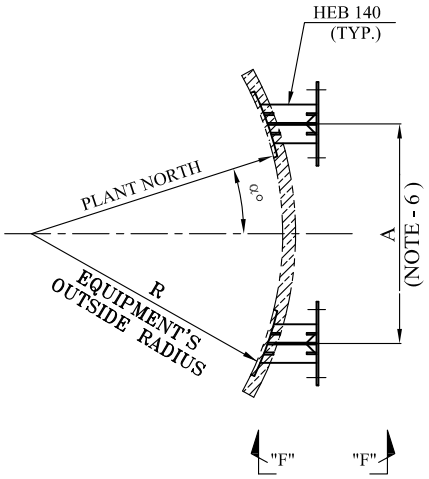
VIEW "A" ~ "A"

NOTE:

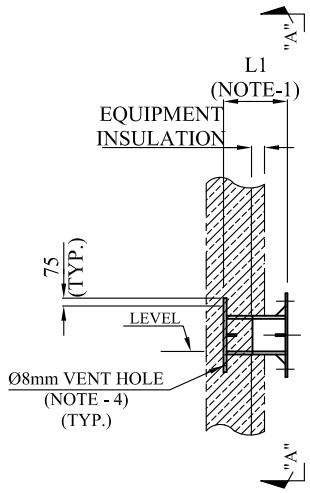
1- DIMENSIONS "L" SHALL BE CALCULATED AS FOLLOW:
FOR EQUIPMENT INSULATION THICKNESS < 80mm, L1=200mm
FOR EQUIPMENT INSULATION THICKNESS > 80mm, L1=250mm
2- VESSEL VENDOR SHALL CALCULATE WEAR PAD THICKNESS AND WELD THICKNESS OF WEAR PAD.
3- VESSEL VENDOR SHALL CHECK LOCAL STRESS FOR VESSEL.
4- VENT HOLE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

SUPPORT DESCRIPTION:

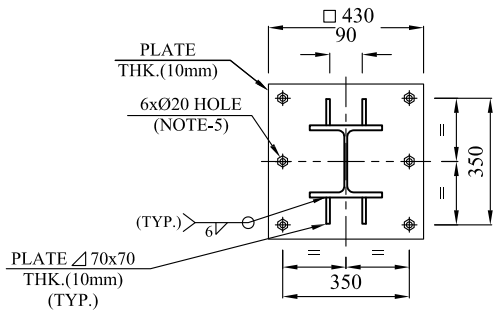
VESSEL CLIP
G-03



CLIP No. 20



VIEW F - F



VIEW "A"~"A"

NOTE:

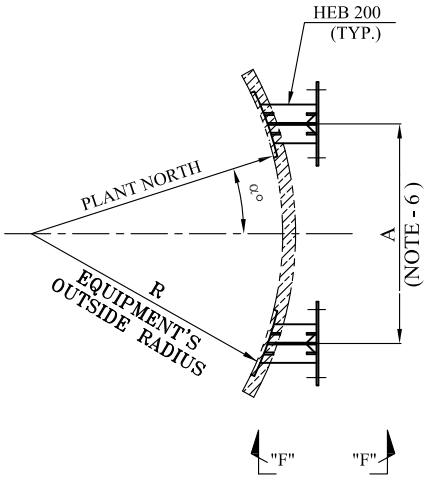
1- DIMENSIONS "L" SHALL BE CALCULATED AS FOLLOW:
FOR EQUIPMENT INSULATION THICKNESS < 80mm, L1=200mm
FOR EQUIPMENT INSULATION THICKNESS > 80mm, L1=250mm
2- VESSEL VENDOR SHALL CALCULATE WEAR PAD THICKNESS AND WELD THICKNESS OF WEAR PAD.
3- VESSEL VENDOR SHALL CHECK LOCAL STRESS FOR VESSEL.
4- VENT HOLE 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:

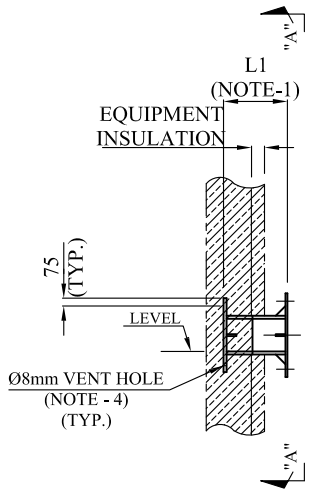
VESSEL CLIP
G-03

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

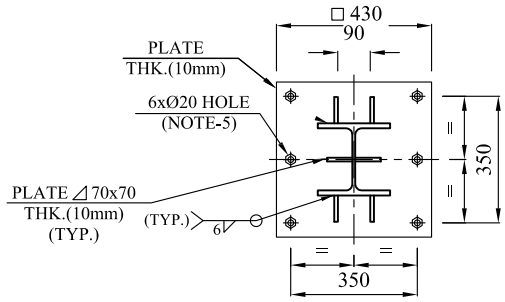
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 30 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



CLIP No. 21



VIEW F - F



VIEW "A"~"A"

NOTE:

1- DIMENSIONS "L" 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:

VESSEL CLIP
G-03

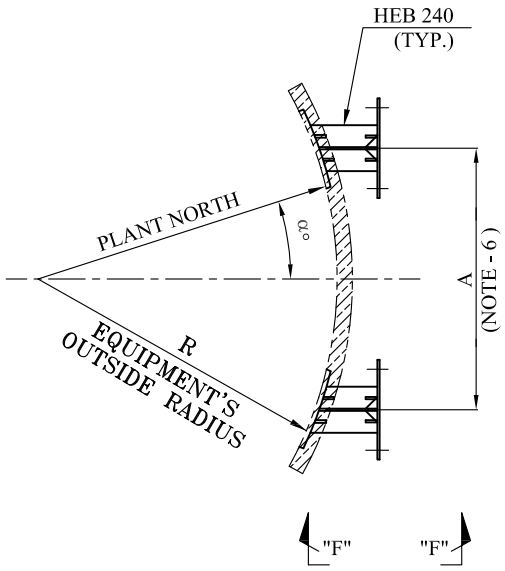
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

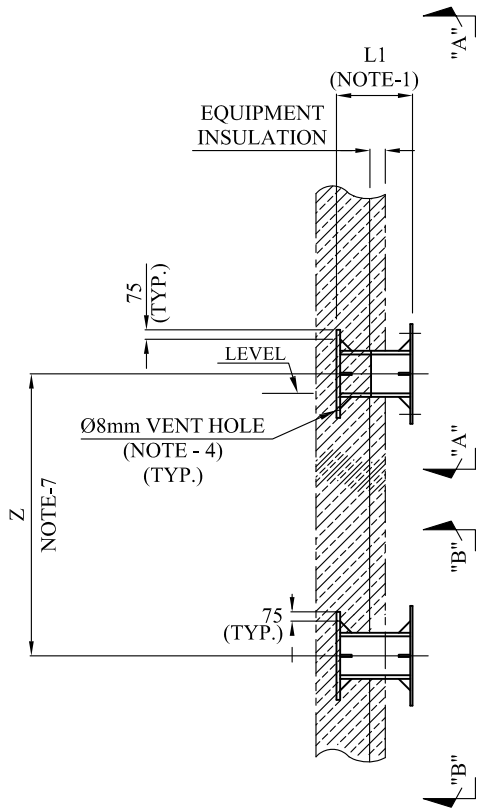
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

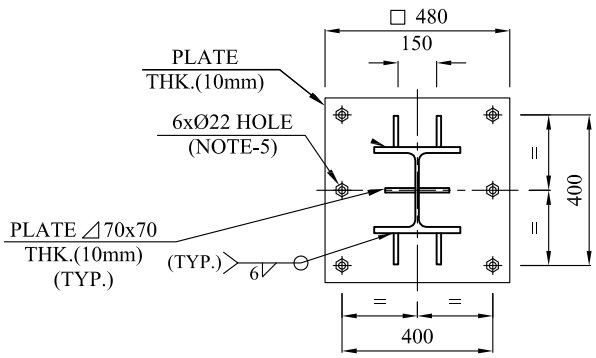
شماره صفحه: 31 از 307



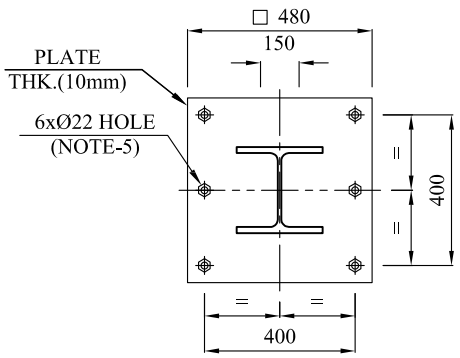
CLIP No. 22



VIEW F - F



VIEW "A"~"A"



VIEW "B"~"B"

NOTE:

1- DIMENSIONS "L" 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.

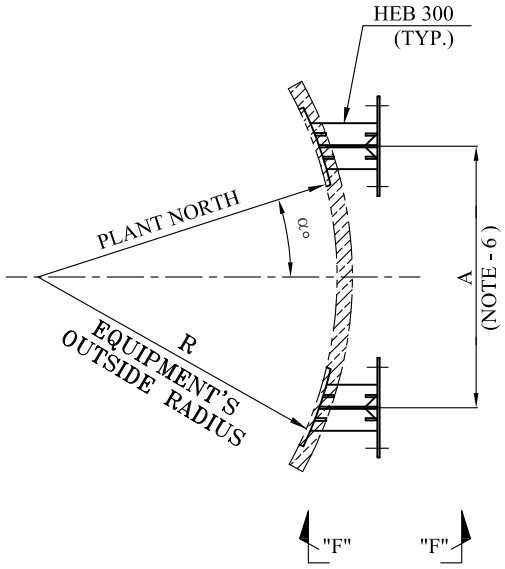
SUPPORT DESCRIPTION:

VESSEL CLIP
G-03

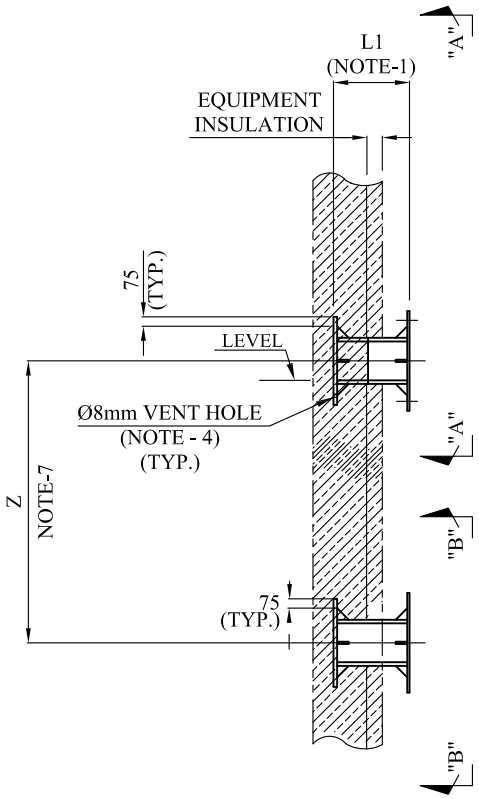
SHEET 6 OF 8

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

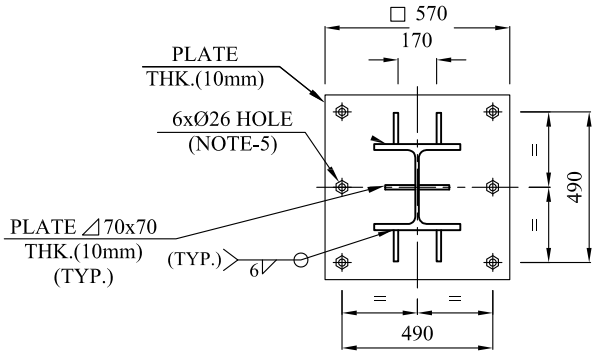
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 32 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



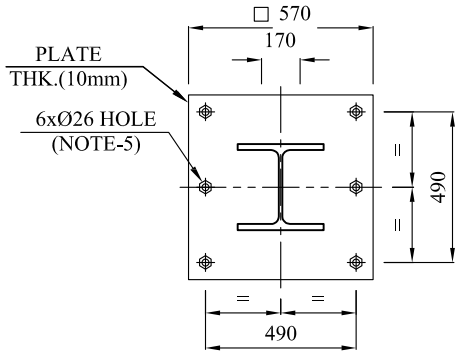
CLIP No. 22



VIEW F - F



VIEW "A"~"A"



VIEW "B"~"B"

NOTE:

1- DIMENSIONS "L" 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:

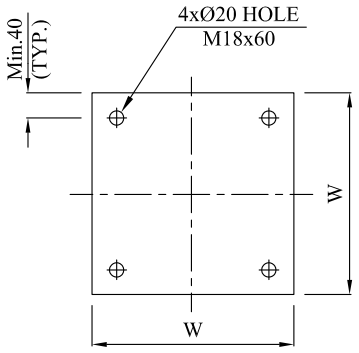
VESSEL CLIP
G-03

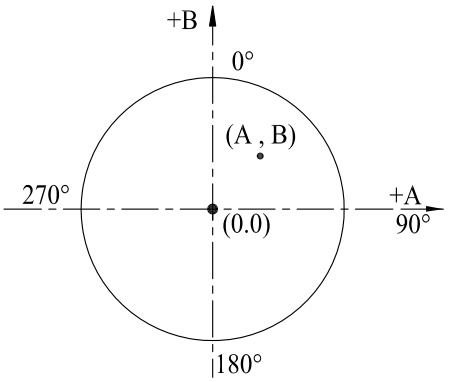
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

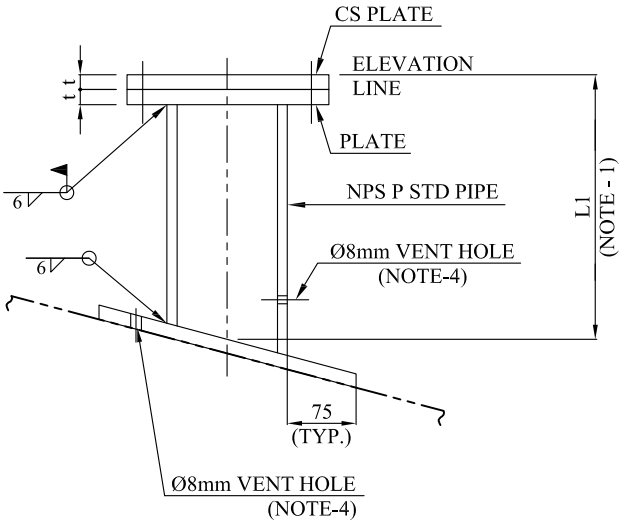
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00





LOCATION PLAN DETAIL



CLIP TYPE No.	P	W	t
24	2"	120	10
25	3"	140	
26	4"	160	
27	6"	220	
28	8"	260	
29	10"	320	12
30	12"	350	
31	14"	400	15

NOTE:
1- DIMENSIONS "L" 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 CODE OF A, B ARE DEFINED IN VESSEL CLIP INFORMATION SHEET.

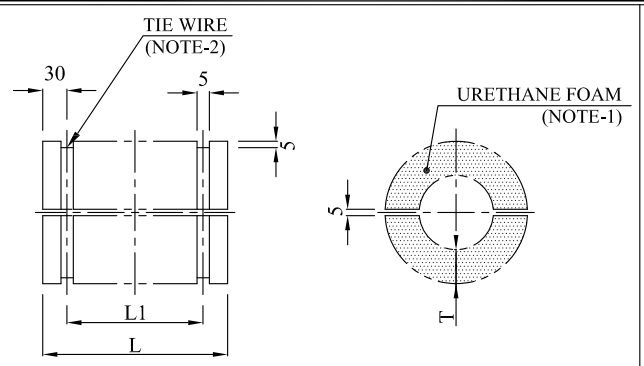
SUPPORT DESCRIPTION:

VESSEL CLIP
G-03

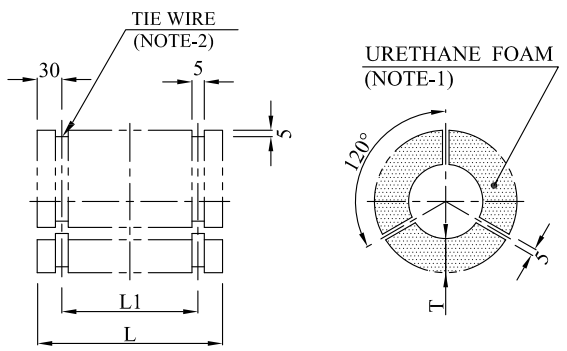
SHEET 8 OF 8

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

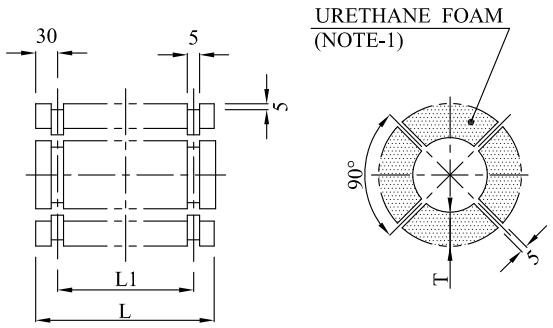
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 34 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



1/2" TO 4"



6" TO 24"



26" TO 32"

TABLE OF DIMENSIONS

NPS MARK	PIPE SIZE	L	L1
0A	1/2"	370	310
0B	3/4"	370	310
01	1"	370	310
1A	1 1/2"	370	310
02	2"	370	310
03	3"	420	360
04	4"	420	360
06	6"	420	360
08	8"	420	360
10	10"	420	360
12	12"	420	360
14	14"	420	360
16	16"	420	360
18	18"	420	360
20	20"	420	360
22	22"	420	360
24	24"	420	360
26	26"	420	360
28	28"	420	360
30	30"	420	360
32	32"	420	360

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 ITCH BY GALVANIZED TIE WIRE TIE WIRE IS IN MANUFACTURER SCOPE OF SUPPLY.

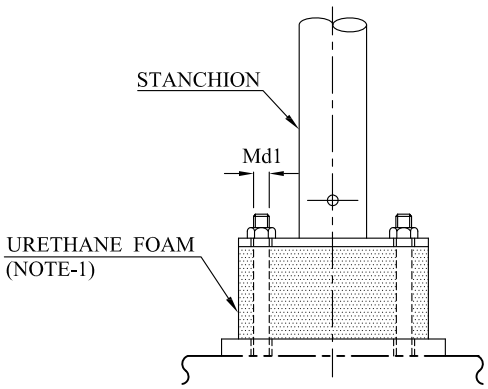
SUPPORT DESCRIPTION:

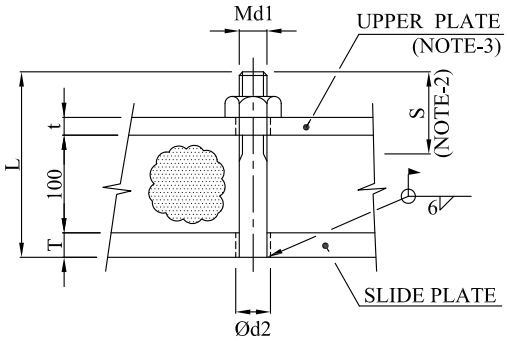
CRADLE
(COLD INSULATION)
G-04

SHEET	1 OF 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: 35 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00





DETAIL FOR BOLT & NUT

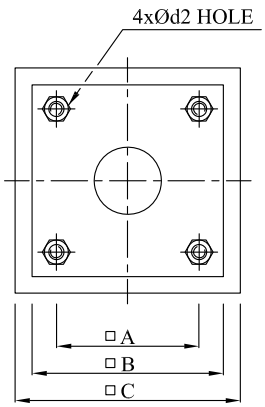


TABLE OF DIMENSIONS

STANCHION SIZE	A	B	C	T	t	BOLT & NUT			Ød2
						Md1	L	S	
1"	90	140	180	10	8	M10	140	35	12
1 1/2"	90	140	180	10	8	M10	140	35	12
2"	90	140	180	10	8	M10	140	35	12
3"	130	180	220	12	10	M12	150	40	14
4"	130	180	220	12	10	M12	150	40	14
6"	180	230	270	12	10	M14	150	40	16
8"	220	280	320	12	10	M16	150	40	18
10"	270	330	370	12	10	M18	160	50	20
12"	330	410	450	12	10	M22	160	50	24
14"	330	410	450	12	10	M22	160	50	24
16"	420	500	540	15	12	M24	170	55	26
18"	420	500	540	15	12	M24	170	55	26
20"	460	550	590	15	12	M27	180	65	30

NOTE:

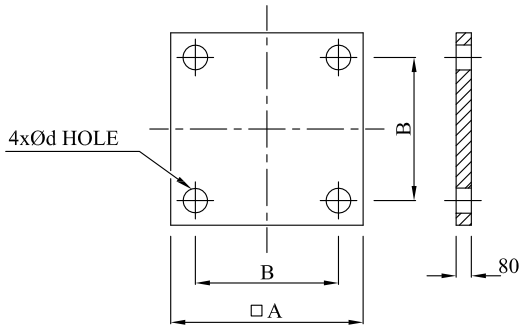
1- FOR DETAIL OF URETHANE FOAM MECHANICAL PROPERTIES SEE (G-07).
2- DIMENSION "S" IS THREADED LENGTH OF BOLT.
3- IF UPPER PLATE'S TEMP. IS LOWER THAN -29 C , MATERIAL BY VENDOR.
4- ALLOWABLE LOAD OF URETHANE BLOCK SHALL BE CLARIFIED BY VENDOR.

MATERIAL:

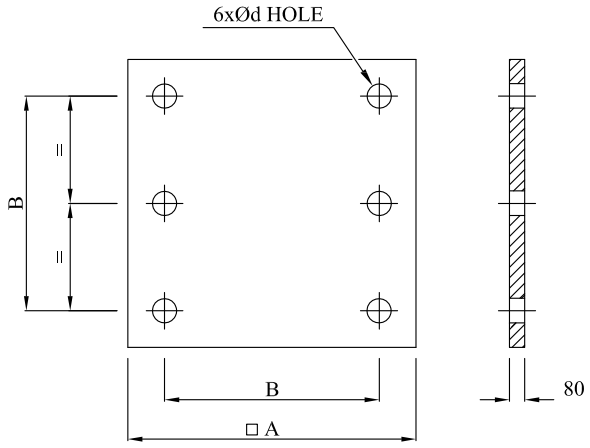
PLATE : A283 GR.C, BOLT & NUT : A325

SUPPORT DESCRIPTION:

URETHANE BLOCK
G-05



TYPE " A "



TYPE " B "

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:

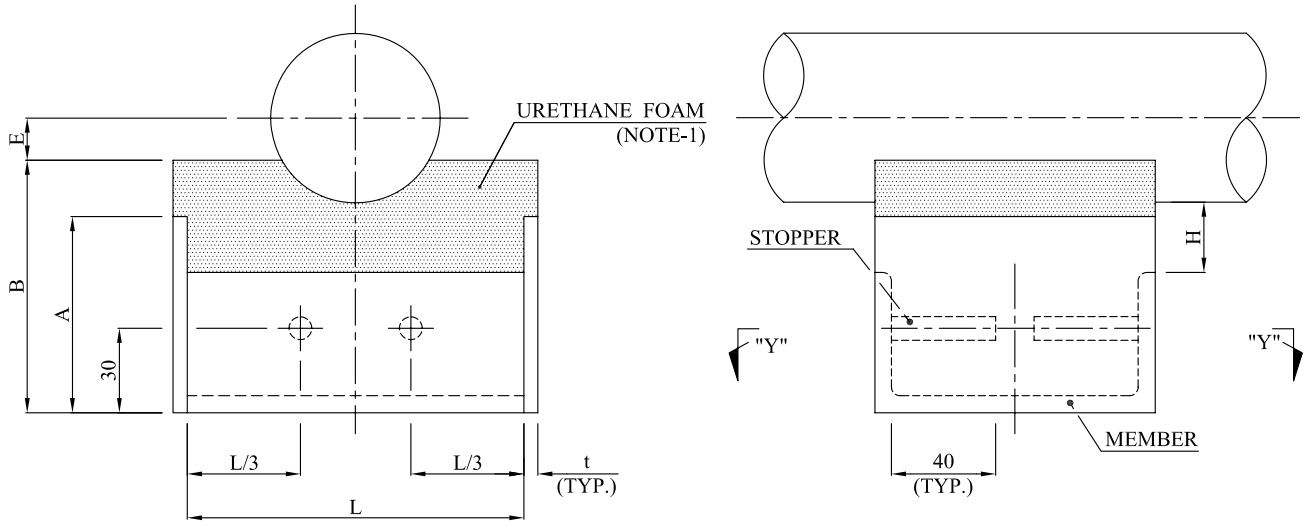
1- FOR DETAIL OF URETHANE FOAM MECHANICAL PROPERTIES SEE (G-07).
2- ALLOWABLE LOAD OF URETHANE BLOCK SHALL BE CLARIFIED BY VENDOR.

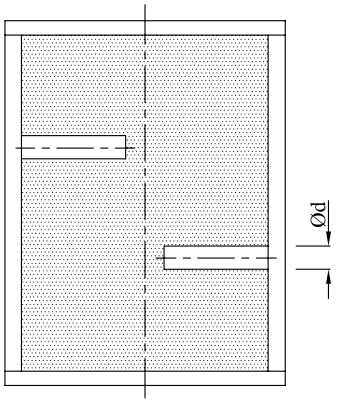
SUPPORT DESCRIPTION:

URETHANE BLOCK
G-05

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 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	





VIEW " Y " ~ "Y"

TABLE OF DIMENSIONS

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

NOTE:

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

MATERIAL :

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

SUPPORT DESCRIPTION:

ADIABATIC BLOCK
(COLD INSULATION)
G-06

SHEET 1 OF 1

MECHANICAL/PHYSICAL PROPERTY OF POLYURETHANE FOAM

ITEM	UNIT	DENSITY (kg/m^3)	
		320	500
ULTIMATE COMPRESSIVE STRENGTH	kg/CM^2	70.4	170
COMPRESSIVE STRENGTH AT 1% DEFLECTION		14.2	33
BENDING STRENGTH		90	200
THERMAL CONDUCTIVITY	Kca1/Mhr°C	0.065	0.084
COEFFICIENT OF THERMAL CONTRACTION	Kca1/cm°C	$50x10^{-6}$	$50x10^{-6}$
NON-INFLAMMABILITY	-	SE	SE
CLOSED CELL CONTENT BY VOLUME	%	90	90
APPLICATION	-	CRADLE SUPPORT	FLXED SUPPORT

SE - SELF EXTINGUISH

NOTE:

SUPPORT DESCRIPTION:

POLYURETHANE FOAM G-07

SHEET 1 OF 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	D00

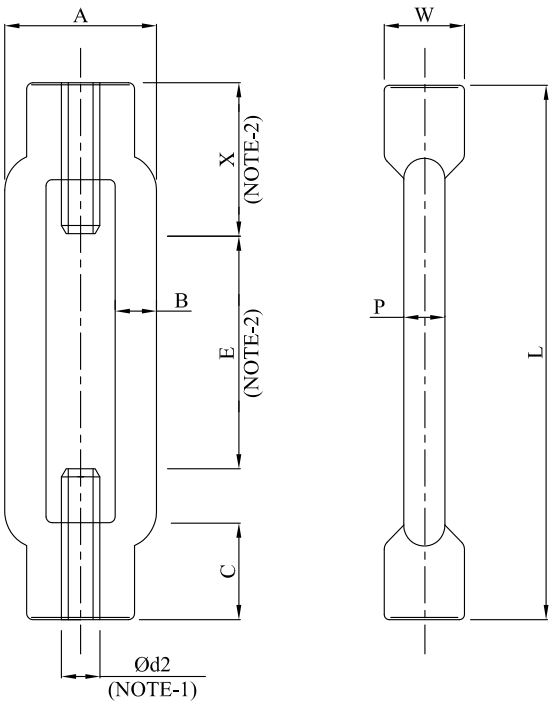


TABLE OF DIMENSIONS

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:

TURN BUCKLE
G-08

SHEET 1 OF 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	D00

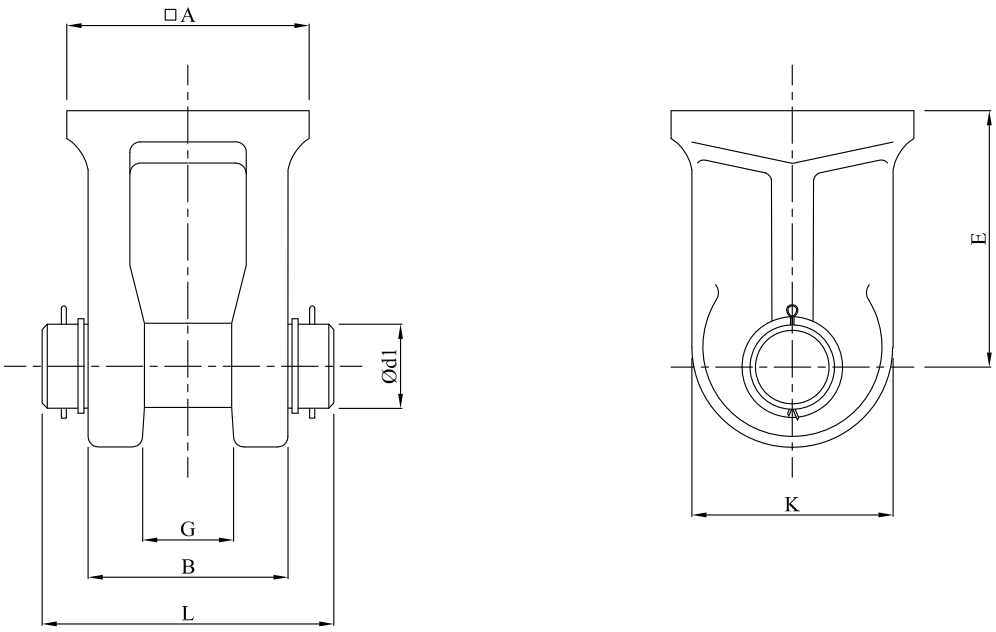


TABLE OF DIMENSIONS

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	85	80	64	80	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:

WELD-ON
CLEVIS
G-09

SHEET 1 OF 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	D00

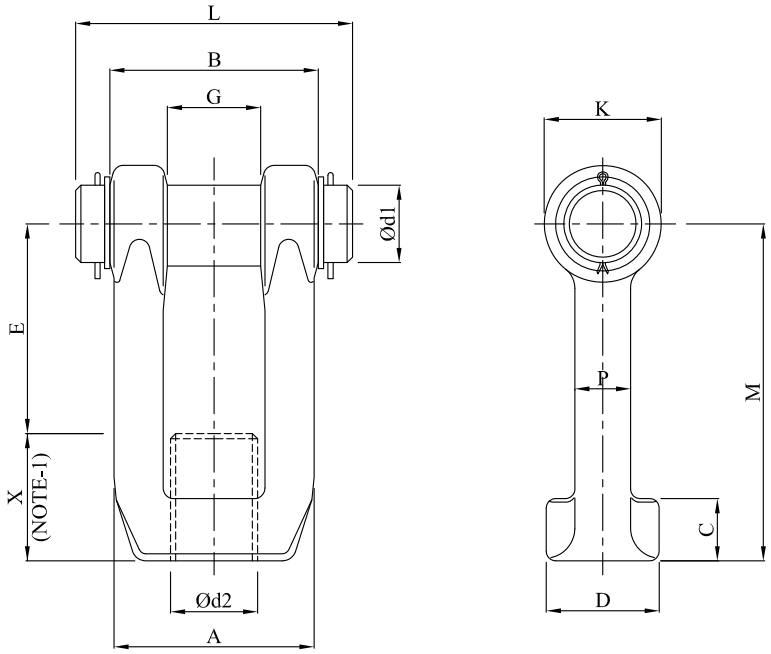


TABLE OF DIMENSIONS

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:

CLEVIS WITH PIN
G-10

SHEET 1 OF 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	D00

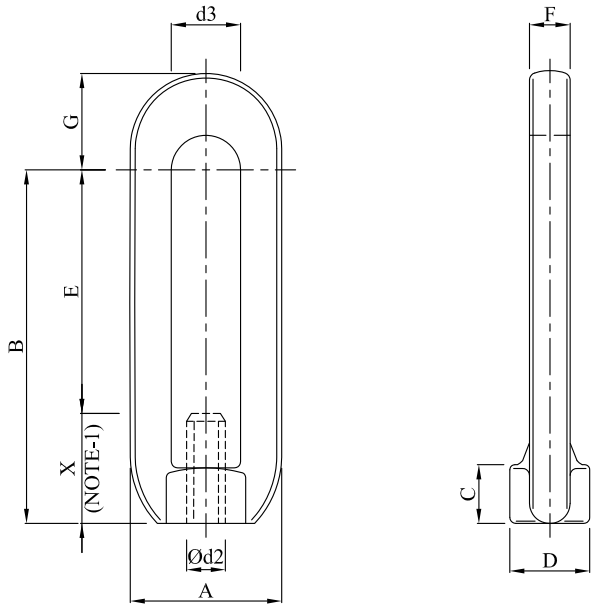


TABLE OF DIMENSIONS

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

MATERIAL :

ASTM A668 Cl.C

SUPPORT DESCRIPTION:

EYE NUT
G-11

SHEET 1 OF 1

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

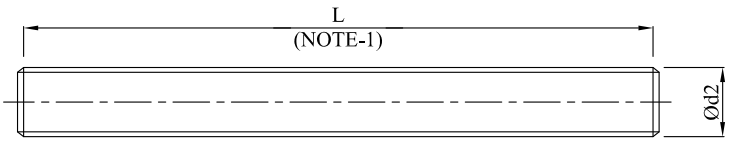
شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 43 از 307



Ød2	L
M10	NOTE-1
M12	
M16	
M20	
M24	
M30	
M36	
M42	
M48	

NOTE:

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

MATERIAL:

M10-M16: ASTM A36

M20-M48: ASTM A572 Gr.50

SUPPORT DESCRIPTION:

THREADED ROD G-12

SHEET 1 OF 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	D00

شماره صفحه: 44 از 307

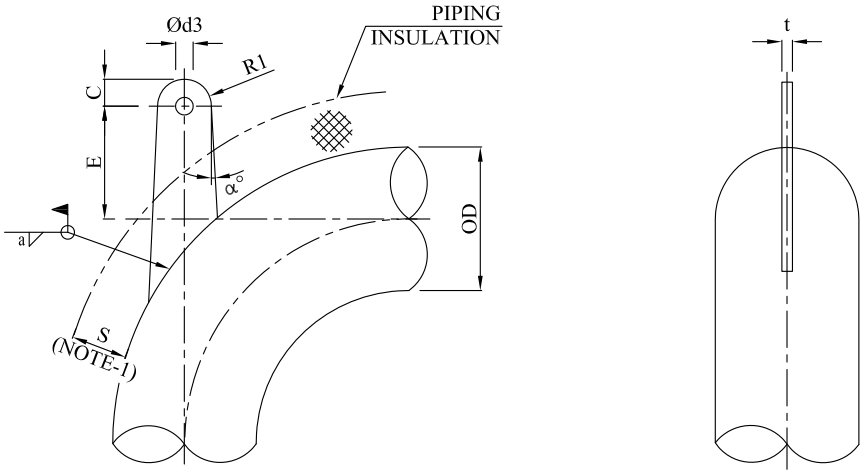


TABLE OF DIMENSIONS

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 ACCORDION 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

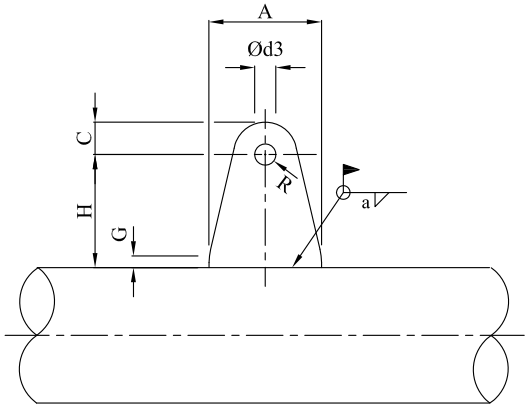
SUPPORT DESCRIPTION:

WELD-ON LUG
FOR ELBOW
G-13

SHEET 1 OF 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: 45 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	



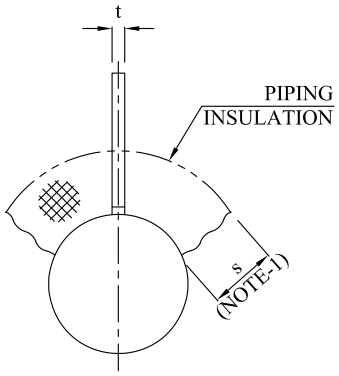


TABLE OF DIMENSIONS

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 ACCORDION 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

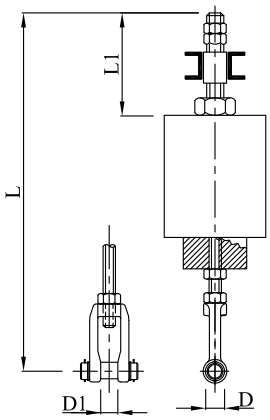
SUPPORT DESCRIPTION:

WELD-ON LUG
FOR STRAIGHT PIPE
G-14

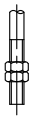
SHEET 1 OF 1

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

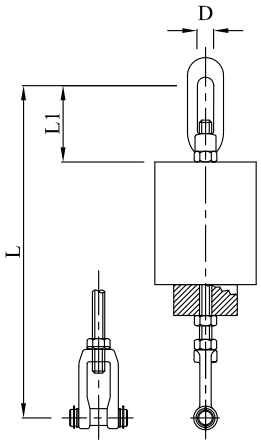
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 46 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



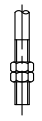
TYPE 1



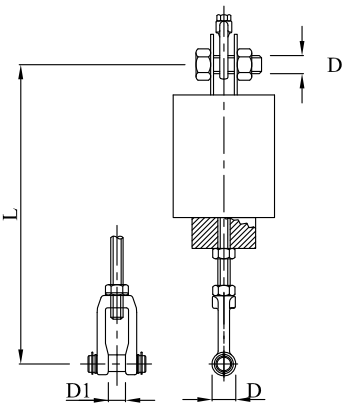
TYPE 1A



TYPE 2



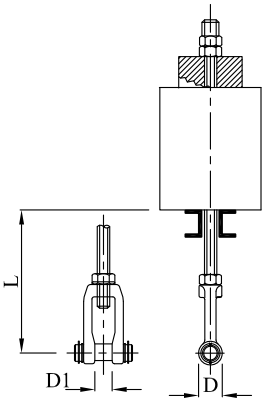
TYPE 2A



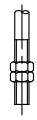
TYPE 3



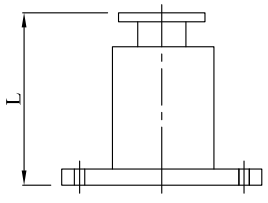
TYPE 3A



TYPE 4



TYPE 4A



TYPE 5A

NOTE:

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

SUPPORT DESCRIPTION:

TYPES OF SPRING SUPPORTS
G-15

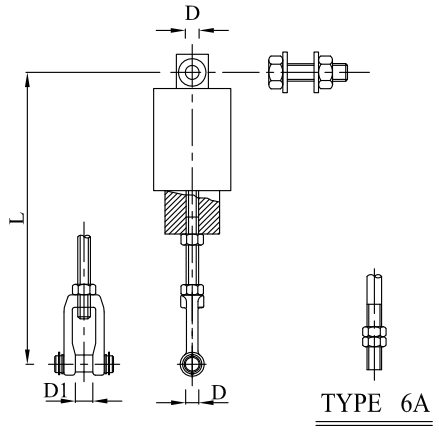
SHEET 1 OF 2

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

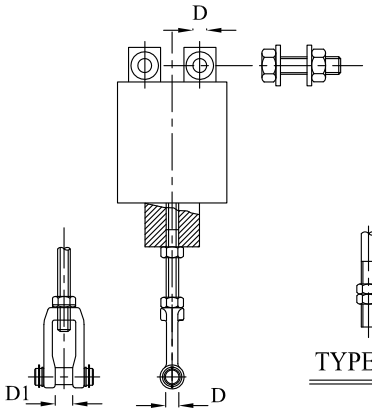
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



TYPE 6

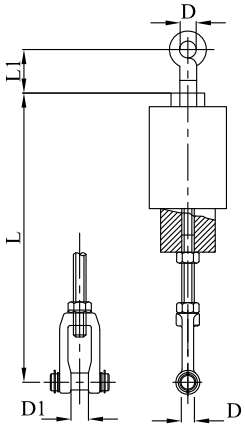
TYPE 6A



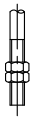
TYPE 7



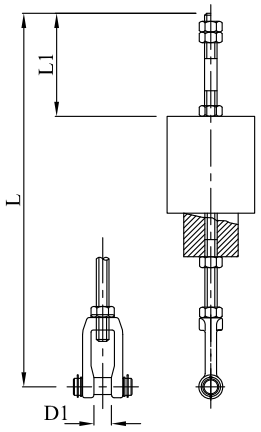
TYPE 7A



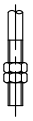
TYPE 8



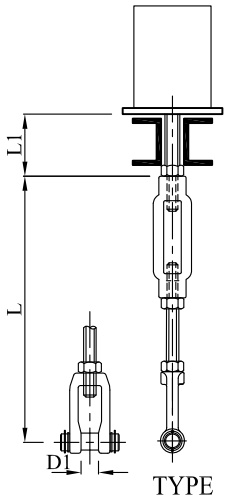
TYPE 8A



TYPE 9



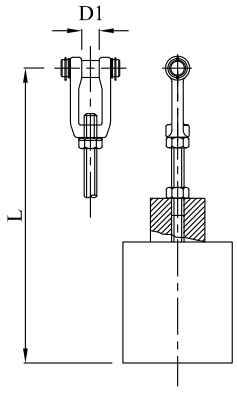
TYPE 9A



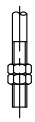
TYPE 10



TYPE 10A



TYPE 11



TYPE 11A

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

SUPPORT DESCRIPTION:

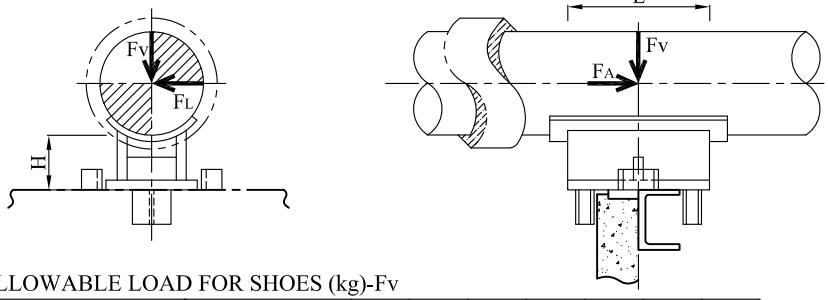
TYPES OF SPRING SUPPORTS
G-15

SHEET 2 OF 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	D00

شماره صفحه: 48 از 307



ALLOWABLE LOAD FOR SHOES (kg)-Fv

RUN PIPE SIZE	L (mm) / H (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	110	–	–
	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" = 0.3 x"Fv" AND "FA"=0.3 x"Fv" WHICH ARE APPLIED CONCURRENTLY.

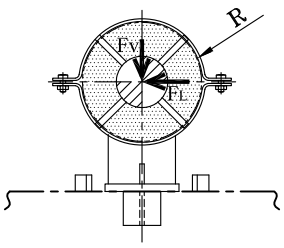
SUPPORT DESCRIPTION:

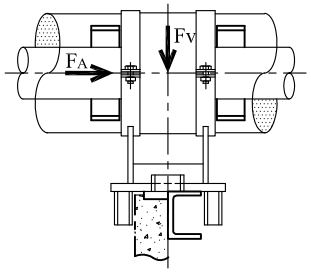
ALLOWABLE LOADS
FOR SHOE (REST TYPE)
G-16

SHEET 1 OF 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: 49 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00





ALLOWABLE LOAD FOR SHOES (kg)-Fv

RUN PIPE SIZE	A	L (mm) / H (mm)	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 "FL"=0.3x"Fv" AND "FA "=0.3x"Fv" WHICH ARE APPLIED CONCURRENTLY.

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

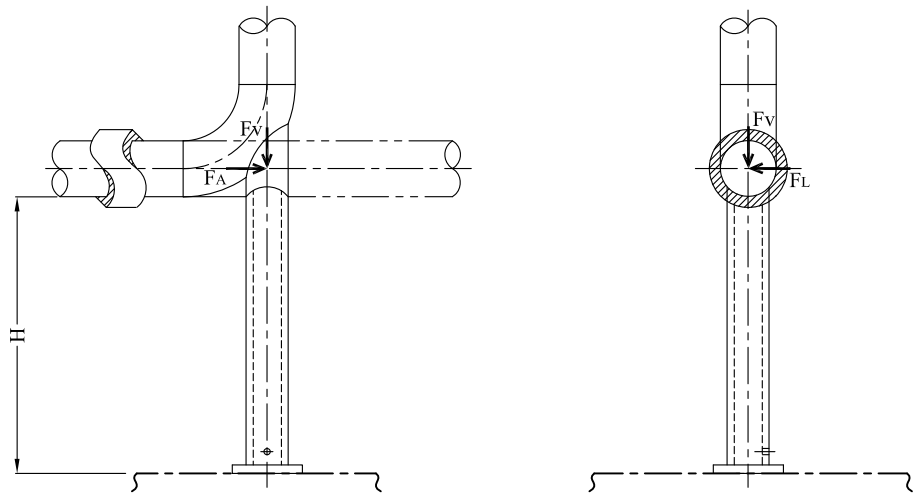
SUPPORT DESCRIPTION:

ALLOWABLE LOADS FOR SHOE
(REST TYPE) (COLD INSULATION)
G-16

SHEET 2 OF 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: 50 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	



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 "FL"=0.3x"Fv" AND "FA"=0.3x"Fv" WHICH ARE APPLIED CONCURRENTLY .

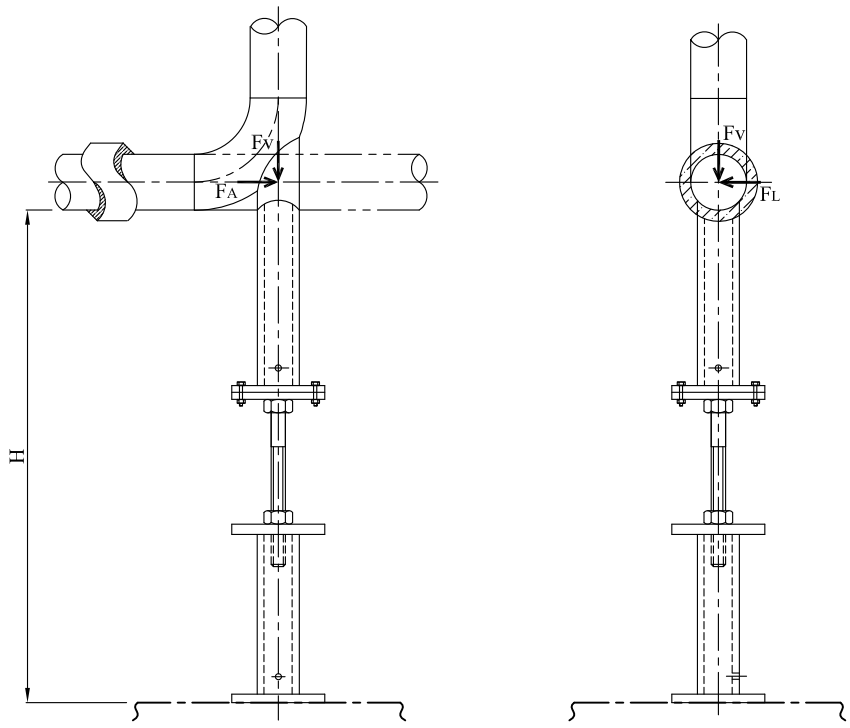
2-FOR PRECISE CALCULATION, FINITE ELEMENT METHOD OR DETAILED HAND CALCULATION IS PERMITTED.

SUPPORT DESCRIPTION:

ALLOWABLE LOADS FOR DUMMY (REST TYPE) G-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 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	



ALLOWABLE LOAD FOR DUMMY (kg) - Fv

RUN PIPE SIZE \ H (mm)	600	900	1200	1400
2"	100	65	45	40
3" ~ 4"				
6"	190	120	90	75
8" ~ 10"	1400	950	740	640
12"	2900	2000	1550	1350
14" ~ 16"	4600	3300	2500	2200
18" ~ 20"	6900	5000	3900	3400
24"	9300	6800	5300	4600

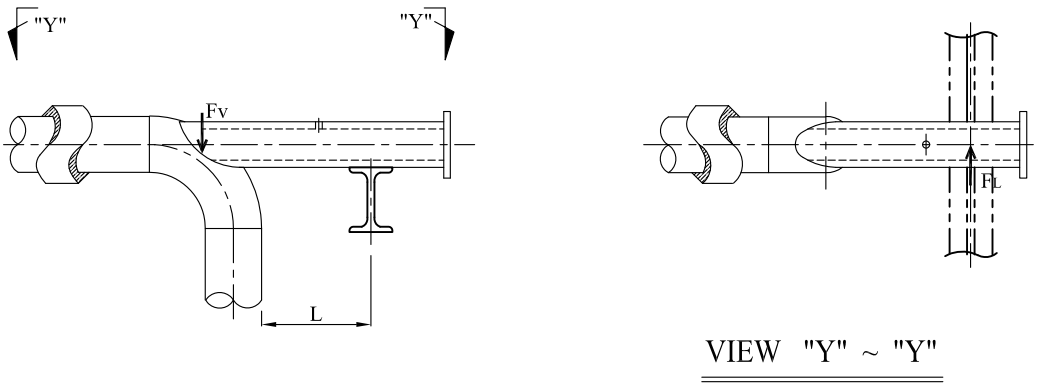
NOTE:

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

2-FOR PRECISE CALCULATION, FINITE ELEMENT METHOD OR DETAILED HAND CALCULATION IS PERMITTED.

SUPPORT DESCRIPTION:

ALLOWABLE LOADS FOR DUMMY
G-17



VIEW "Y" ~ "Y"

ALLOWABLE LOAD FOR DUMMY (kg) - Fv

RUN PIPE SIZE \ L (mm)	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"	1660	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 VERTICAL LOAD "Fv" HAS BEEN CALCULATED BASED ON μ=0.3, ALSO "Fv" IS THE MAX. CONCENTRATED VERTICAL LOAD "FL"=0.3x"Fv" AND "FA"=0.3x"Fv" WHICH ARE APPLIED CONCURRENTLY .

2-FOR PRECISE CALCULATION, FINITE ELEMENT METHOD OR DETAILED HAND CALCULATION IS PERMITTED.

SUPPORT DESCRIPTION:

ALLOWABLE LOADS
FOR DUMMY
G-17

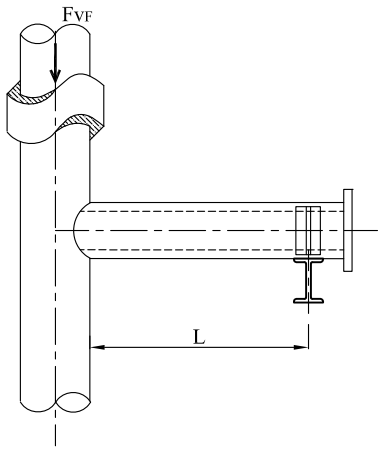
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00



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

2-FOR PRECISE CALCULATION, FINITE ELEMENT METHOD OR DETAILED HAND CALCULATION IS PERMITTED.

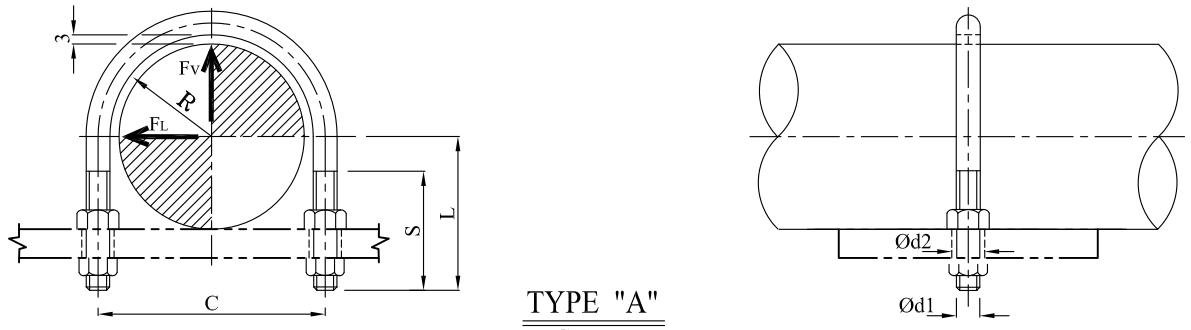
SUPPORT DESCRIPTION:

ALLOWABLE LOADS
FOR TRUNNION
G-18

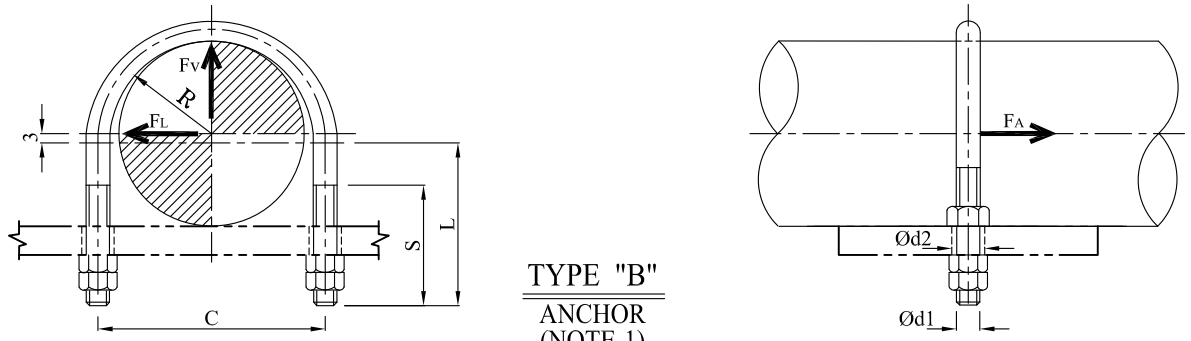
SHEET 1 OF 1

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: 54 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



TYPE "A"
GUIDE



TYPE "B"
ANCHOR
(NOTE-1)

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	Ød1	Ød2	R	C	S (NOTE-2)	L (NOTE-2)	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			
03	3"	M16	18	48	112	80	110	200	1200	60
04	4"	M16	18	60	136	80	120			
06	6"	M16	18	87	190	95	145			
08	8"	M20	22	113	246	95	180	240	2500	
10	10"	M20	20	140	300	100	205			
12	12"	M24	26	165	354	120	240		3500	80
14	14"	M24	26	181	386	120	255			
16	16"	M24	26	206	436	120	280			
18	18"	M24	26	232	488	120	305			
20	20"	M33	35	257	547	155	345	500	6000	150
24	24"	M33	35	308	649	155	395			

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 DETAIL OF CRADLE SEE (G-04).
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:

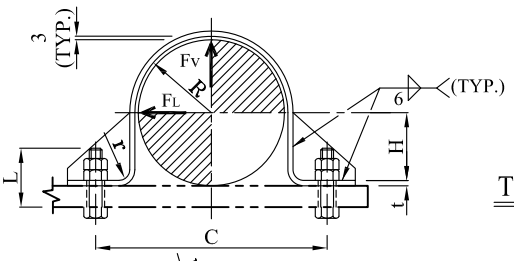
U-BOLT
3/8" ~ 24"
SA-01

SHEET	1 OF 1

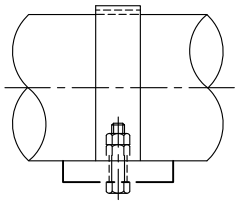
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00

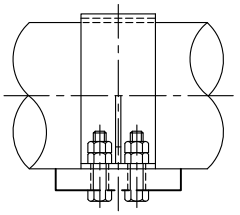
شماره صفحه: 55 از 307



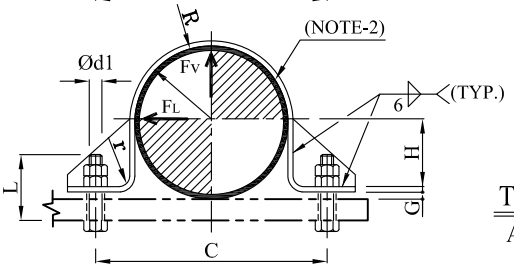
TYPE "A"
GUIDE



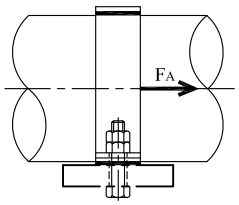
1/2" ~ 4"



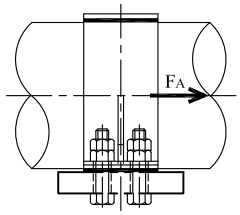
6" ~ 24"



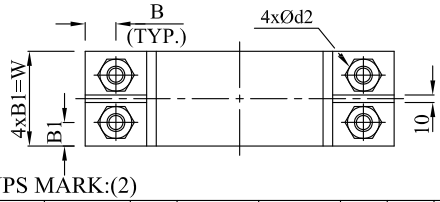
TYPE "B"
ANCHOR



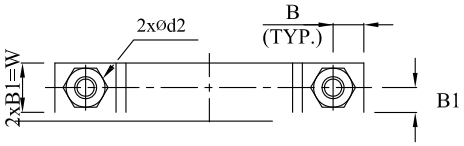
1/2" ~ 4"



6" ~ 24"



DETAIL FOR STRAP



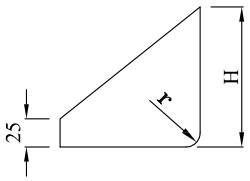
NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	Ød1	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	80x60	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	105x70	26	12	18	308	784	50	220	55	10	293	286			

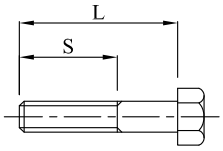
INDICATION:

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 "S" AND "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 u=0.3 ALSO "Fv", "FA" AND "FL" ARE THE MAX. CONCENTRATED LOAD WHICH ARE APPLIED SEPARATELY.

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

SUPPORT DESCRIPTION:

STRAP
1/2" ~ 24"
SA-02

SHEET 1 OF 1

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

HIRGAN ENERGY

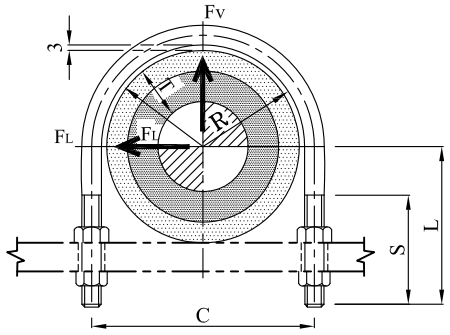
شماره پیمان:

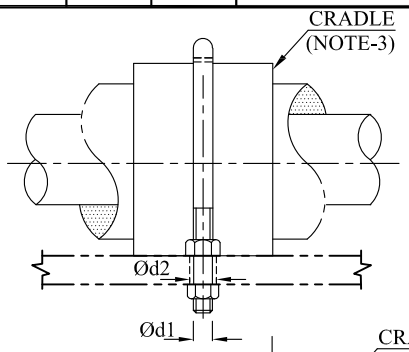
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D00	0001	DW	PI	120	PEDCO	GCS	BK

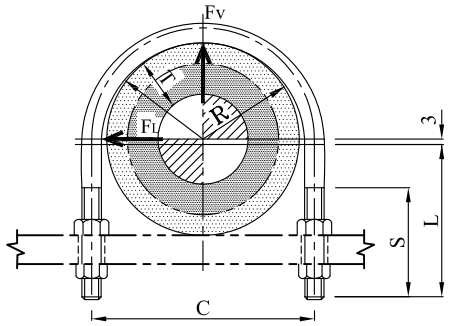
شماره صفحه: 56 از 307

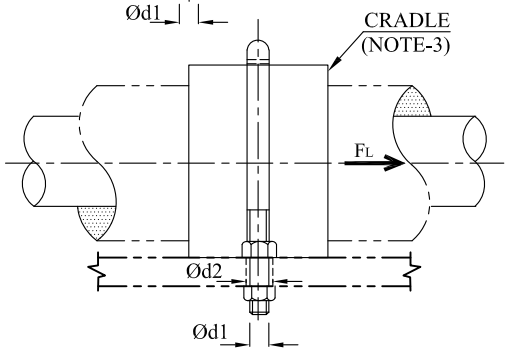




TYPE "A"

GUIDE





TYPE "B"

ANCHOR
(NOTE-1)

DIMENSION TABLE

R	Ød1	Ød2	C	L (NOTE-2)	S (NOTE-2)	ALLOWABLE LOADS (kg) FL	Fv	FA
66	M14	16	146	120	85	140	800	40
70	M14	16	154	125	85			
77	M14	16	168	130	85			
83	M16	18	182	135	85	180	1500	50
98	M16	18	212	150	85			
110	M18	20	238	165	90	200	2200	60
116	M18	20	250	175	90			
120	M18	20	258	180	90			
127	M20	22	274	185	90	240	3000	75
133	M20	22	286	190	90			
140	M20	22	300	200	90			
148	M22	24	318	205	90	280	4000	85
160	M22	24	342	215	90			
165	M22	24	352	220	90			
170	M22	24	362	225	90			
177	M24	26	378	235	90	300	5200	90
183	M24	26	390	245	100			
190	M24	26	404	255	100			
198	M24	26	420	260	100			
210	M24	26	444	275	100			
215	M27	29	457	285	115	320	6500	100
227	M27	29	481	295	115			
233	M27	29	493	300	115			
240	M27	29	507	310	115			
248	M27	29	523	320	115			
260	M27	29	547	330	115			
265	M27	29	557	340	115			
290	M30	32	610	370	130	350	8000	110
315	M30	32	660	395	130			
340	M30	32	710	420	130			
365	M33	35	763	445	130	380		
390	M33	35	813	470	130			
415	M33	35	863	495	130			

NPS MARK:(2)

NPS MARK	INS. THK. / CRADLE THK. / PIPE SIZE(D)	R 25-50 T=50	51-100 T=100	101-151 T=150	151-200 T=200	201-250 T=250
0A	1/2"	66	116	165	–	–
0B	3/4"	66	116	165	–	–
01	1"	70	120	170	–	–
1A	1 1/2"	77	127	177	227	–
02	2"	83	133	183	233	–
03	3"	98	148	198	248	–
04	4"	110	160	210	260	–
06	6"	140	190	240	290	–
08	8"	165	215	265	315	365
10	10"	190	240	290	340	390
12	12"	215	265	315	365	415

INSULATION THK. MARK: (3)

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

INDICATION:

SA - 03 - [ ][ ][ ] – [ ]

(1) (2) (3)

1-TYPE MARK
2-NPS MARK
3-INSULATION THK. 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 DETAIL OF CRADLE SEE (G-04) .
4- ALLOWABLE LOADS HAVE BEEN CALCULATED BASED ON u=0.3, ALSO "Fv","FL" AND "FA" ARE THE MAX. CONCENTRATED LOADS WHICH ARE APPLIED SEPARATELY.

MATERIAL :

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

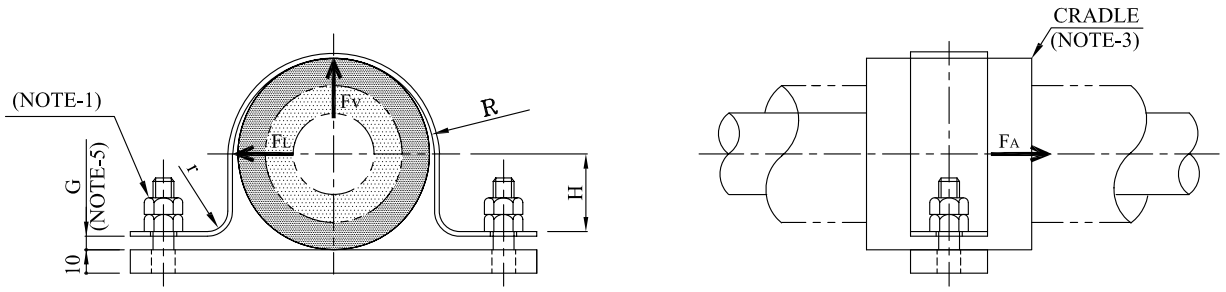
SUPPORT DESCRIPTION:

U-BOLT
(COLD INSULATION) 1/2" ~ 12"
SA-03

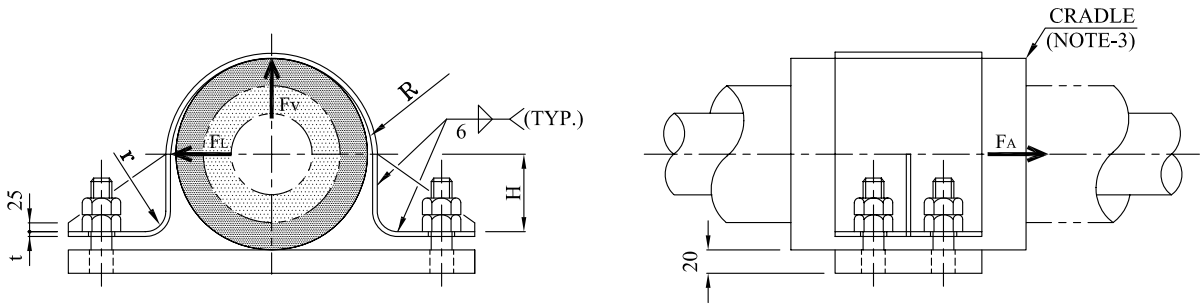
SHEET 1 OF 1

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: 57 از 307

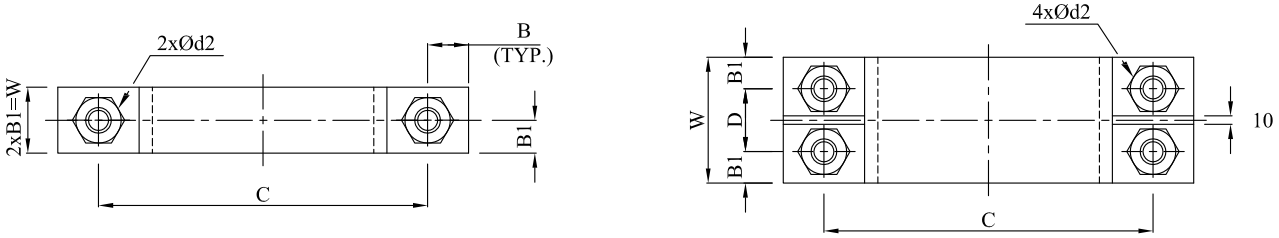
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



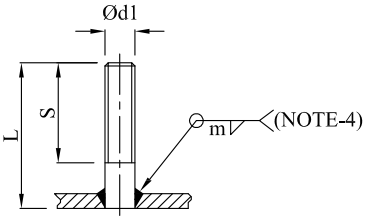
R=170 & SMALLER



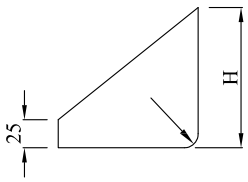
R=177 & LARGER



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 LOAD 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:

A283 Gr.C BOLT & NUT : A325

SUPPORT DESCRIPTION:

TIGHT STRAP
(COLD INSULATION) 1"~16"
SA-04

SHEET 1 OF 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	D00

DIMENSION TABLE

R	C	B	t	r	H	W	B1	D	Ød2	Md1 x L x S	G	ALLOW. LOADS (kg) FL	Fv	FA
70	235	30	8	9	48	80	40	–	18	M16x70x60	10			
78	245	30	8	9	56	80	40	–	18	M16x70x60	10		400	20
84	260	30	8	9	62	80	40	–	18	M16x70x60	10			
98	290	30	8	9	76	132	66	–	18	M16x70x60	10	110		
111	315	30	8	9	89	132	66	–	18	M16x70x60	10		500	40
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			
148	415	35	10	15	124	132	66	–	22	M20x85x70	10	150	700	50
164	445	35	10	15	140	132	66	–	22	M20x85x70	10			
170	460	35	10	15	146	132	66	–	22	M20x85x70	10			
177	485	50	10	15	154	132	41	50	22	M20x85x70	10	240		
188	500	50	10	15	160	132	41	50	22	M20x85x70	10			
191	520	50	10	15	166	132	41	50	22	M20x85x70	10		1500	120
198	535	50	10	15	174	180	65	50	22	M20x85x70	10			
216	570	50	10	18	187	180	65	50	22	M20x85x70	10	160		
227	590	60	10	18	199	180	65	50	22	M20x85x70	15			
234	630	60	12	18	200	180	50	80	26	M24x100x80	15			
238	640	60	12	18	207	180	50	80	26	M24x100x80	15	340		160
241	655	60	12	18	209	180	50	80	26	M24x100x80	15			
248	670	60	12	18	217	230	60	110	26	M24x100x80	15		2300	
257	685	60	12	18	226	230	60	110	26	M24x100x80	15	270		180
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			
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		2900	
341	900	75	15	25	301	230	55	123	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	320		200
381	1050	75	15	25	343	250	60	130	32	M30x115x95	20			
391	1100	75	15	25	351	250	60	130	32	M30x115x95	20			
407	1150	75	15	25	368	250	60	130	32	M30x115x95	20		2000	
416	1200	75	15	25	377	250	60	130	32	M30x115x95	20			
432	1250	75	15	25	393	280	80	130	32	M30x115x95	20			
457	1300	75	15	25	418	280	80	130	32	M30x115x95	20			

NPS MARK:(1)

NPS MARK	INS. THK. / CRADLE THK. / PIPE SIZE(D)	R 25-50 T=50	51-100 T=100	101-150 T=150	151-200 T=200	201-250 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	257	407	457

INSULATION THK. MARK: (2)

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

INDICATION:

SA - 04 – [ ][ ] – [ ]

(1) (2)

1-NPS MARK
2-INSULATION THK. MARK

NOTE:

SUPPORT DESCRIPTION:

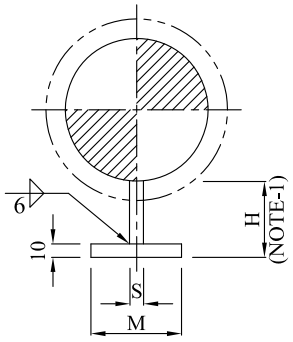
TIGHT STRAP
(COLD INSULATION) 1"~16"
SA-04

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

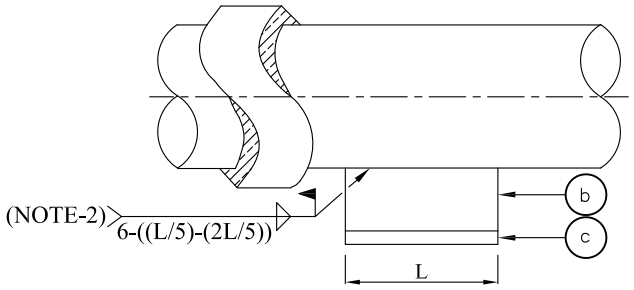
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

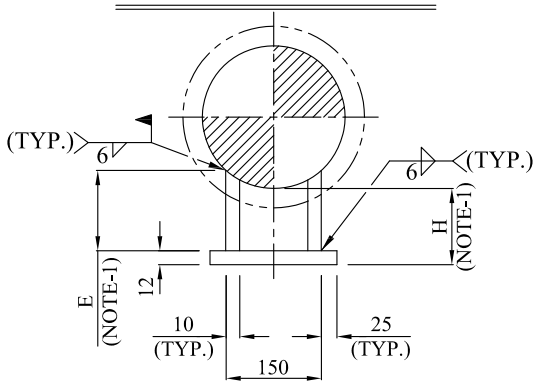
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

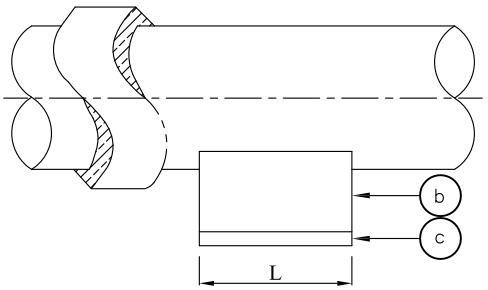


1/2" ~ 2" : M = 100 , S = 8
3" ~ 6" : M = 150 , S = 10



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

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		

LENGTH MARK:(4)

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

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

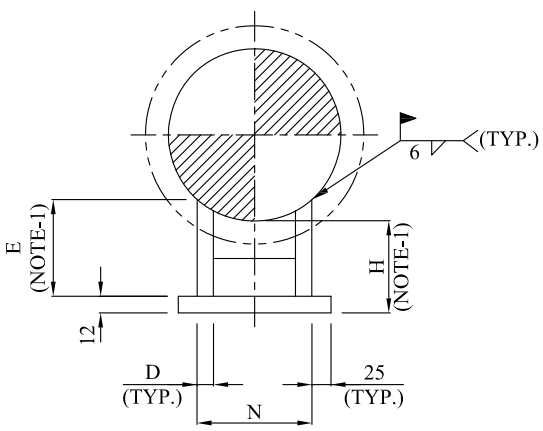
1-MATERIAL MARK
2-NPS MARK
3-HEIGHT MARK
4-LENGTH MARK

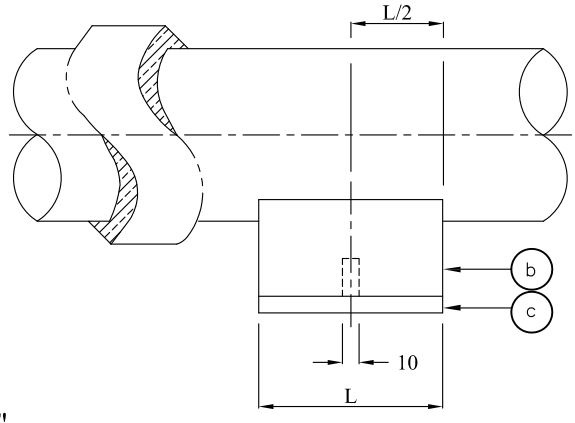
NOTE:
1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
2- THIS TYPE OF WELDING IS USED FOR PIPES WITH NPS 1/2"~2",NPS 3"~6" CONTINUOUS WELDING SHALL BE PERFORMED.
3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

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

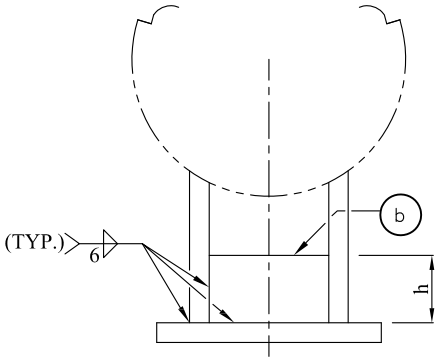
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 60 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00





16" ~ 28"



DETAIL

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

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
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
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:

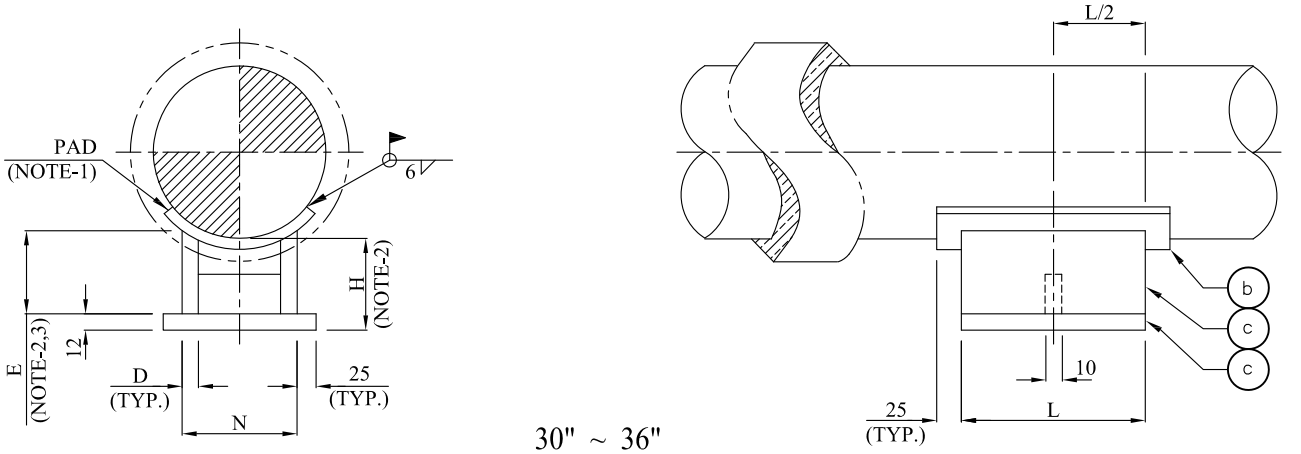
SLIDE SHOE
(CS-WITHOUT PWHT) 16"~28"
SB-01

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

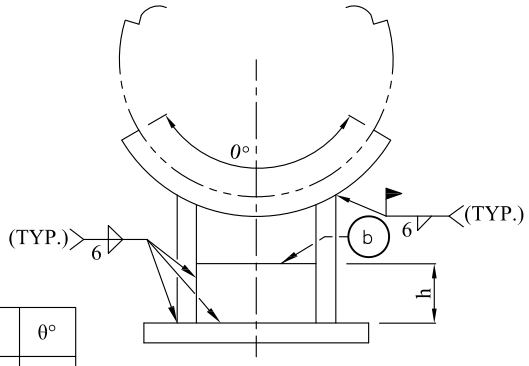
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



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	0°
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
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED			

LENGTH MARK:(4)

MARK	L
3	300
4	400
5	500
6	600

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 CALCULATION 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 (φ=6mm) SHALL BE PROVIDED FOR PADS.

SUPPORT DESCRIPTION:

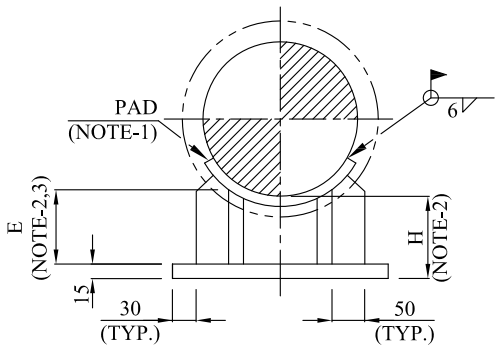
SLIDE SHOE
(CS-WITHOUT PWHT) 30"~36"
SB-01

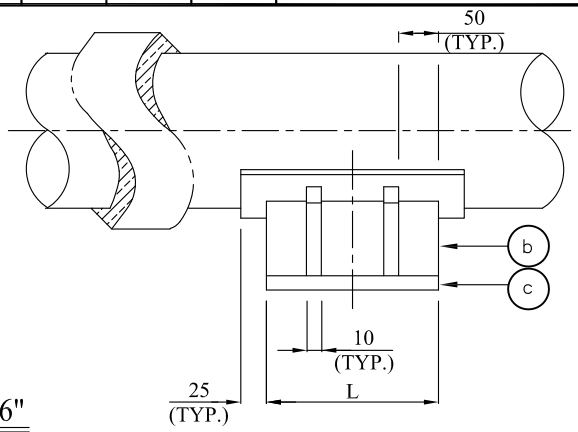
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00

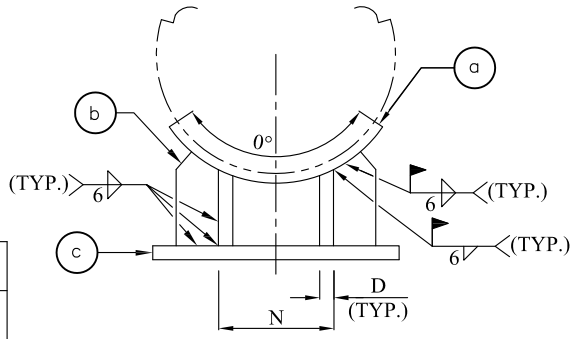




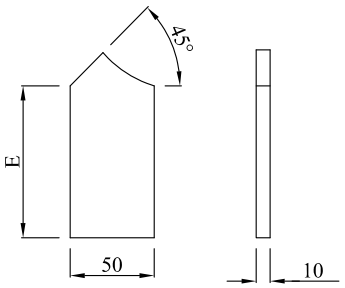
38" ~ 56"

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 FOR 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			

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		

LENGTH MARK:(4)

MARK	L
4	400
5	500
6	600
7	700

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 CALCULATION 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 (φ=6mm) SHALL BE PROVIDED FOR PADS.

SUPPORT DESCRIPTION:

SLIDE SHOE
(CS-WITHOUT PWHT) 38"~56"
SB-01

SHEET 4 OF 4

NISOC

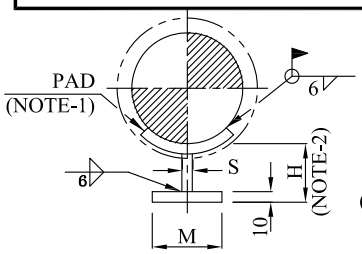
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

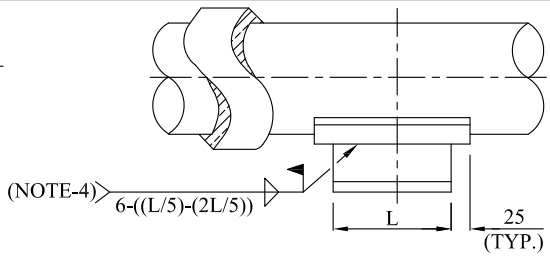
PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

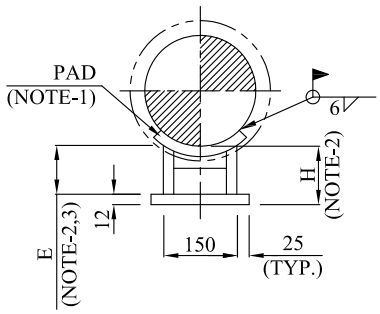
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

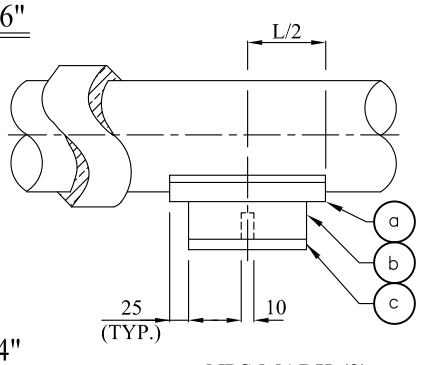




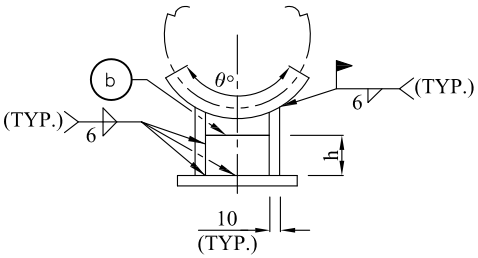
1/2" ~ 2" : M=100, S=8
3" ~ 6" : M=150, S=10



1/2" ~ 6"



8" ~ 14"



DETAIL OF PAD

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	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	

LENGTH MARK:(4)

MARK	L
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
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED			

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.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- DIMENSION "E" HAS BEEN CALCULATION 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",NPS 3"~6" CONTINUOUS WELDING SHALL BE PERFORMED.
5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
6- WEEP HOLE (φ=6mm) SHALL BE PROVIDED FOR PADS.

SUPPORT DESCRIPTION:

SLIDE SHOE
(CS-WITH PWHT, AS, SS) 1/2"~14"
SB-02

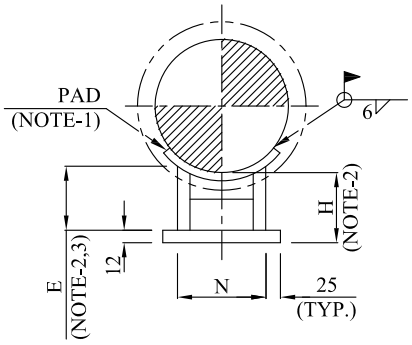
SHEET 1 OF 3

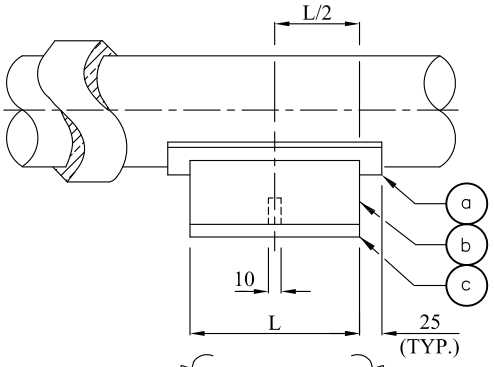
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

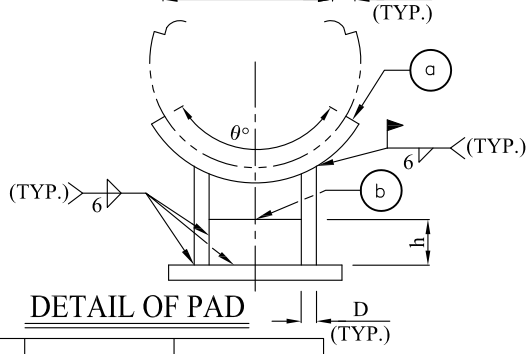
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00





16" ~ 36"



DETAIL OF PAD

D
(TYP.)

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
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED			

LENGTH MARK:(4)

MARK	L
3	300
4	400
5	500
6	600

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:

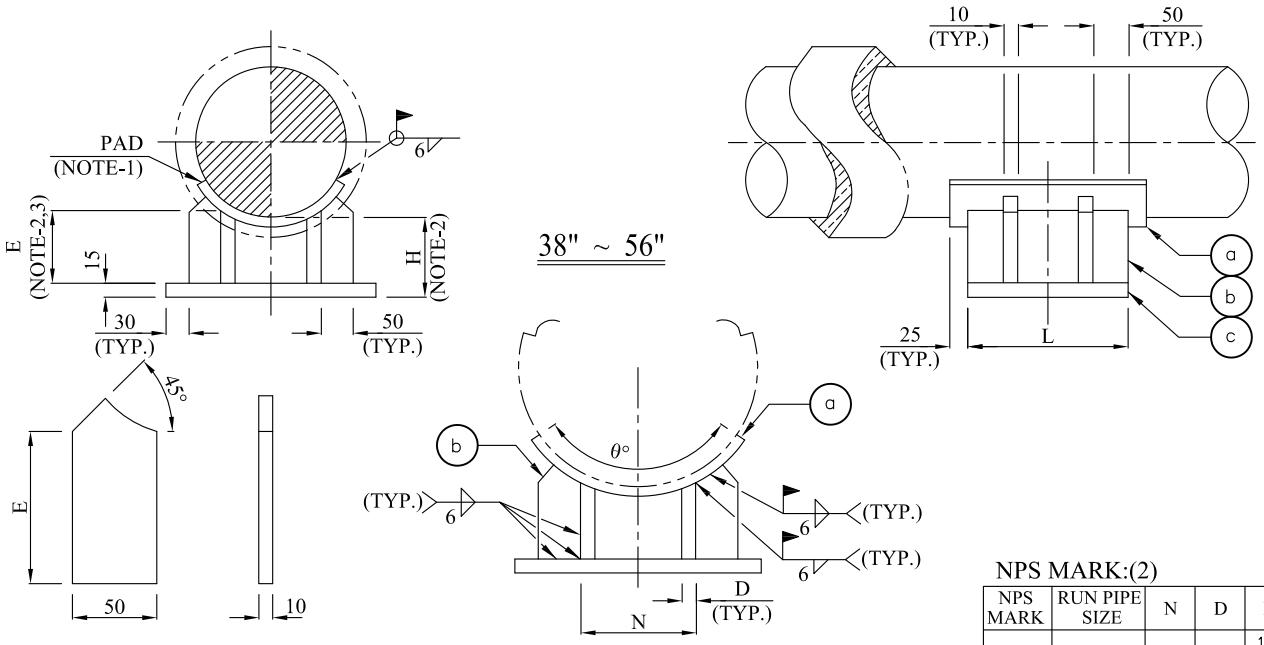
1- PAD (MATERIAL@) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- DIMENSION "E" HAS BEEN CALCULATION BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED WITH RESPECT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

SUPPORT DESCRIPTION:

SLIDE SHOE
(CS-WITH PWHT, AS, SS) 16"~36"
SB-02

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: 65 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



DETAIL OF STIFFENER

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		

DETAIL OF PAD

LENGTH MARK:(4)

MARK	L
4	400
5	500
6	600
7	700

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°
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	
				150	297	

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.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- DIMENSION "E" HAS BEEN CALCULATION 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 (φ=6mm) SHALL BE PROVIDED FOR PADS.

SUPPORT DESCRIPTION:

SLIDE SHOE
(CS-WITH PWHT, AS, SS) 38"~56"
SB-02

SHEET 3 OF 3

NISOC

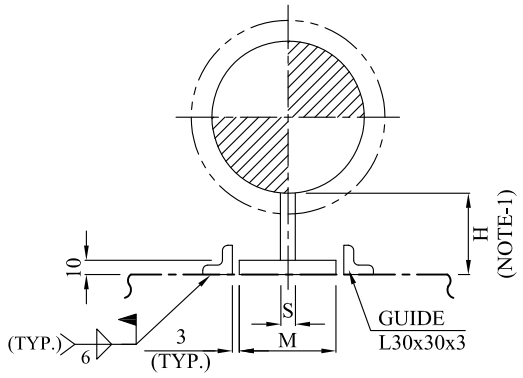
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سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO
HIRGAN ENERGY

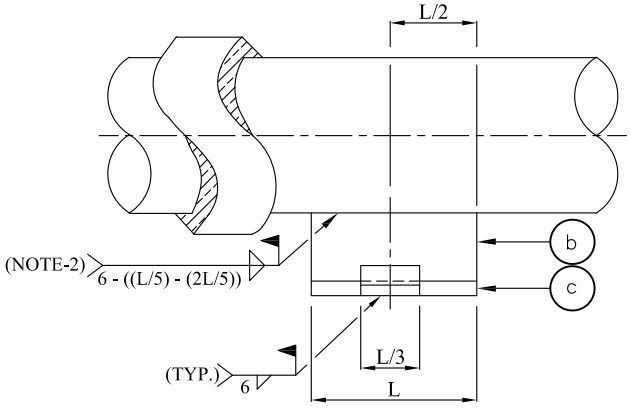
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

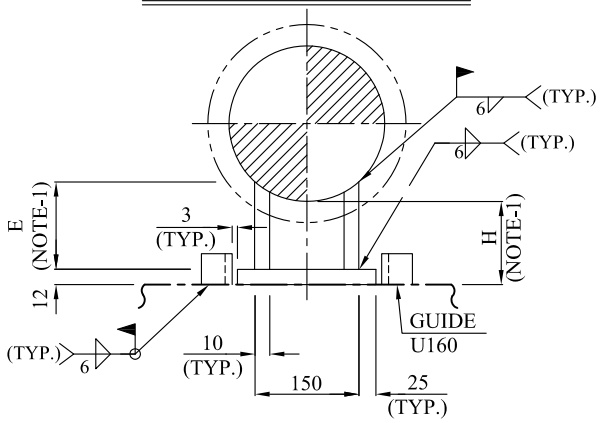
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

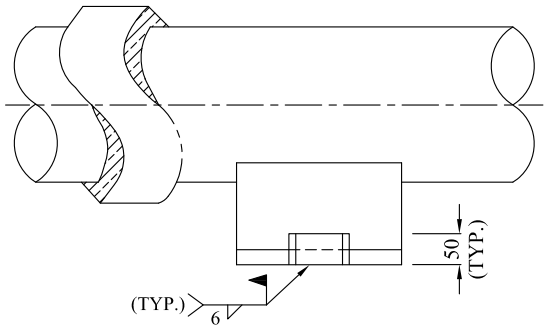


1/2" ~ 2" : M = 100 , S = 8
3" ~ 6" : M = 150 , S = 10



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	THERAML MOVEMENT
1	100	UP TP 40mm
2	200	41mm TO 75mm
3	300	76mm TO 125mm
4	400	126mm TO 175mm
5	500	176mm TO 230mm
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED		

HEIGHT MARK:(3)

MARK	H
1	100
2	150
3	200

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 - 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",NPS 3"~6" CONTINUOUS WELDING SHALL BE PERFORMED.
3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

MATERIAL:

STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:

GUIDE SHOE
(CS-WITHOUT PWHT) 1/2"~14"
SB-03

SHEET 1 OF 4

NISOC

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

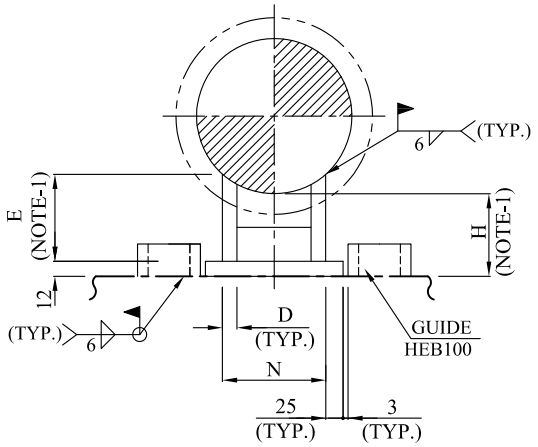
PEDCO

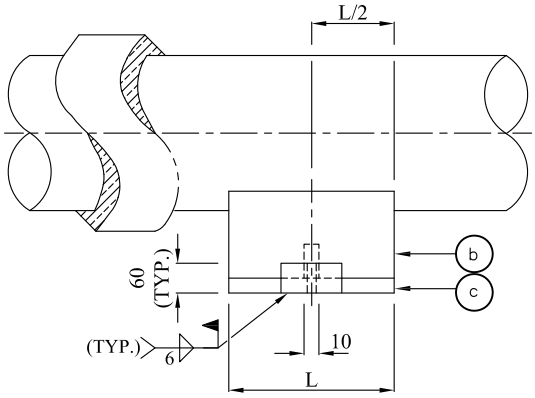
HIRGAN ENERGY

شماره پیمان:
053-073-9184

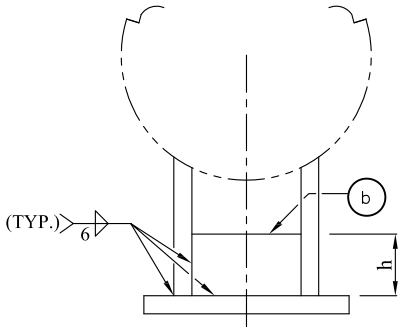
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00





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		

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
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED			

LENGTH MARK:(4)

MARK	L
3	300
4	400
5	500
6	600

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

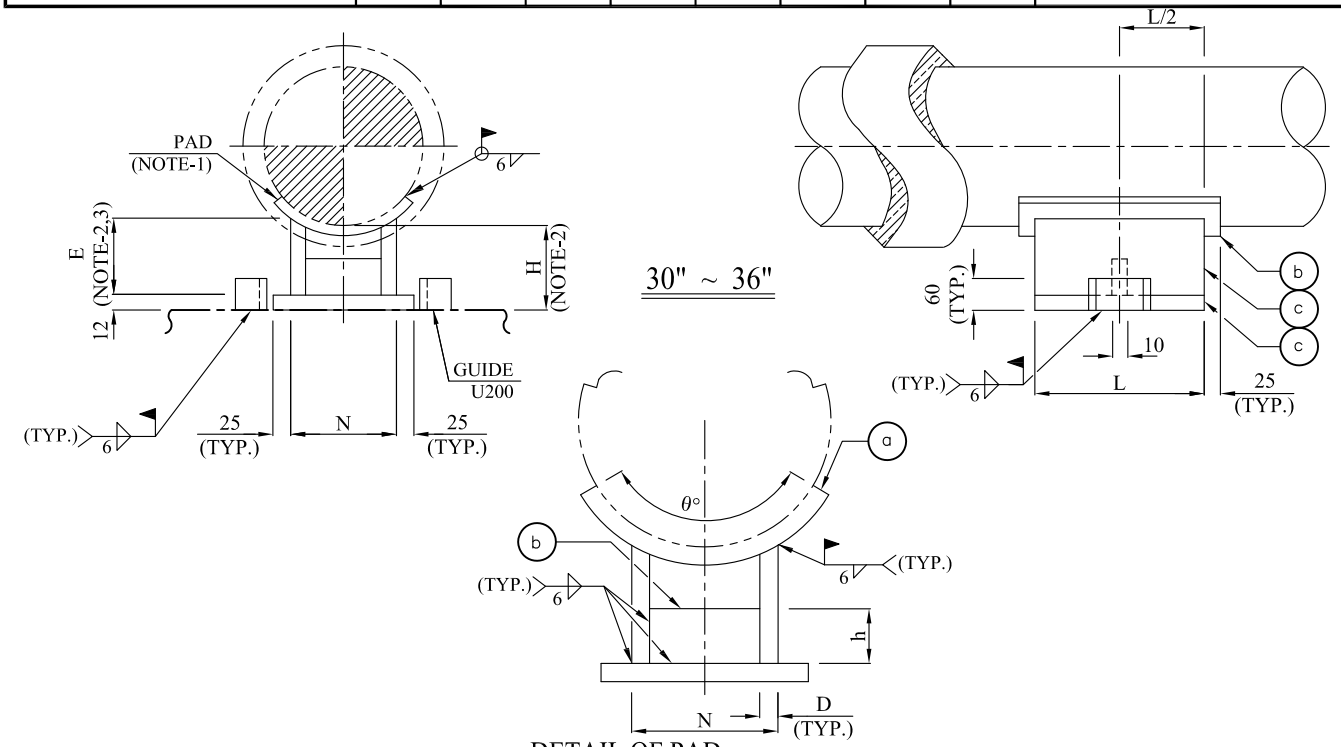
SUPPORT DESCRIPTION:
GUIDE SHOE
(CS-WITHOUT PWHT) 16"~28"
SB-03

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	D00



DETAIL OF PAD

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.	h
1	100	UP TO 75mm	50
2	150	76mm TO 125mm	100
3	200	126mm TO 175mm	150
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED			

LENGTH MARK:(4)

MARK	L
3	300
4	400
5	500
6	600

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			

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 CALCULATION 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 (φ=6mm) SHALL BE PROVIDED FOR PADS.

MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:

GUIDE SHOE
(CS-WITHOUT PWHT) 30"~36"
SB-03

SHEET 3 OF 4

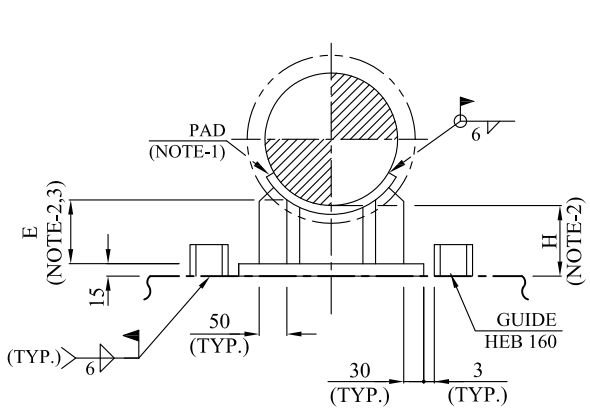
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

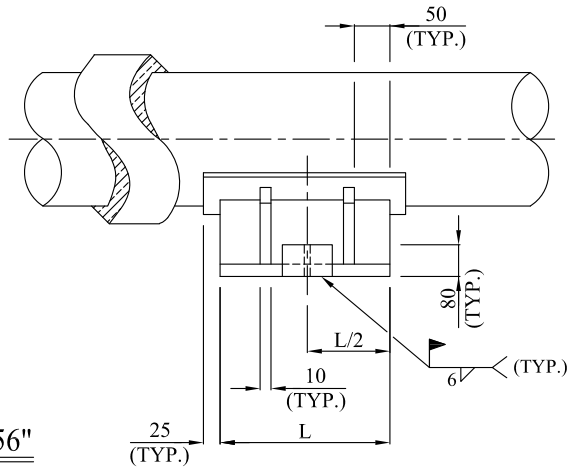
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 69 از 307

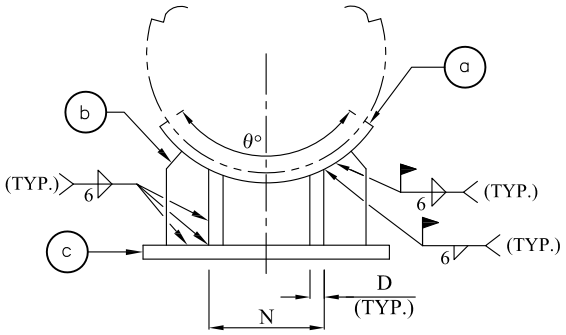




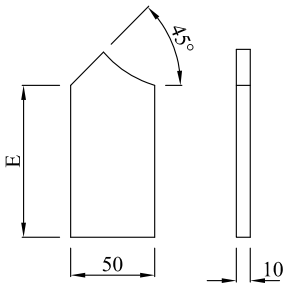
38" ~ 56"

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



DETAIL OF PAD



DETAIL FOR 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			

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
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED			

LENGTH MARK:(4)

MARK	L
3	300
4	400
5	500
6	600

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 CALCULATION 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 (φ=6mm) SHALL BE PROVIDED FOR PADS.

MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:

GUIDE SHOE
(CS-WITHOUT PWHT) 38"~56"
SB-03

SHEET 4 OF 4

NISOC

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

PEDCO

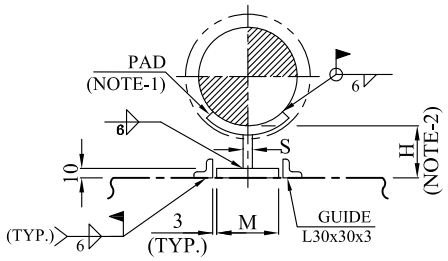
HIRGAN ENERGY

شماره پیمان:
053-073-9184

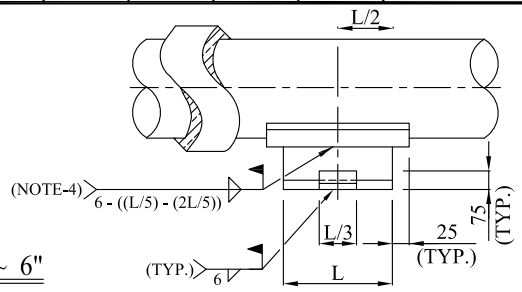
STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D00	0001	DW	PI	120	PEDCO	GCS	BK

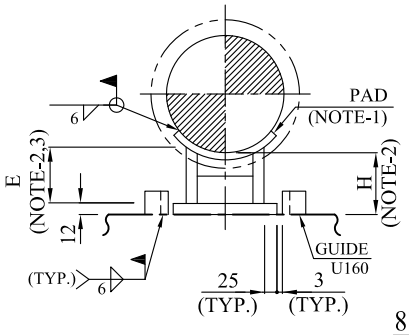
شماره صفحه: 70 از 307

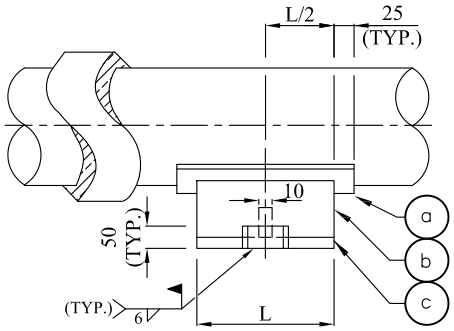


1/2" ~ 2" : M=100, S=8
3" ~ 6" : M=150, S=10

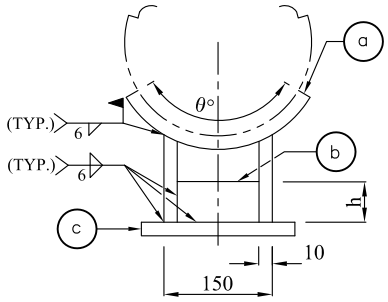


1/2" ~ 6"





8" ~ 14"



DETAIL OF PAD

LENGTH MARK:(4)

MARK	L
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
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.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- DIMENSION "E" HAS BEEN CALCULATION 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",NPS 3"~6" CONTINUOUS WELDING SHALL BE PERFORMED.
5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
6- WEEP HOLE (φ=6mm) SHALL BE PROVIDED FOR PADS.

MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:

GUIDE SHOE
(CS-WITH PWHT, AS, SS) 1/2"~14"
SB-04

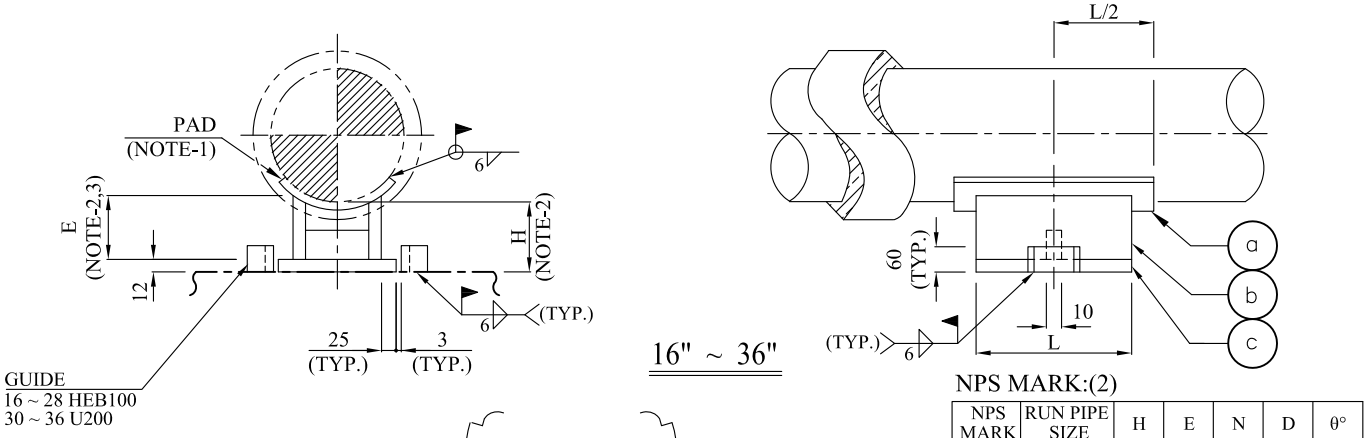
SHEET 1 OF 3

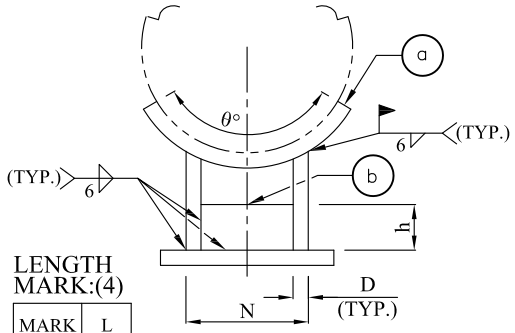
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 71 از 307

053-073-9184

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00





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			

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
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED			

LENGTH MARK:(4)

MARK	L
3	300
4	400
5	500
6	600

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.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- DIMENSION "E" HAS BEEN CALCULATION 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 (φ=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 OF 3

NISOC

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

PEDCO

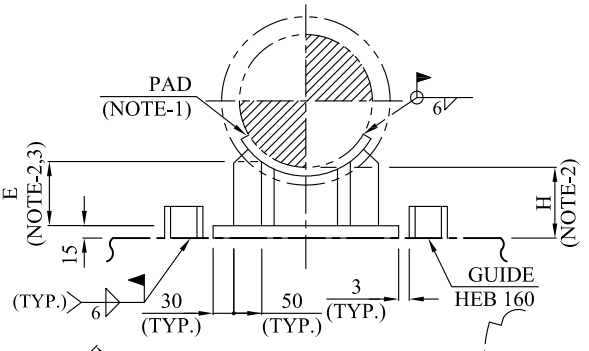
HIRGAN ENERGY

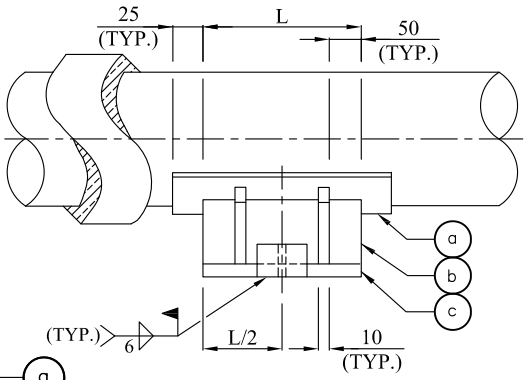
شماره پیمان:
053-073-9184

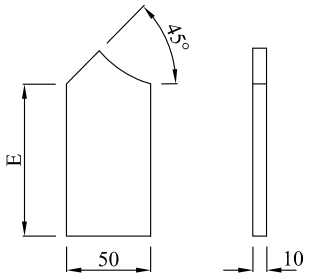
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 72 از 307

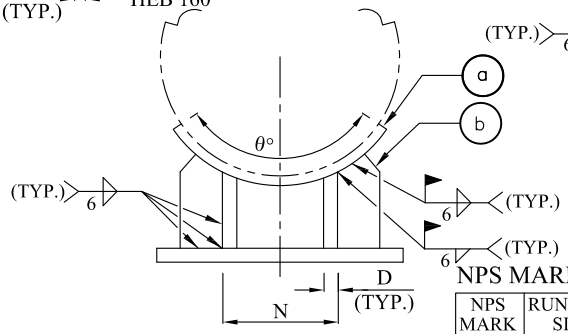






DETAIL OF STIFFENER

38" ~ 56"



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	
				150	297	

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
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED			

LENGTH MARK:(4)

MARK	L
3	300
4	400
5	500
6	600

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

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.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- DIMENSION "E" HAS BEEN CALCULATION 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 (φ=6mm) SHALL BE PROVIDED FOR PADS.

MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:

GUIDE SHOE
(CS-WITH PWHT, AS, SS) 38" ~ 56"
SB-04

SHEET 3 OF 3

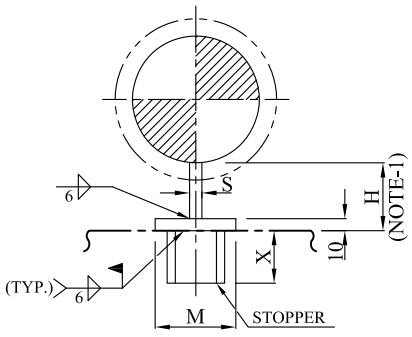
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

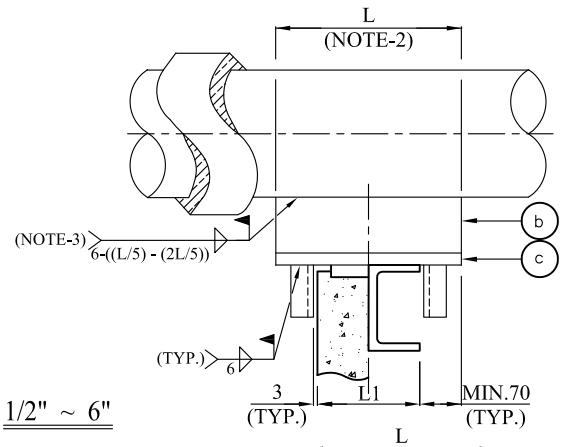
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

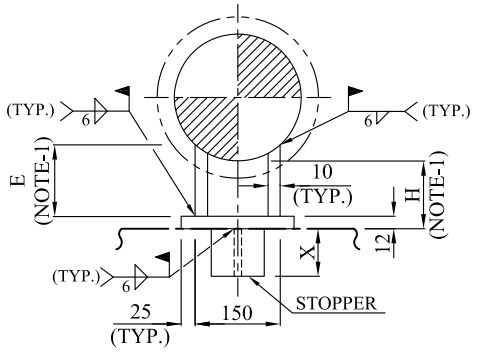
شماره صفحه: 73 از 307

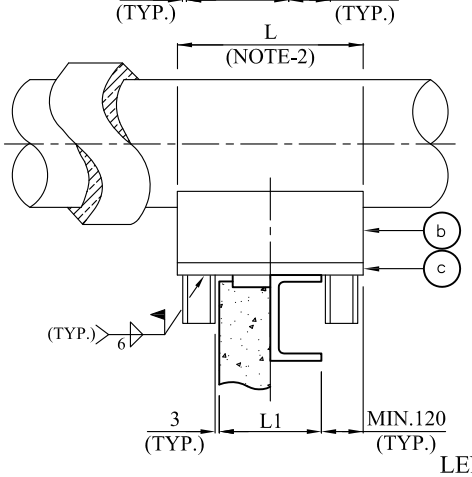


1/2" ~ 2" : M = 100 , S = 8
3" ~ 6" : M = 150 , S = 10



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

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		

LENGHT MARK:(4)

MARK	H
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 - 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- THIS TYPE OF WELDING IS USED FOR PIPES WITH NPS 1/2"~2",NPS 3"~6" CONTINUOUS WELDING SHALL BE PERFORMED. 3- THE SHOE LENGTH SHALL BE DECIDE DEPENDING ON WIDTH OF EXISTING BEAM "L".
4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

MATERIAL:

STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:

STOP SHOE
(CS-WITH PWHT) 1/2"~14"
SB-05

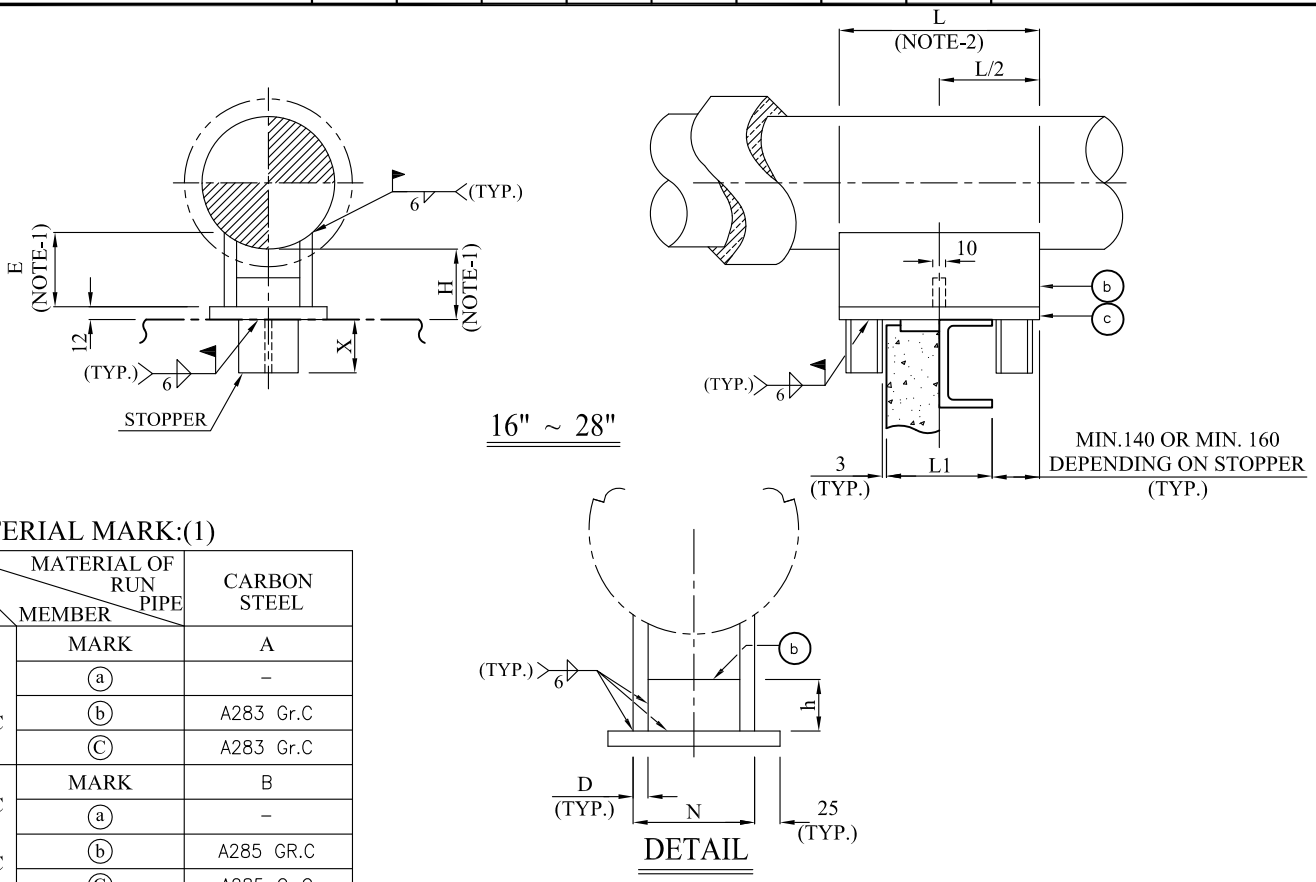
SHEET	1 OF 4

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	D00



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

LENGHT MARK:(4)

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

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		

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.
3- THE SHOE LENGTH SHALL BE DECIDE DEPENDING ON WIDTH OF EXISTING BEAM "L".
4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

MATERIAL:

STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:

STOP SHOE
(CS-WITH PWH, AS, SS) 16" ~ 28"
SB-05

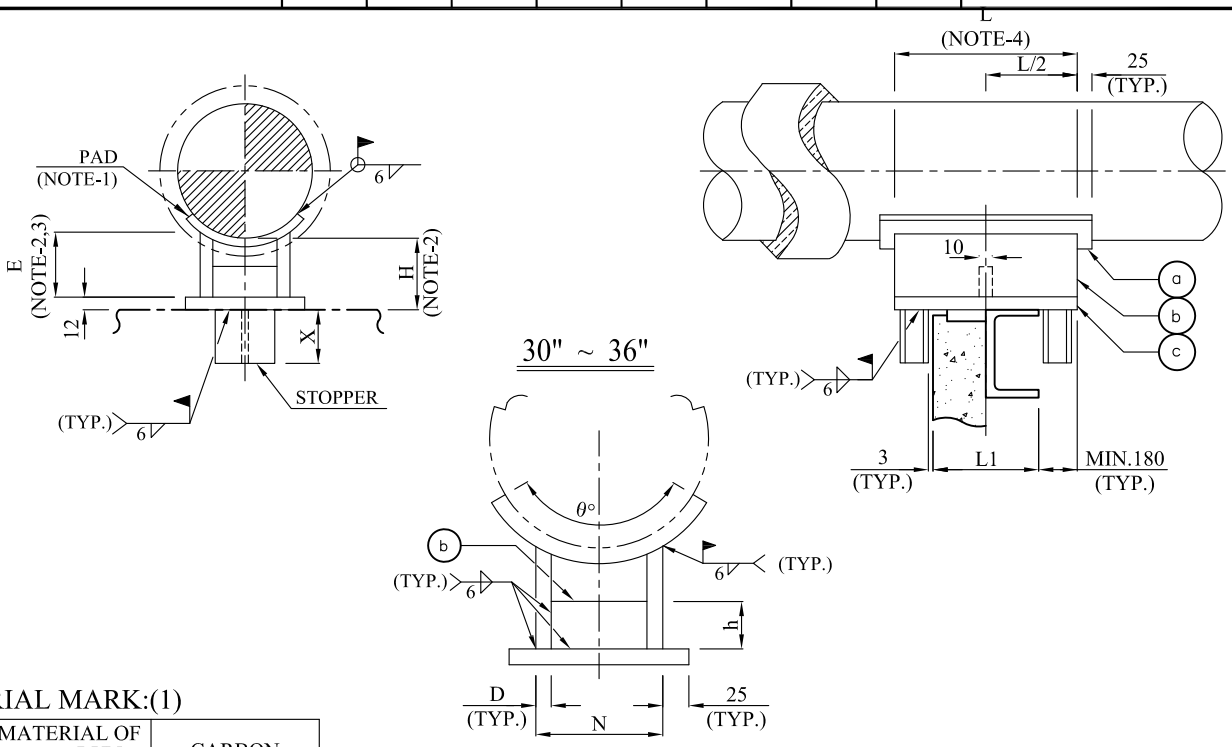
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00

شماره صفحه: 75 از 307



DETAIL OF PAD

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.	h
1	100	UP TO 75mm	50
2	150	76mm TO 125mm	100
3	200	126mm TO 175mm	150
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED			

LENGHT MARK:(4)

MARK	L
5	500
6	600
7	700
8	800

STOPPER MARK:(5)

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

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				

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 CALCULATION BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED WITH RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.
4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM "L".
5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
6- WEEP HOLE (φ=6mm) SHALL BE PROVIDED FOR PADS.

MATERIAL:
STANDARD PROFILE: ASTM A36

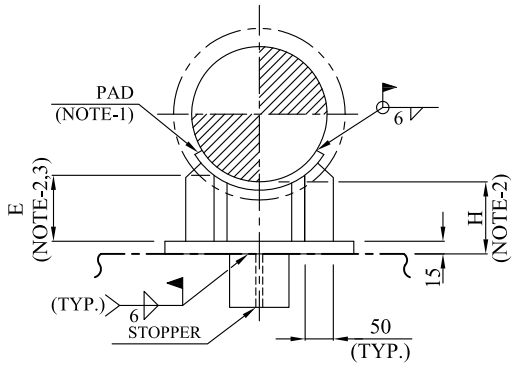
SUPPORT DESCRIPTION:

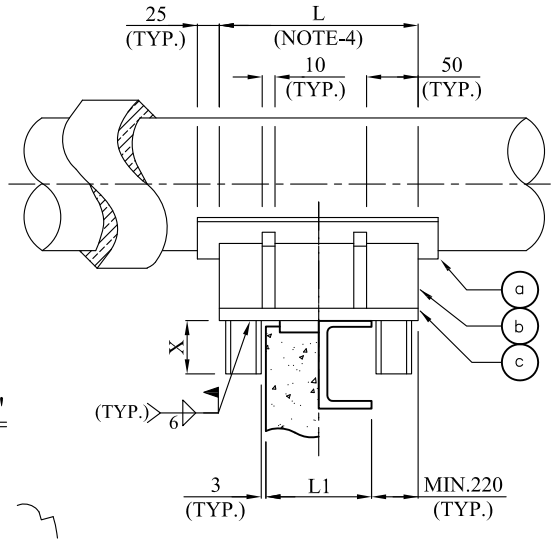
STOP SHOE
(CS-WITHOUT PWHT) 30"~36"
SB-05

SHEET	3 OF 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: 76 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00

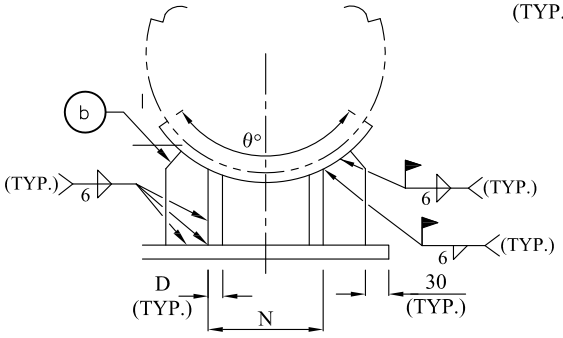


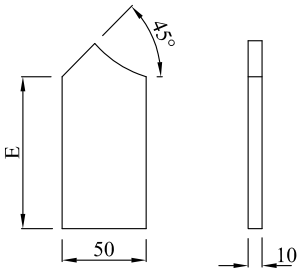


38" ~ 56"

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





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				

DETAIL OF PAD

DETAIL OF STIFFENER

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		

LENGHT MARK:(4)

MARK	L
5	500
6	700
7	800
8	800
9	900

STOPPER MARK:(5)

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

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 CALCULATION 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",NPS 3"~6" CONTINUOUS WELDING SHALL BE PERFORMED.
5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
6- WEEP HOLE (φ=6mm) SHALL BE PROVIDED FOR PADS.

MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:

STOP SHOE
(CS-WITHOUT PWHT) 38"~56"
SB-05

SHEET	4 OF 4

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک

سطح‌الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO

HIRGAN ENERGY

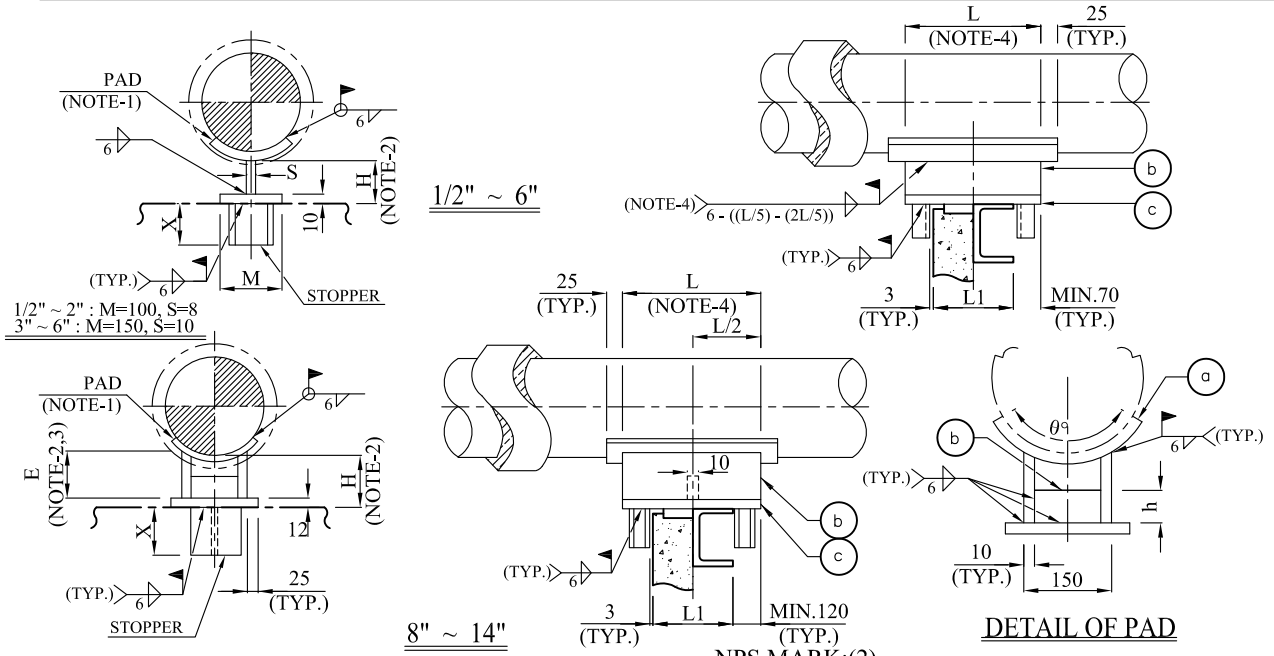
شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D00	0001	DW	PI	120	PEDCO	GCS	BK

شماره صفحه: 77 از 307



LENGHT 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
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 - 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.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H"AN "E" SHALL BE ADJUSTED AT FIELD.
3- DIMENSION "E" HAS BEEN CALCULATION BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED WITH RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.
4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM "L".
5- THIS TYPE OF WELDING IS USED FOR PIPES WITH NPS 1/2"~2",NPS 3"~6" CONTINUOUS WELDING SHALL BE PERFORMED.
6- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
7- WEEP HOLE (φ=6mm) SHALL BE PROVIDED FOR PADS.

MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:

STOP SHOE
(CS-WITH PWHT, AS, SS) 1/2"~14"
SB-05

SHEET 1 OF 3

NISOC

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

PEDCO

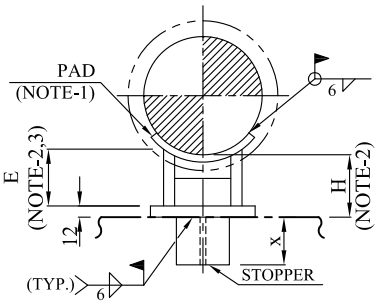
HIRGAN ENERGY

شماره پیمان:
053-073-9184

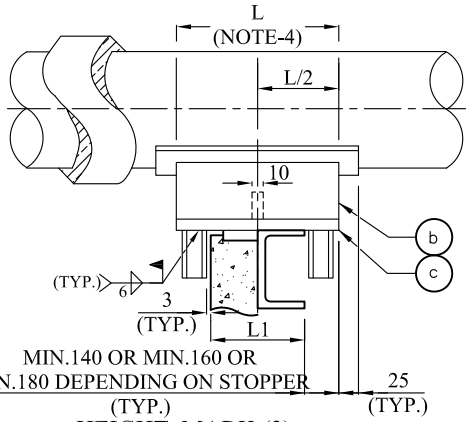
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 78 از 307

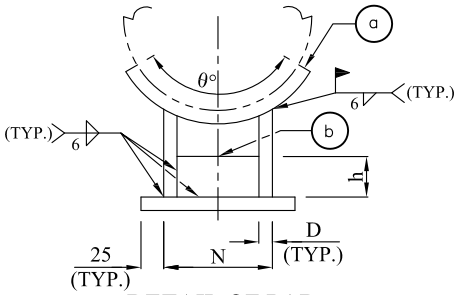


16" ~ 36"



STOPPER MARK:(5)

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



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
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

LENGHT MARK:(4)

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

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.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H"AN "E" SHALL BE ADJUSTED AT FIELD.
3- DIMENSION "E" HAS BEEN CALCULATION BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED WITH RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.
4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM "L".
5- THIS TYPE OF WELDING IS USED FOR PIPES WITH NPS 1/2"~2",NPS 3"~6" CONTINUOUS WELDING SHALL BE PERFORMED.
6- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
7- WEEP HOLE (φ=6mm) SHALL BE PROVIDED FOR PADS.

MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:

STOP SHOE
(CS-WITH PWHT, AS, SS) 16"~36"
SB-05

SHEET 2 OF 3

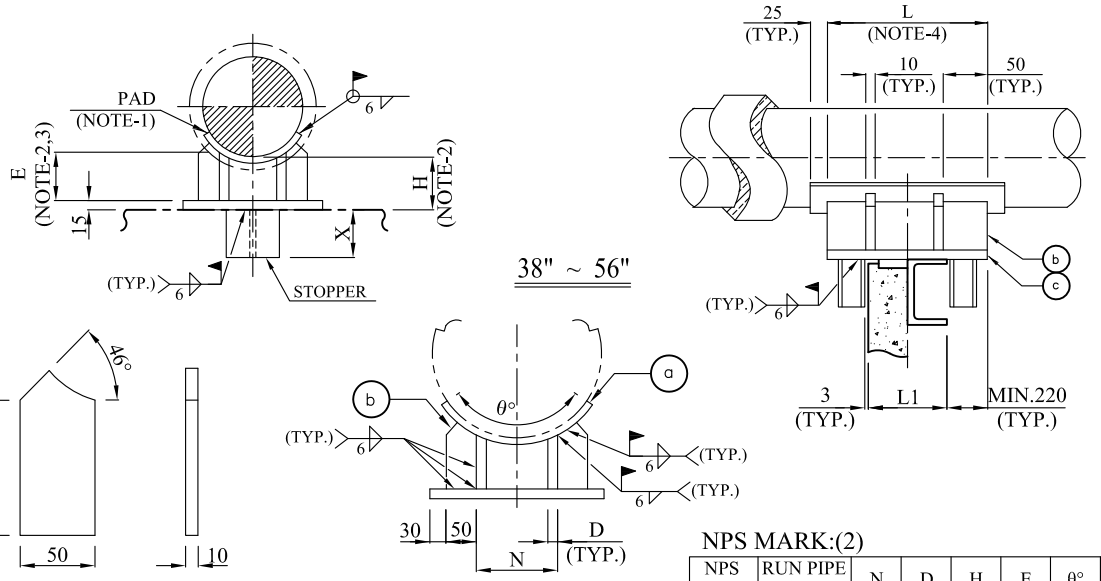
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00

شماره صفحه: 79 از 307



DETAIL OF STIFFENER

DETAIL OF PAD

STOPPER MARK:(5)

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

LENGHT 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
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED		

MATERIAL MARK:(1)

DES. TEMP / MEMBER \ 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

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		
				150	297		

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

MATERIAL:
STANDARD PROFILE: ASTM A36

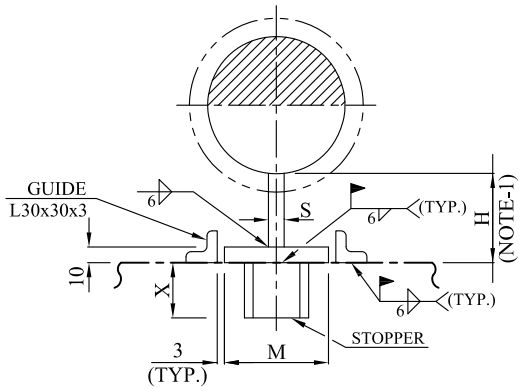
SUPPORT DESCRIPTION:

STOP SHOE
(CS-WITH PWHT, AS, SS) 38"~56"
SB-05

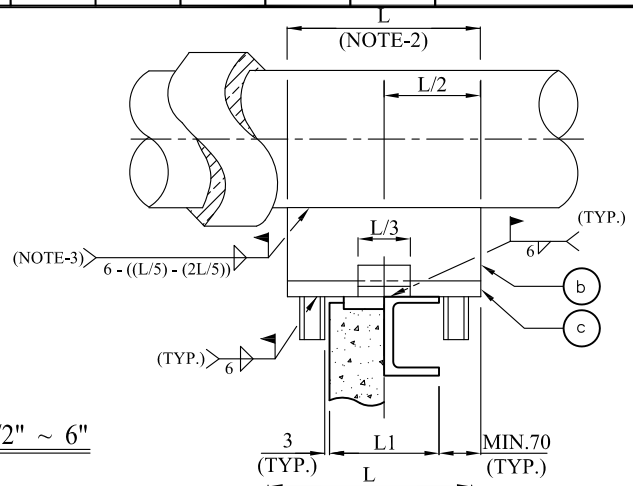
SHEET 3 OF 3

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

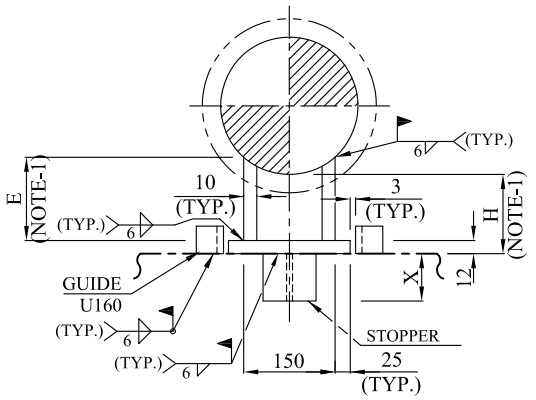
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 80 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



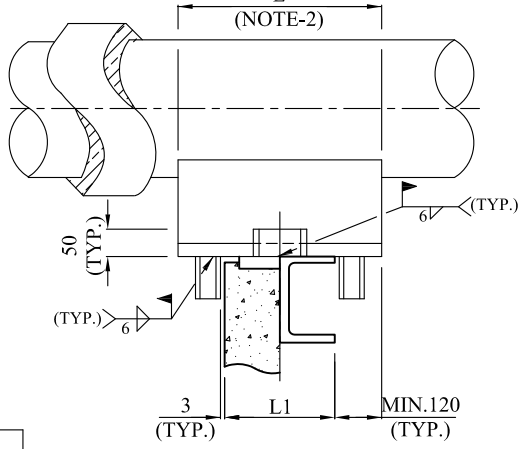
1/2" ~ 2" : M=100, S=8
3" ~ 6" : M=150, S=10



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

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		

LENGHT 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 - 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 DECIDE DEPENDING ON WIDTH OF EXISTING BEAM "L".
3- THIS TYPE OF WELDING IS USED FOR PIPES WITH NPS 1/2"~2",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

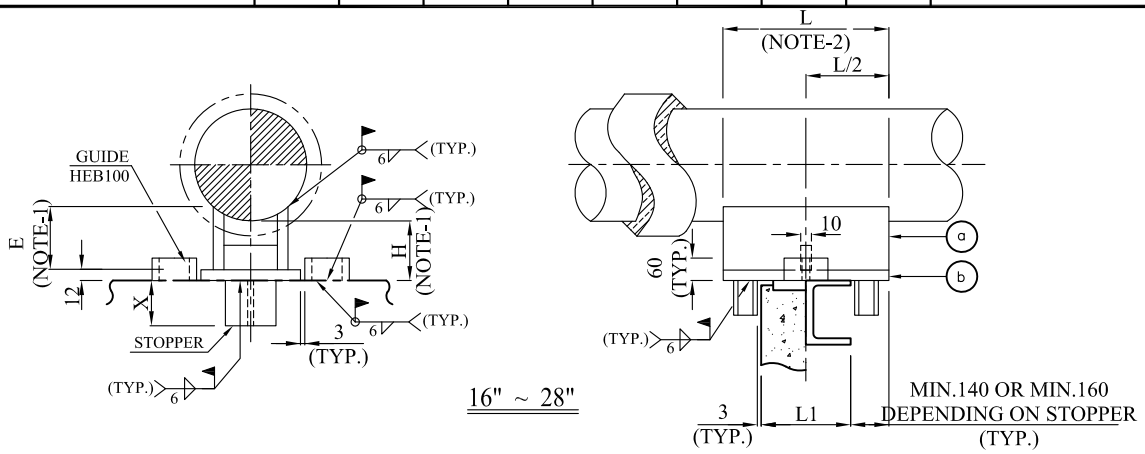
SHEET	1 OF 4

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

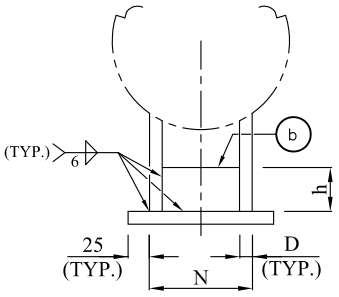
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



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

LENGHT 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
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 DECIDE DEPENDING ON WIDTH OF EXISTING BEAM "L".
3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).

MATERIAL:

STANDARD PROFILE: ASTM A36

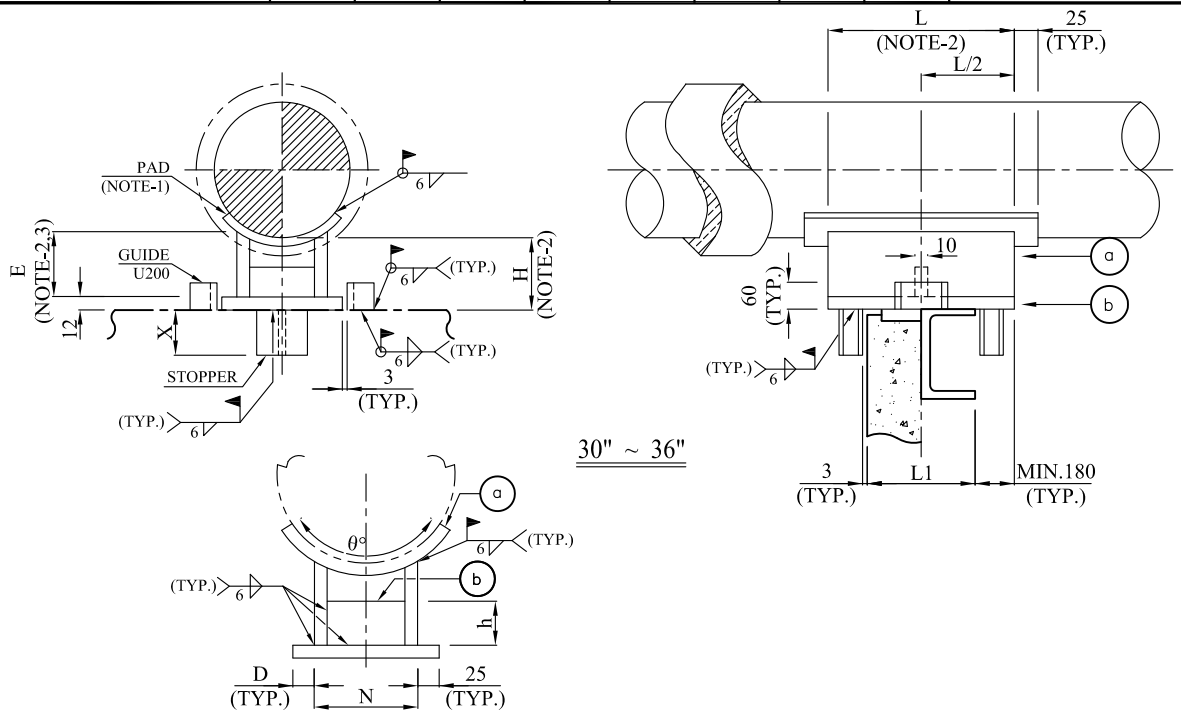
SUPPORT DESCRIPTION:

SEMI ANCHOR SHOE
(CS-WITHOUT PWHT) 16"~28"
SB-07

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض 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	D00

شماره صفحه: 82 از 307



DETAIL OF PAD

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
2	200
3	300
4	400
5	500
6	600

LENGHT MARK:(4)

MARK	L
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
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED			

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				

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 CALCULATION BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED WITH RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.
4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM "L1".
6- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
7- WEEP HOLE (ō=6mm) SHALL BE PROVIDED FOR PADS.

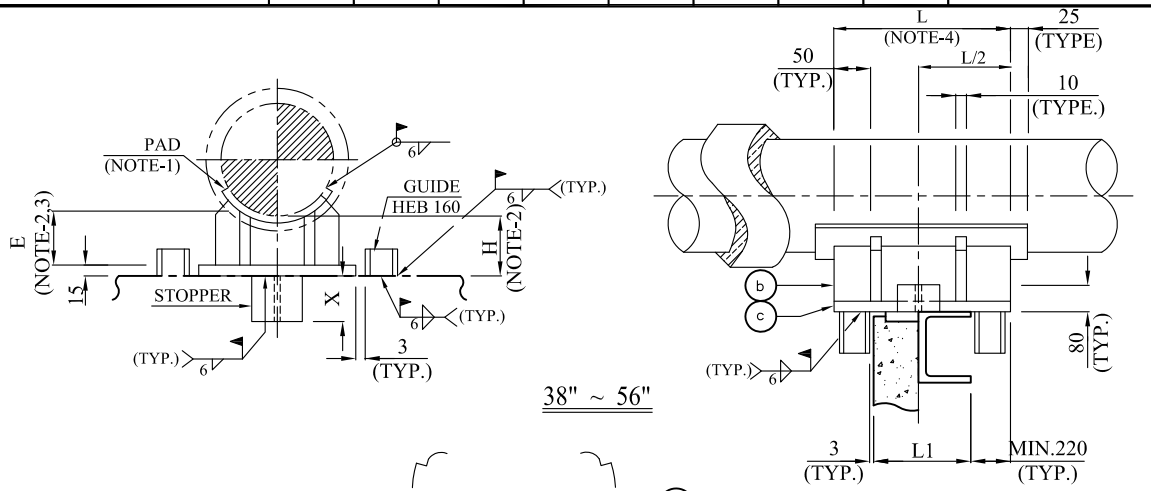
MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:

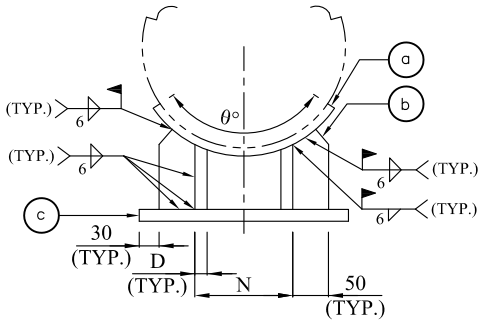
SEMI ANCHOR SHOE
(CS-WITHOUT PWHT) 30"~36"
SB-07

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

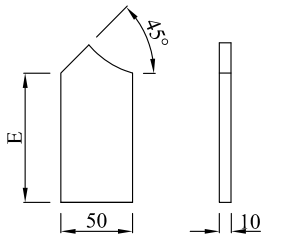
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 83 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



38" ~ 56"



DETAIL OF PAD



DETAIL OF STIFFENER

STOPPER MARK:(5)

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

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
	ⓐ	–
	ⓑ	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
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED		

LENGHT MARK:(4)

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

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 CALCULATION BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED WITH RESPECT TO ACTUAL PIPE THICKNESS AT FIELD.
4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM "L".
5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
6- WEEP HOLE (φ=6mm) SHALL BE PROVIDED FOR PADS

MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:

SEMI ANCHOR SHOE
(CS-WITHOUT PWHT 38"~56"
SB-07

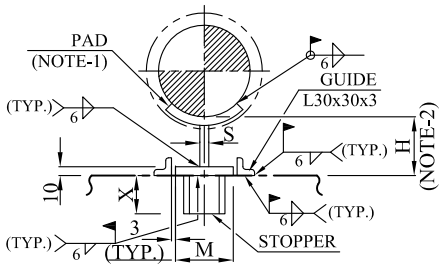
SHEET 4 OF 4

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

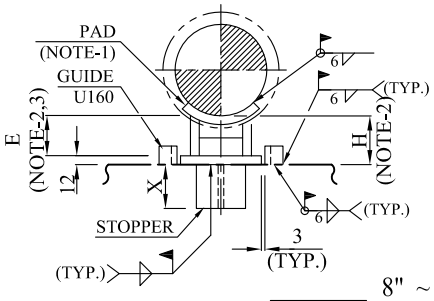
شماره پیمان: 053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

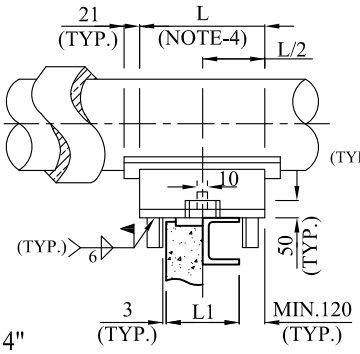
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



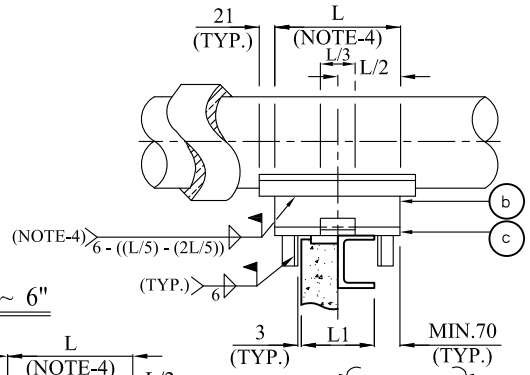
1/2" ~ 2" : M=100, S=8
3" ~ 6" : M=150, S=10

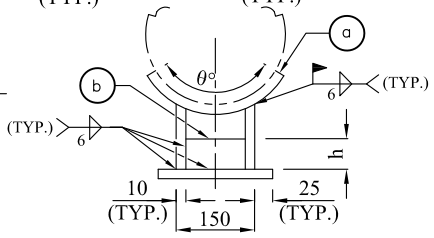


8" ~ 14"



1/2" ~ 6"





DETAIL OF PAD

LENGHT 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
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	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		

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.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- DIMENSION "E" HAS BEEN CALCULATION BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED WITH 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",NPS 3"~6" CONTINUOUS WELDING SHALL BE PERFORMED. 6- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
7- WEEP HOLE (φ=6mm) SHALL BE PROVIDED FOR PADS.

MATERIAL:
STANDARD PROFILE: ASTM A36

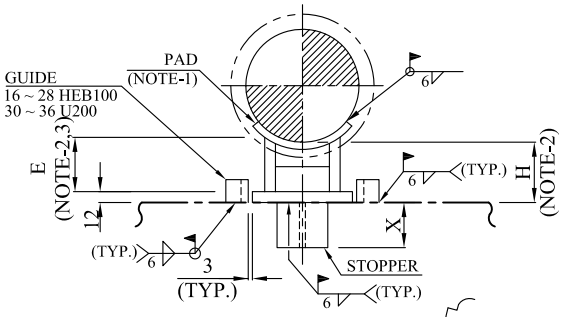
SUPPORT DESCRIPTION:

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

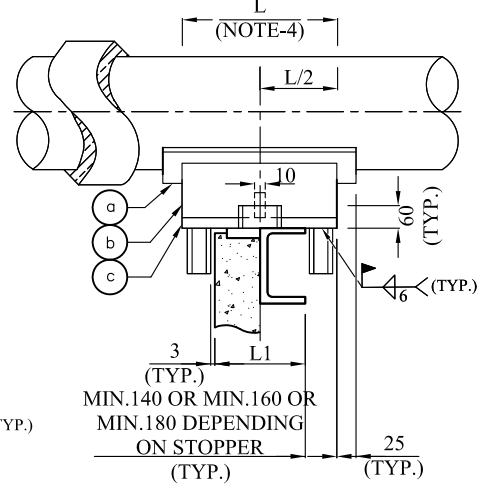
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

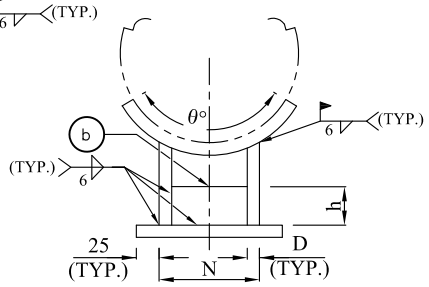
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 85 از 307



16" ~ 36"





DETAIL OF PAD

STOPPER MARK:(5)

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

LENGHT 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
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.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- DIMENSION "E" HAS BEEN CALCULATION BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED WITH 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 (φ=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

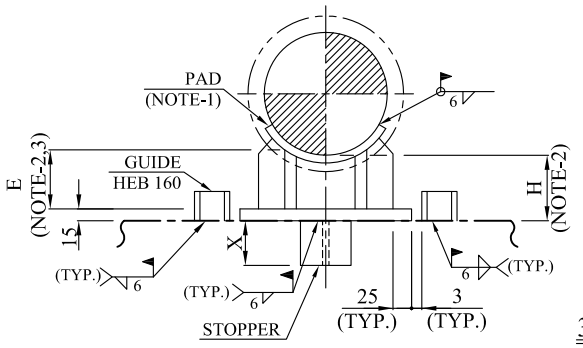
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

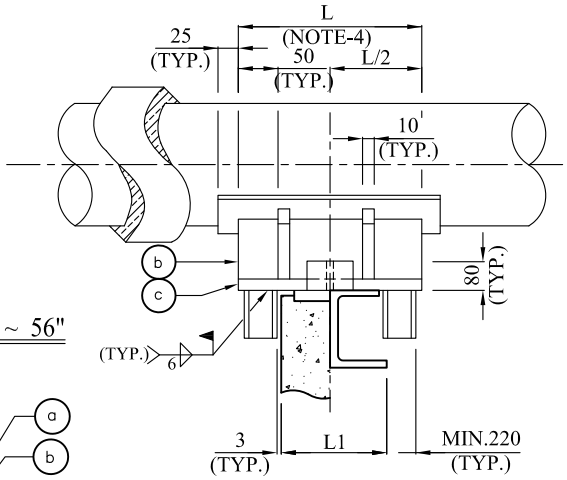
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

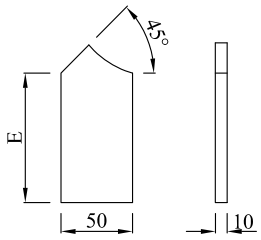
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 86 از 307

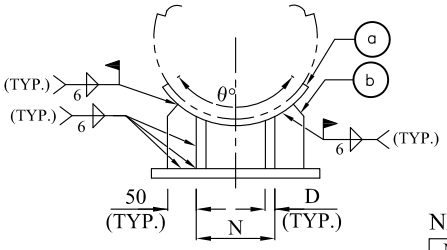




38" ~ 56"



DETAIL OF STIFFENER



DETAIL OF PAD

LENGHT 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
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED		

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		
				150	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 - 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.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- DIMENSION "E" HAS BEEN CALCULATION BASED ON PIPES WITH SCH. STD, SO THIS DIMENSION SHALL BE ADJUSTED WITH 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 (φ=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

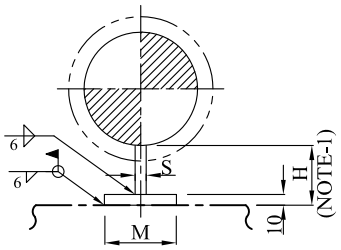
SHEET 3 OF 3

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

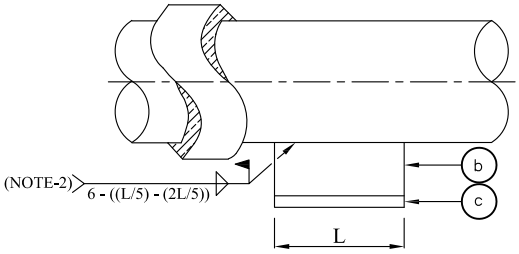
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

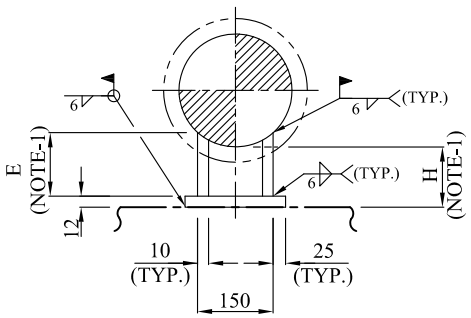
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

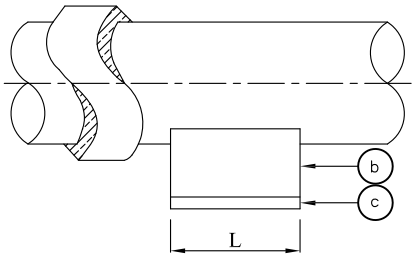


1/2" ~ 2" : M = 100 , S = 8
3" ~ 6" : M = 150 , S = 10



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 / 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

LENGHT MARK:(4)

MARK	L
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
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED		

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:

FIXED SHOE
(CS-WITHOUT PWH) 1/2"~14"
SB-09

SHEET 1 OF 1

NISOC

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

PEDCO

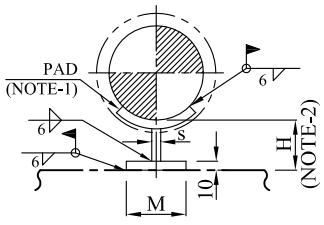
HIRGAN ENERGY

شماره پیمان:
053-073-9184

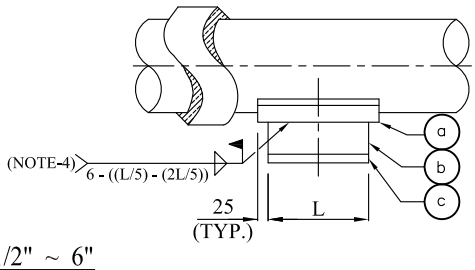
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

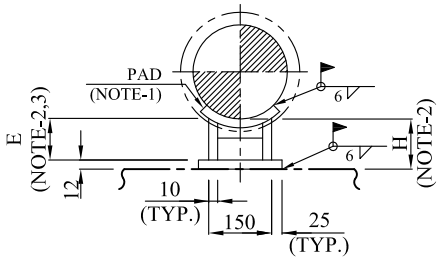
شماره صفحه: 88 از 307



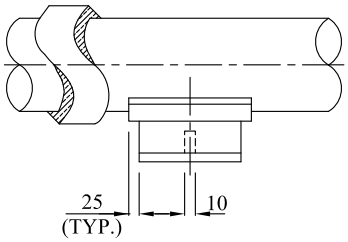
1/2" ~ 2" : M=100, S=8
3" ~ 6" : M=150, S=10

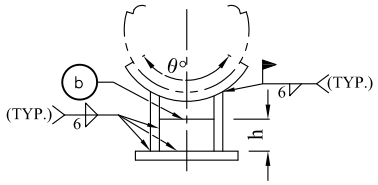


1/2" ~ 6"



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
ABOVE 175mm INSULATION THICKNESS ACTUAL HEIGHT SHALL BE CALCULATED			

LENGHT MARK:(4)

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

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 - 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.
2- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- DIMENSION "E" HAS BEEN CALCULATION 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",NPS 3"~6" CONTINUOUS WELDING SHALL BE PERFORMED.
5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-16).
6- WEEP HOLE (φ=6mm) SHALL BE PROVIDED FOR PADS.

SUPPORT DESCRIPTION:

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

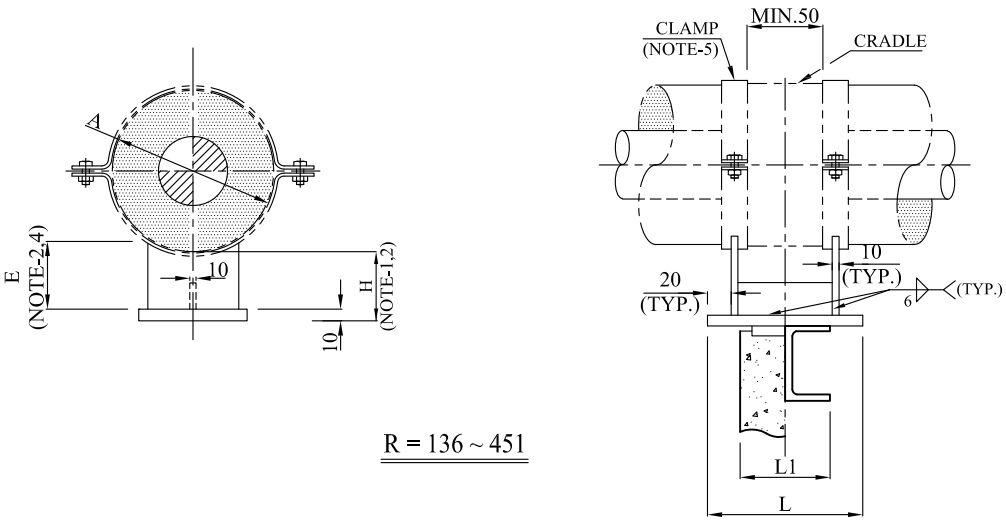
SHEET 1 OF 1

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

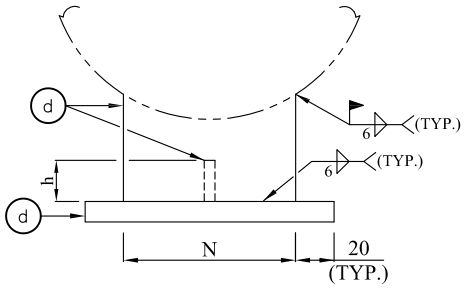
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



R = 136 ~ 451



DETAIL

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	G
ⓐ	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	120	170	220	100
163	116	166	216	
224	128	178	228	150
236	126	176	226	
251	124	174	224	
324	118	168	218	
336	117	167	217	
351	116	166	216	
451	113	163	213	

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
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 CLAMP 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 CALCULATION 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:

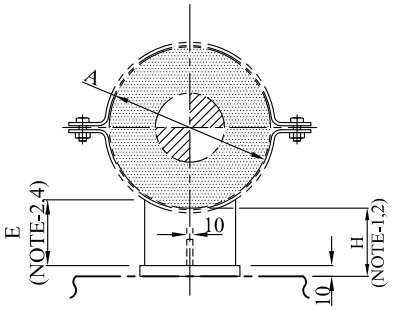
SLIDE SHOE
(COLD INSULATION) 1/2"~1 1/2"
SB-11

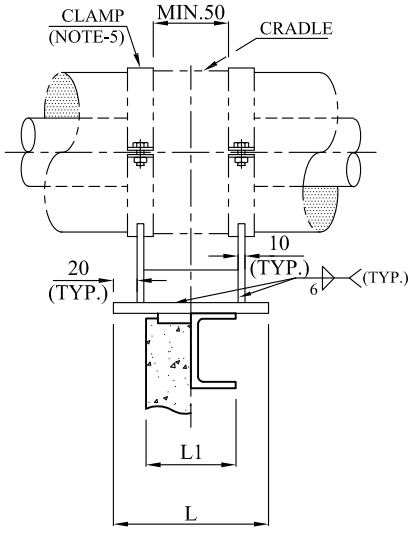
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00

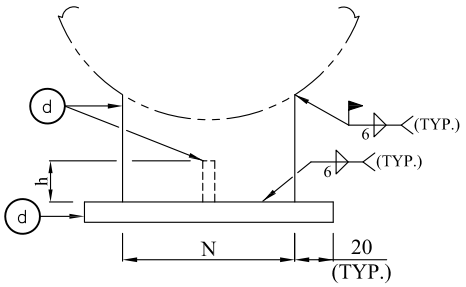




R = 163 ~ 548

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

INS. THK. MARK	COLD INS. THK.	CRADLE THK.	2"	2 1/2"	3"	4"	5"
			0A	0B	01	1A	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	–	–	–	–	–



DETAIL

MATERIAL MARK:(1)

A	E			N
	H=100	H=150	H=200	
163	140	190	240	150
192	132	182	232	
224	126	176	226	
251	123	173	223	
274	140	190	240	200
279	139	189	239	
292	138	188	238	
324	133	183	233	
351	129	179	229	
374	127	177	227	
392	126	176	226	
430	138	188	238	250
451	136	186	236	
474	134	184	234	
492	133	183	233	
530	130	180	230	
548	129	179	229	

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	G
ⓐ	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
4	400
5	500
6	600
7	700
8	800
9	900

HEIGHT MARK:(4)

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

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 CLAMP 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 CALCULATION 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.

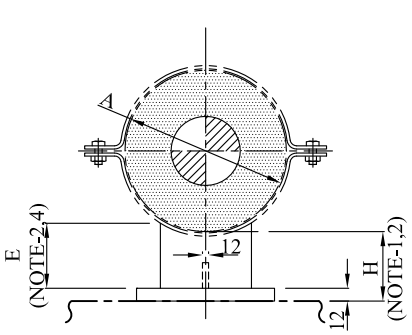
SUPPORT DESCRIPTION:

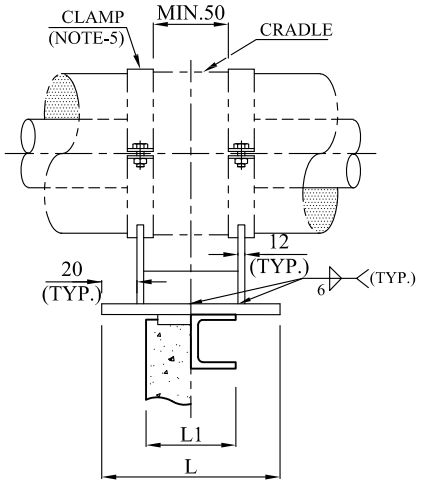
SLIDE SHOE
(COLD INSULATION) 2"~5"
SB-11

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

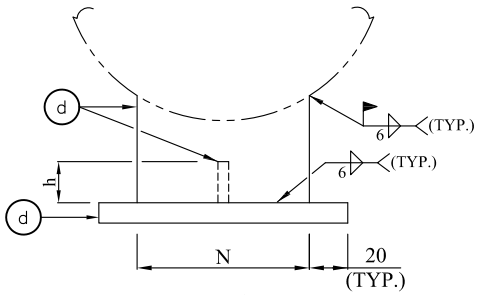
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 91 از 307





R = 274 ~ 970



DETAIL

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	-	-	-	-	-	-	-

A	E			N
	H=100	H=150	H=200	
274	138	188	238	200
324	131	181	231	
374	127	177	227	
392	126	176	226	
430	137	187	237	250
474	134	184	234	
492	132	182	232	
530	130	180	230	
578	127	177	227	
630	136	186	236	300
678	133	183	233	
730	131	181	231	
778	129	179	229	
830	137	187	237	350
870	135	185	235	
920	134	184	234	
970	132	182	232	

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	G
ⓐ	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
05	500
06	600
07	700
08	800
09	900
10	1000

HEIGHT MARK:(4)

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

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 CLAMP 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 CALCULATION 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:

SLIDE SHOE
(COLD INSULATION) 6"~18"
SB-11

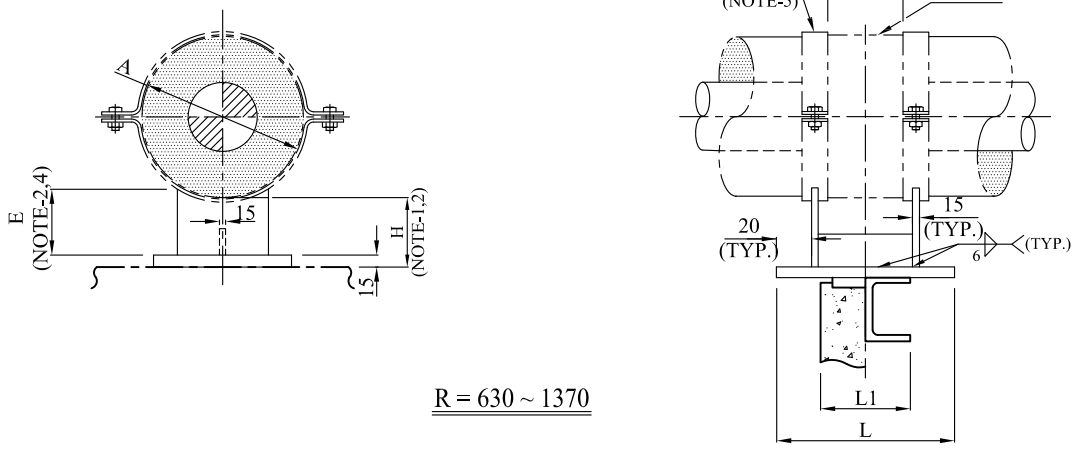
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

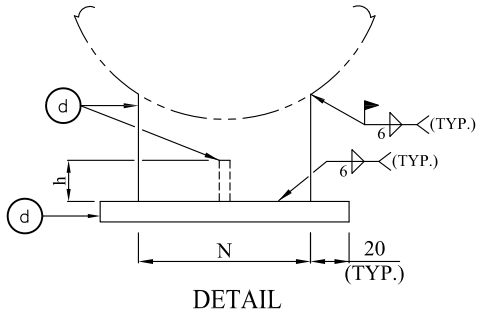
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 92 از 307



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

A	E			N
	H=100	H=150	H=200	
630	136	186	236	300
678	133	183	233	
730	131	181	231	
778	129	179	229	
830	137	187	237	350
870	135	185	235	
920	133	183	233	
970	131	181	231	
1020	139	189	239	400
1070	137	187	237	
1120	136	186	236	
1170	134	184	234	
1220	142	192	242	450
1270	140	190	240	
1320	138	188	238	
1370	137	187	237	

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	G
ⓐ	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

HEIGHT MARK:(4)

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

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 CLAMP 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 CALCULATION 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.

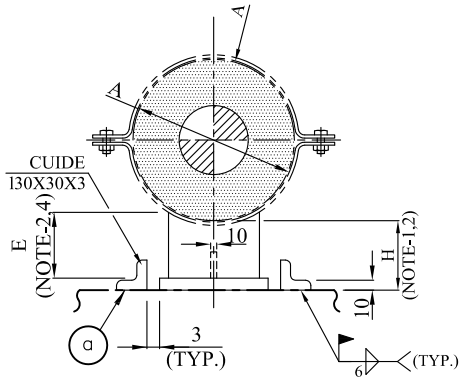
SUPPORT DESCRIPTION:

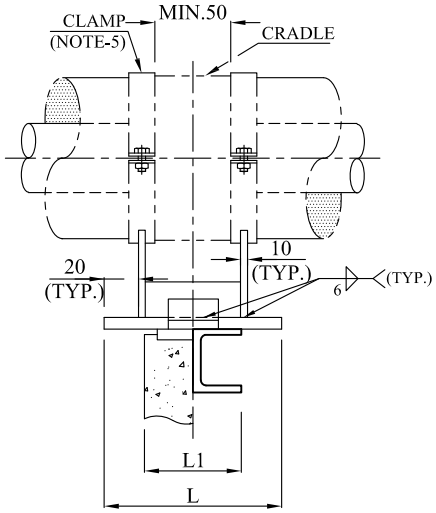
SLIDE SHOE
(COLD INSULATION) 20"~30"
SB-11

SHEET 4 OF 4

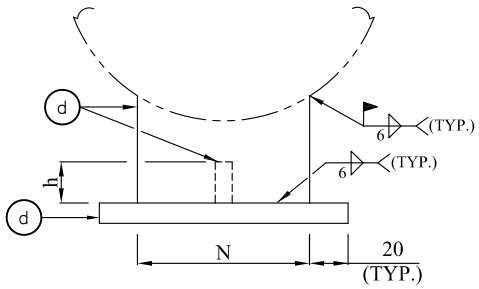
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 93 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00





R = 136 ~ 451



DETAIL

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	G
ⓐ	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
03	300
04	400
05	500
06	600
07	700
08	800

A	E			N
	H=100	H=150	H=200	
136	120	170	220	100
163	116	166	216	
224	128	178	228	150
236	126	176	226	
251	124	174	224	
324	118	168	218	
336	117	167	217	
351	116	166	216	
451	113	163	213	

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	-	-	-	-

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 CLAMP 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 CALCULATION 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:

GUIDE SHOE
(COLD INSULATION) 1/2"~1 1/2"
SB-12

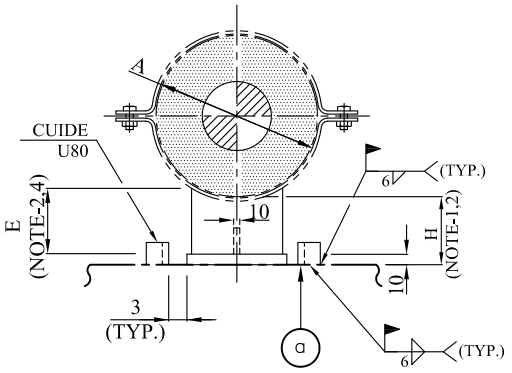
SHEET	1 OF 4

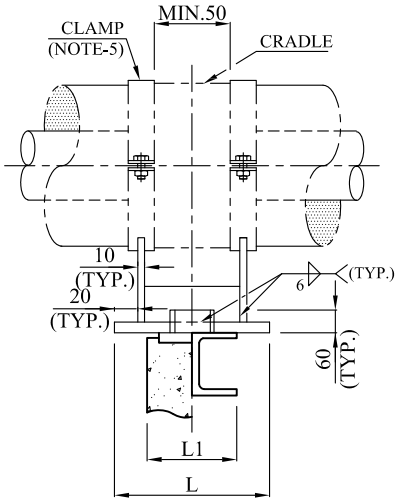
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

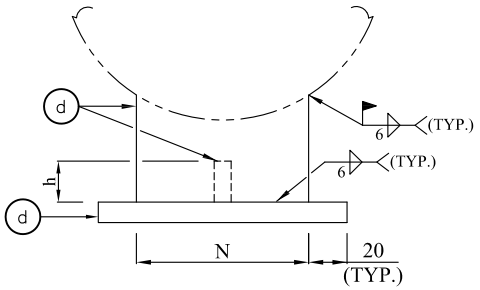
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00





R = 163 ~ 548



DETAIL

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	140	190	240	150
192	132	182	232	
224	126	176	226	
251	123	173	223	
274	140	190	240	200
279	139	189	239	
292	138	188	238	
324	133	183	233	
351	129	179	229	
374	127	177	227	
392	126	176	226	
430	138	188	238	250
451	136	186	236	
474	134	184	234	
492	133	183	233	
530	130	180	230	
548	129	179	229	

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	G
ⓐ	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
4	400
5	500
6	600
7	700
8	800
9	900

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 CLAMP 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 CALCULATION 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.

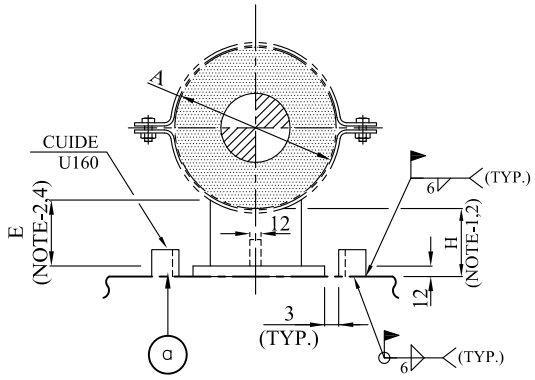
SUPPORT DESCRIPTION:

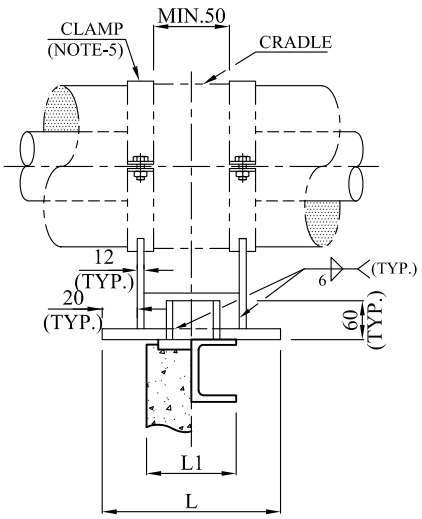
GUIDE SHOE
(COLD INSULATION) 2" ~ 5"
SB-12

SHEET	2 OF 4

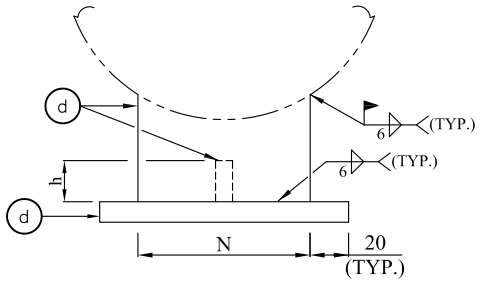
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 95 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00





R = 274 ~ 970



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	-	-	-	-	-	-	-

A	E			N
	H=100	H=150	H=200	
274	138	188	238	200
324	131	181	231	
374	127	177	227	
392	126	176	226	
430	137	187	237	250
474	134	184	234	
492	132	182	232	
530	130	180	230	
578	127	177	227	
630	136	186	236	300
678	133	183	233	
730	131	181	231	
778	129	179	229	
830	137	187	237	350
870	135	185	235	
920	134	184	234	
970	132	182	232	

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	G
ⓐ	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
05	500
06	600
07	700
08	800
09	900
10	1000

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 CLAMP 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 CALCULATION 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:

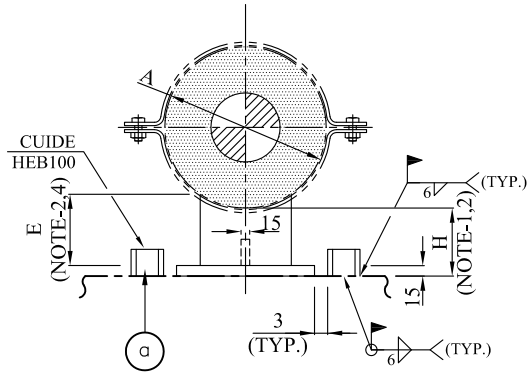
GUIDE SHOE
(COLD INSULATION) 6" ~ 18"
SB-12

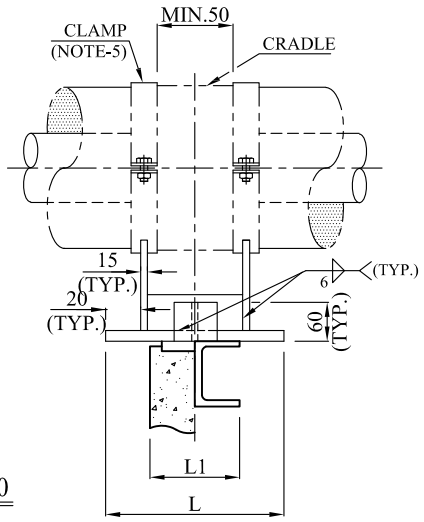
SHEET	3 OF 4

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

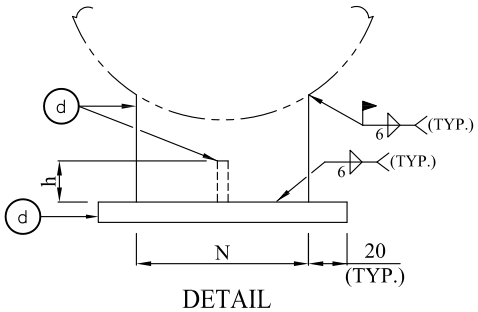
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 96 از 307





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

A	E			N
	H=100	H=150	H=200	
630	136	186	236	300
678	133	183	233	
730	131	181	231	
778	129	179	229	
830	137	187	237	350
870	135	185	235	
920	133	183	233	
970	131	181	231	
1020	139	189	239	400
1070	137	187	237	
1120	136	186	236	
1170	134	184	234	
1220	142	192	242	450
1270	140	190	240	
1320	138	188	238	
1370	137	187	237	

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	G
ⓐ	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

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 CLAMP 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 CALCULATION 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:

GUIDE SHOE
(COLD INSULATION) 20" ~ 30"
SB-12

SHEET 4 OF 4

NISOC

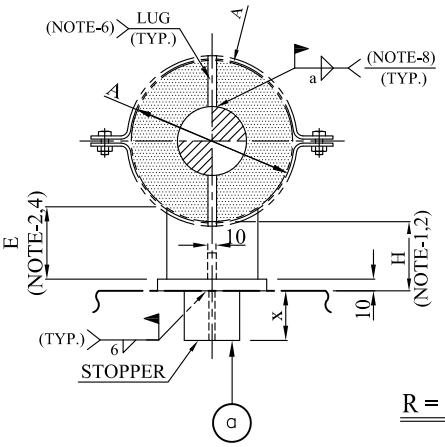
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

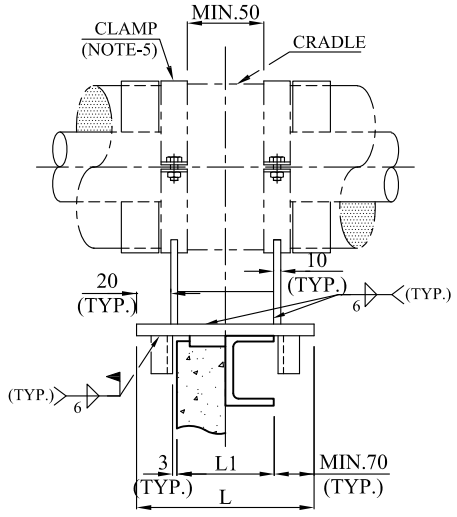
PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

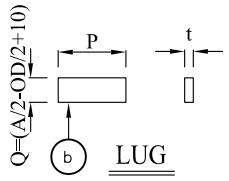
STANDARD PIPE SUPPORT DRAWINGS

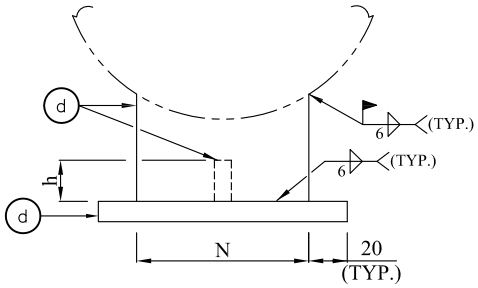
نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D00	0001	DW	PI	120	PEDCO	GCS	BK





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"	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	–	–	–	–

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	G
ⓐ	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			P	t	N	STOPPER
	H=100	H=150	H=200				
136	120	170	220	80	8	100	U80
163	116	166	216				
224	128	178	228			150	
236	126	176	226				
251	124	174	224	100			
324	118	168	218				
336	117	167	217				
351	116	166	216				
451	113	163	213				

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 CLAMP 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 CALCULATION 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.
7- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.
8- a = RUN PIPE WALL THICKNESS.

SUPPORT DESCRIPTION:

STOP SHOE
(COLD INSULATION) 1/2"~1 1/2"
SB-13

SHEET 1 OF 4

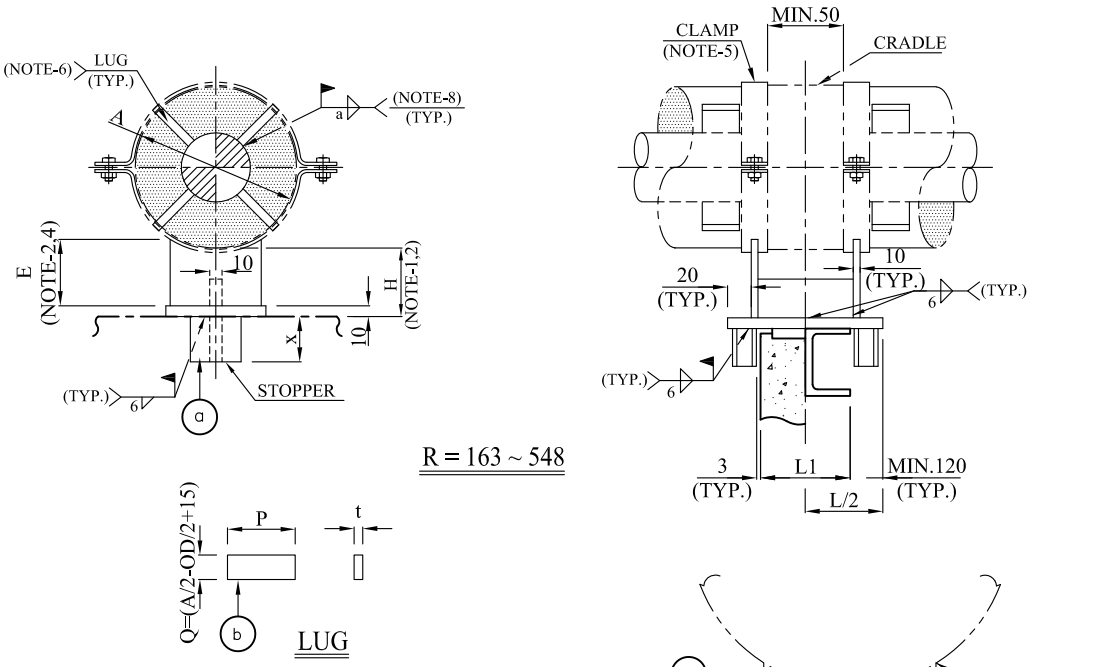
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00

شماره صفحه: 98 از 307



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	-	-	-	-	-

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				
163	140	190	240	100	10	150	HEB100
192	132	182	232				
224	126	176	226				
251	123	173	223				
274	140	190	240			200	
279	139	189	239				
292	138	188	138				
324	133	183	233				
351	129	179	229	150			
374	127	177	227				
392	126	176	226				
430	138	188	238			250	
451	136	186	236				
474	134	184	234				
492	133	183	233				
530	130	180	230				
548	129	179	229				

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	G
ⓐ	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 CLAMP 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 CALCULATION 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.
7- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.
8- a = RUN PIPE WALL THICKNESS.

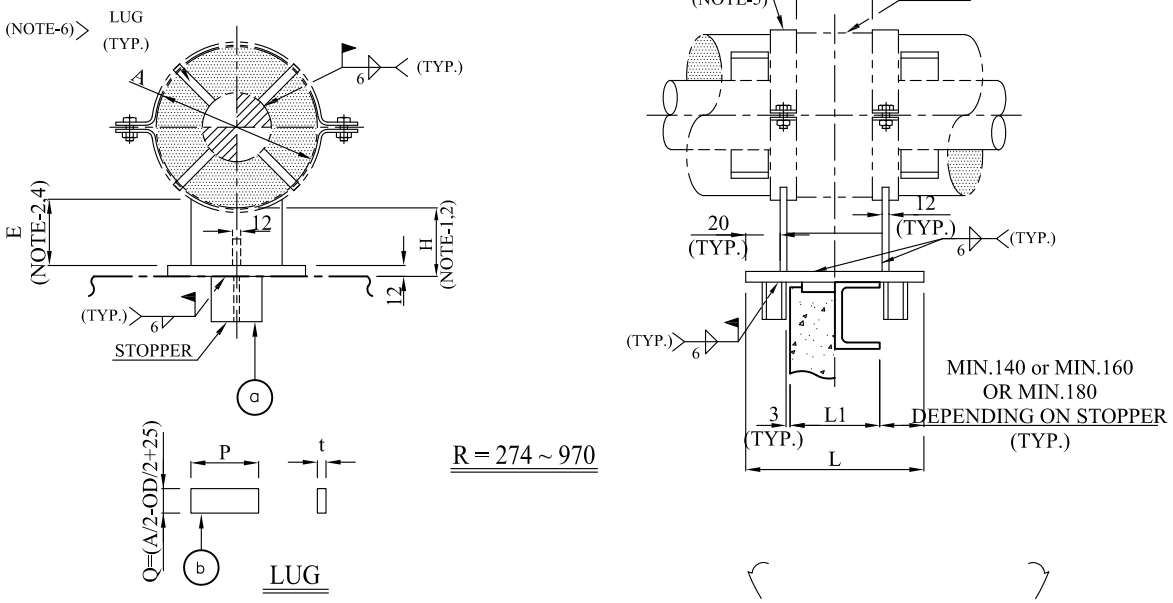
SUPPORT DESCRIPTION:

STOP SHOE
(COLD INSULATION) 2"~5"
SB-13

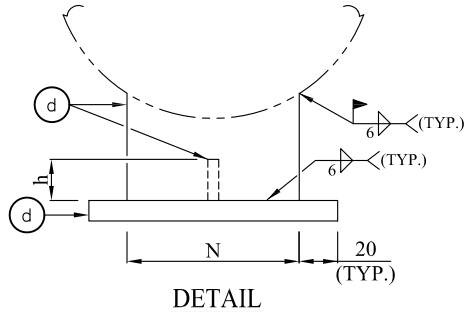
SHEET 2 OF 4

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: 99 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



LUG



DETAIL

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	-	-	-	-	-	-	-

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				
274	138	188	238	200	10	200	HEB120
324	131	181	231				
374	127	177	227				
392	126	176	226				
430	137	187	237			250	HEB140
474	134	184	234				
492	132	182	232				
530	130	180	230				
578	127	177	227				
630	136	186	236	250		300	HEB160
678	133	183	233				
730	131	181	231				
778	129	179	229				
830	137	187	237			350	
870	135	185	235				
920	134	184	234				
970	132	182	232				

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	G
ⓐ	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
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 CLAMP 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 CALCULATION 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.
7- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

SUPPORT DESCRIPTION:

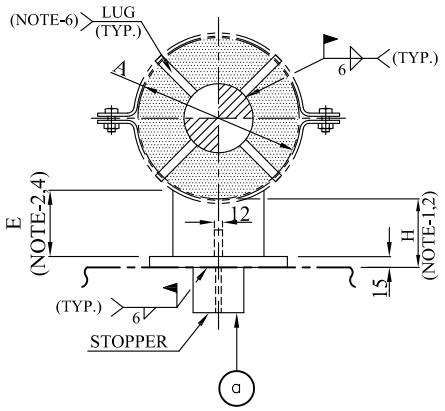
STOP SHOE
(COLD INSULATION) 6"~18"
SB-13

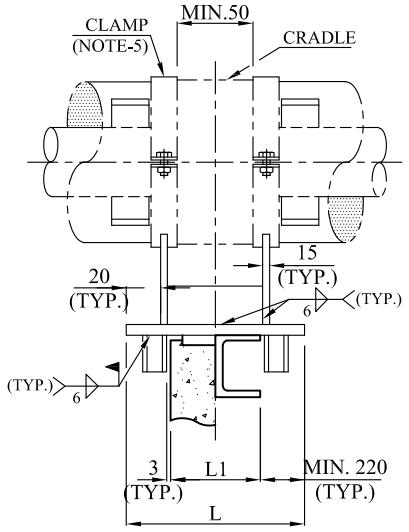
SHEET	3 OF 4

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

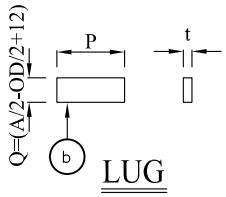
شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 100 از 307

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

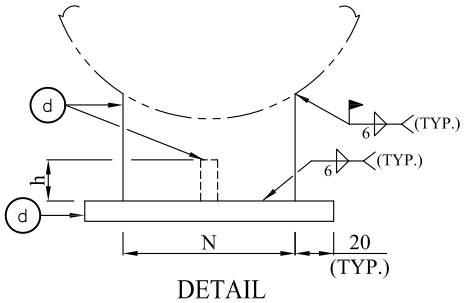




R = 630 ~ 1370



LUG



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

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	136	186	236	300	12	300	HEB200
678	133	183	233				
730	131	181	231				
778	129	179	229				
830	137	187	237			350	
870	135	185	235				
920	133	183	233				
970	131	181	231				
1020	139	189	239			400	
1070	137	187	237				
1120	136	186	236				
1170	134	184	234			450	
1220	142	192	242				
1270	140	190	240				
1320	138	188	238				
1370	137	187	237				

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	G
ⓐ	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:(4)

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 CLAMP 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 CALCULATION 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.
7- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

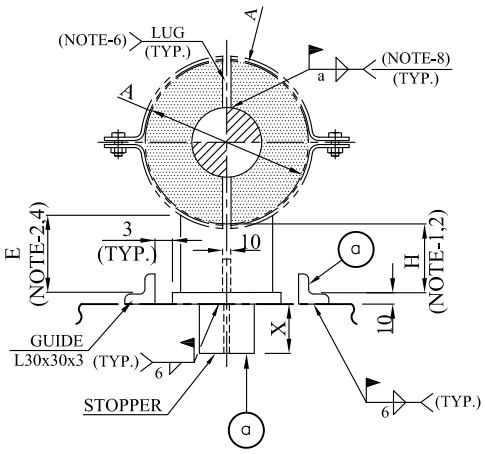
SUPPORT DESCRIPTION:

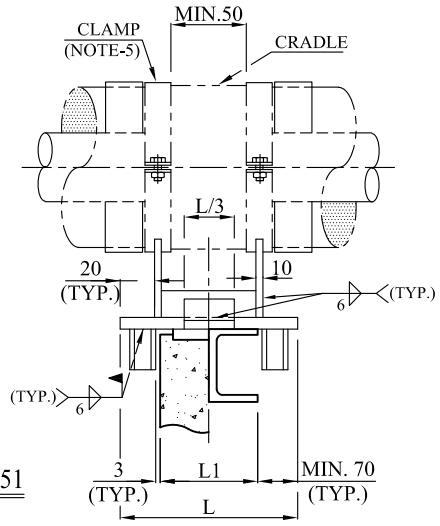
STOP SHOE
(COLD INSULATION) 20"~30"
SB-13

SHEET	4 OF 4

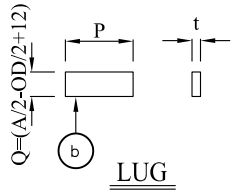
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 101 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00

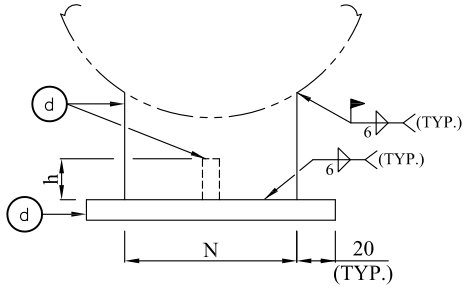




R = 136 ~ 451



LUG



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"	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	–	–	–	–

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	G
ⓐ	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

NPS MARK:(2)

A	E			P	t	N	STOPPER
	H=100	H=150	H=200				
136	120	170	220	80	8	100	U80
163	116	166	216				
224	128	178	228				
236	126	176	226			150	
251	124	174	224	100			
324	118	168	218				
336	117	167	217				
351	116	166	216				
451	113	163	213				

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 CLAMP 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 CALCULATION 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.
7- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.
8- a = RUN PIPE WALL THICKNESS.

SUPPORT DESCRIPTION:

SEMI ANCHOR SHOE
(COLD INSULATION) 1/2"~1 1/2"
SB-14

SHEET 1 OF 4

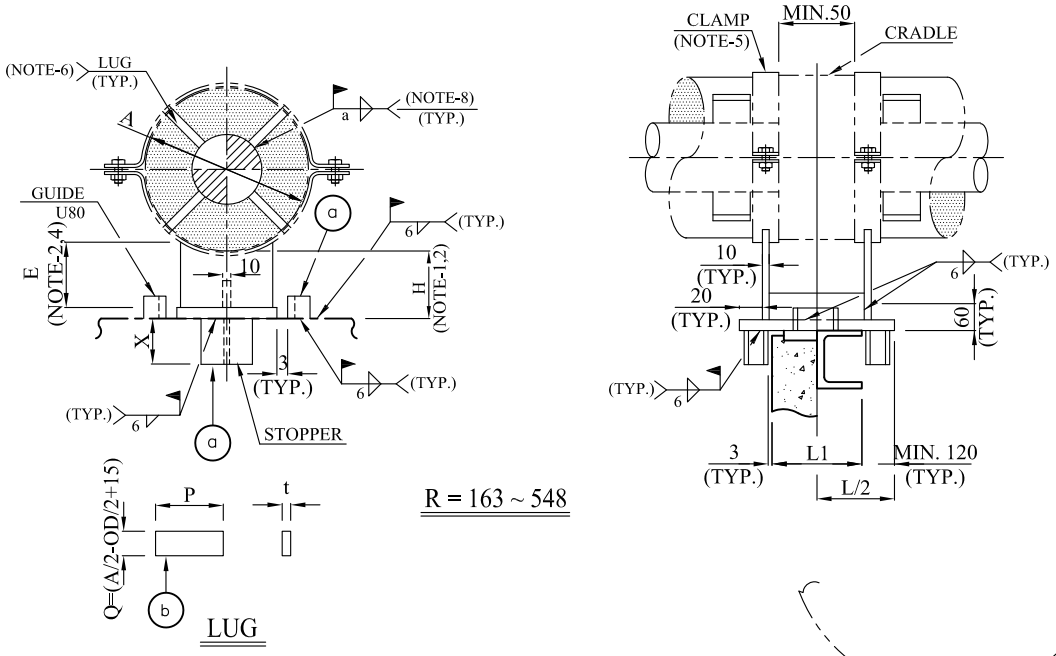
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184

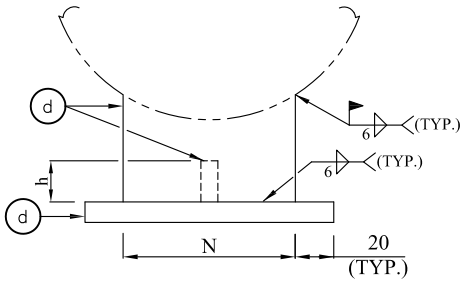
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 102 از 307



LUG



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	140	190	240	100	10	150	HEB100
192	132	182	232				
224	126	176	226				
251	123	173	223				
274	140	190	240			200	
279	139	189	239				
292	138	188	238				
324	133	183	233				
351	129	179	229	150			
374	127	177	227				
392	126	176	226				
430	138	188	238			250	
451	136	186	236				
474	134	184	234				
492	133	183	233				
530	130	180	230				
548	129	179	229				

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	G
ⓐ	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
4	400
5	500
6	600
7	700
8	800
9	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 CLAMP 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 CALCULATION 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.
7- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.
8- a = RUN PIPE WALL THICKNESS.

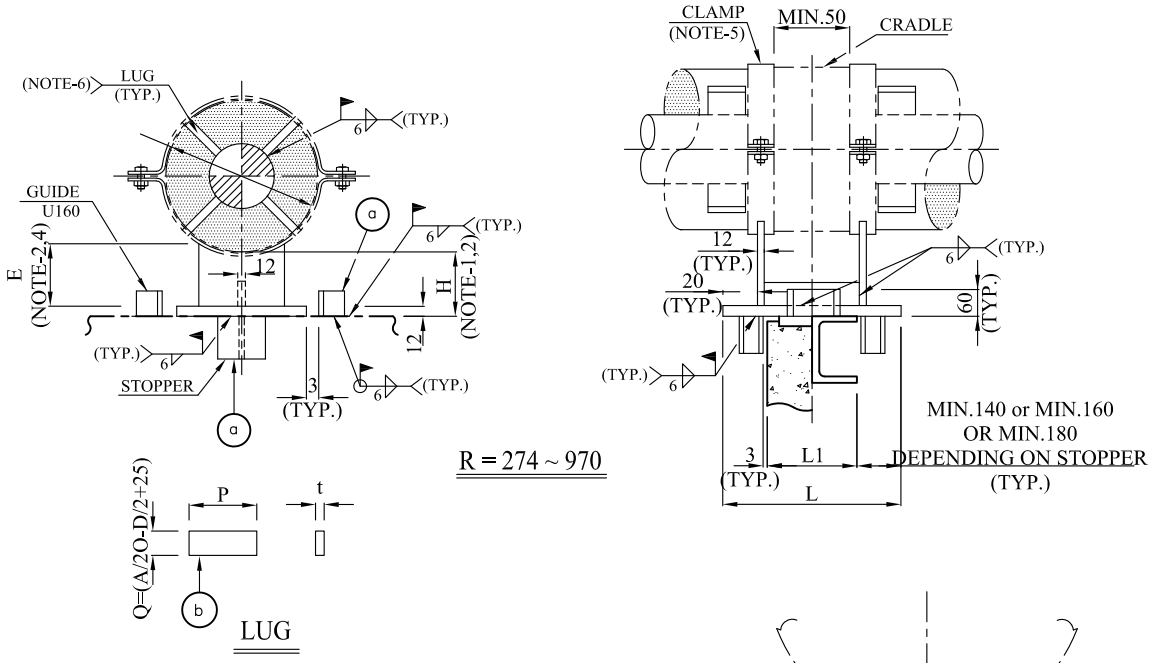
SUPPORT DESCRIPTION:

SEMI ANCHOR SHOE
(COLD INSULATION) 2"~5"
SB-14

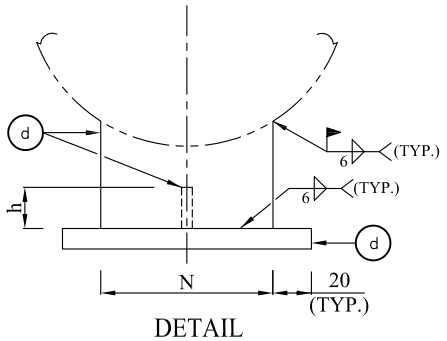
SHEET 2 OF 4

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: 103 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



LUG



DETAIL

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	-	-	-	-	-	-	-

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

A	E			P	t	N	STOPPER
	H=100	H=150	H=200				
274	138	188	238	200	10	200	HEB120
324	131	181	231				
374	127	177	227				
392	126	176	226				
430	137	187	237			250	HEB140
474	134	184	234				
492	132	182	232				
530	130	180	230				
578	127	177	227				
630	136	186	236	250		300	HEB160
678	133	183	233				
730	131	181	231				
778	129	179	229				
830	137	187	237			350	
870	135	185	235				
920	134	184	234				
970	132	182	232				

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	G
ⓐ	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 CLAMP 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 CALCULATION 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:

SEMI ANCHOR SHOE
(COLD INSULATION) 6"~18"
SB-14

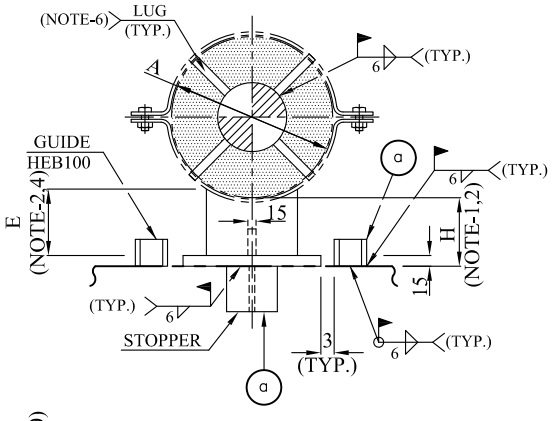
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

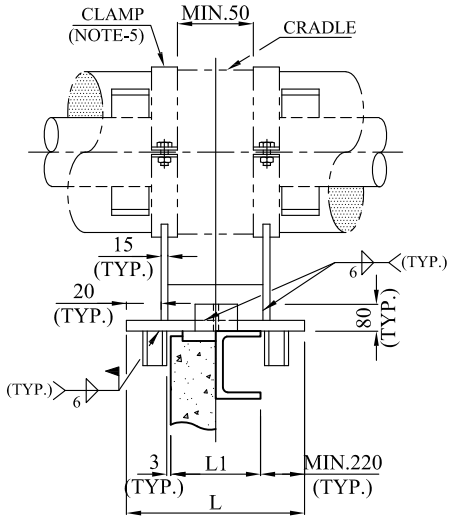
شماره پیمان:
053-073-9184

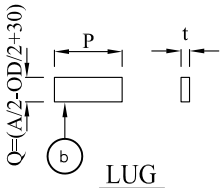
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 104 از 307







LUG

R = 630 ~ 1370

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

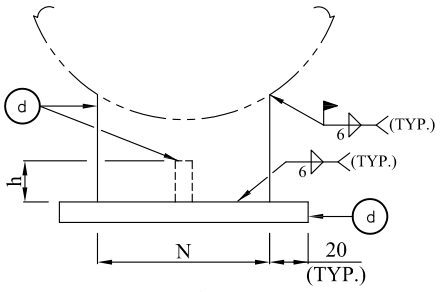
INS. THK. MARK	COLD INS. THK.	CRADLE THK.	20"	22"	24"	26"	28"	30"
			20	22	24	26	28	30
			A (FOR EACH PIPE SIZE)					
1	25-50	T=50	630	678	730	778	830	870
2	51-100	T=100	730	778	830	870	920	970
3	101-150	T=150	830	870	920	970	1020	1070
4	151-200	T=200	920	970	1020	1070	1120	1170
5	201-250	T=250	1020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

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



DETAIL

A	E			P	t	N	STOPPER
	H=100	H=150	H=200				
630	136	186	236	300	12	300	HEB200
678	133	183	233				
730	131	181	231				
778	129	179	229				
830	137	187	237			350	
870	135	185	235				
920	133	183	233				
970	131	181	231				
1020	139	189	239			400	
1070	137	187	237				
1120	136	186	236				
1170	134	184	234				
1220	142	192	242			450	
1270	140	190	240				
1320	138	188	238				
1370	137	187	237				

MATERIAL MARK:(1)

MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
MARK	A	B	G
ⓐ	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:(5)

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 CLAMP 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 CALCULATION 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.

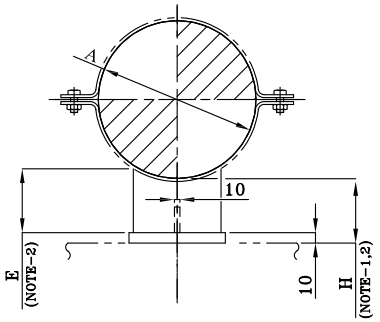
SUPPORT DESCRIPTION:

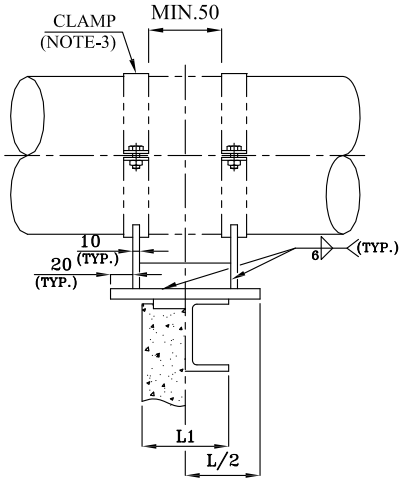
SEMI ANCHOR SHOE
(COLD INSULATION) 20"~30"
SB-14

SHEET 4 OF 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: 105 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	

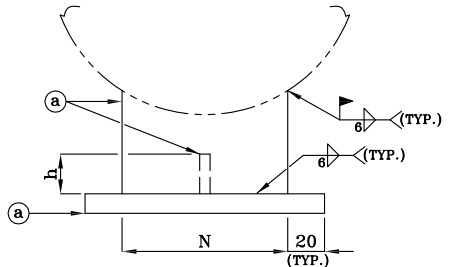




1/2"~6"

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N
0A	1/2"	100	103	20
		150	153	
		200	203	
0B	3/4"	100	104	25
		150	154	
		200	204	
01	1"	100	104	
		150	154	
		200	204	
1A	1+1/2"	100	104	30
		150	154	
		200	204	
02	2"	100	104	35
		150	154	
		200	204	
03	3"	100	104	40
		150	154	
		200	204	
04	4"	100	104	45
		150	154	
		200	204	
06	6"	100	104	50
		150	154	
		200	204	



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
	ⓐ 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
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 CLAMP 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 CLAMP SEE (SK-01), AND SEPARATED TAG IS REQUIRED FOR CLAMP.
4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

SUPPORT DESCRIPTION:

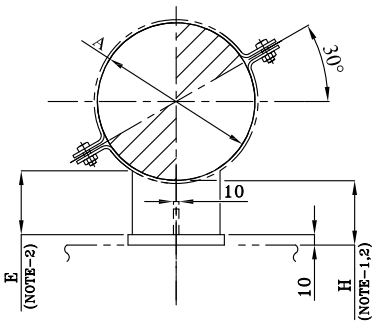
SLIDE CLAMPED SHOE
1/2"~6"

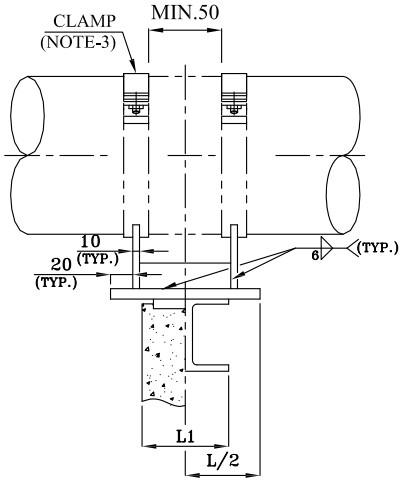
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

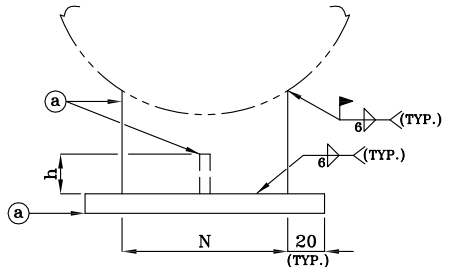




8"~20

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N
08	8"	100	125	150
		150	175	
		200	225	
10	10"	100	120	
		150	170	
		200	220	
12	12"	100	130	200
		150	180	
		200	230	
14	14"	100	128	
		150	178	
		200	228	
16	16"	100	139	250
		150	189	
		200	239	
18	18"	100	134	
		150	184	
		200	234	
20	20"	100	130	
		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
	ⓐ 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
04	400
05	500
06	600
07	700
08	800
09	900

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 CLAMP 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 CLAMP SEE (SK-01), AND SEPARATED TAG IS REQUIRED FOR CLAMP.
4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

SUPPORT DESCRIPTION:

SLIDE CLAMPED SHOE
8"~20"

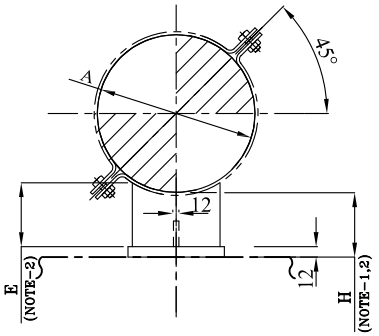
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

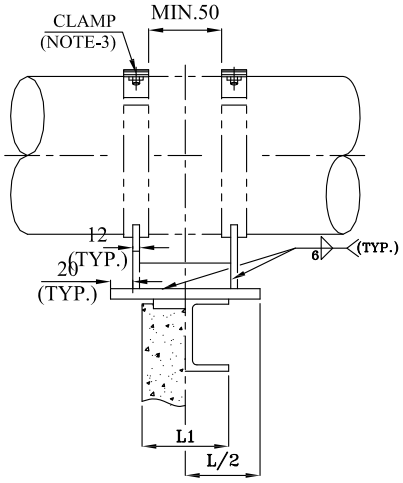
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 107 از 307

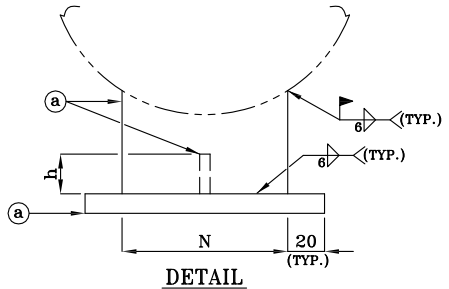




22"~36"

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N
22	22"	100	140	300
		150	190	
		200	240	
24	24"	100	137	
		150	187	
		200	237	
26	26"	100	146	350
		150	196	
		200	246	
28	28"	100	142	
		150	192	
		200	242	
30	30"	100	152	400
		150	202	
		200	252	
32	32"	100	149	
		150	199	
		200	249	
34	34"	100	145	
		150	195	
		200	245	
36	36"	100	155	450
		150	205	
		200	255	



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
	ⓐ 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
05	500
06	600
07	700
08	800
09	900
10	1000

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 CLAMP 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 CLAMP SEE (SK-01), AND SEPARATED TAG IS REQUIRED FOR CLAMP.
4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

SUPPORT DESCRIPTION:

SLIDE CLAMPED SHOE
22"~36"

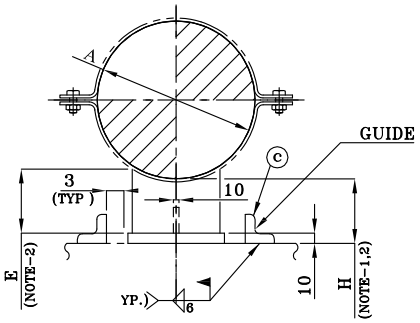
SHEET 3 OF 3

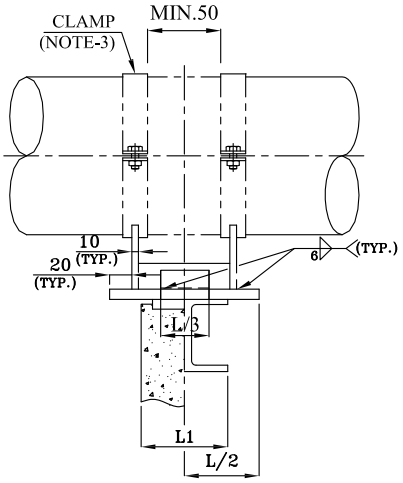
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D00	0001	DW	PI	120	PEDCO	GCS	BK

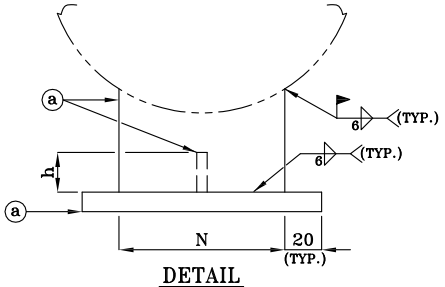




1/2"~6"

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	GUIDE
0A	1/2"	100	103	20	L 30x30x3
		150	153		
		200	203		
0B	3/4"	100	104	25	
		150	154		
		200	204		
01	1"	100	104		
		150	154		
		200	204		
1A	1+1/2"	100	104	30	
		150	154		
		200	204		
02	2"	100	104	35	
		150	154		
		200	204		
03	3"	100	104	40	
		150	154		
		200	204		
04	4"	100	104	45	
		150	154		
		200	204		
06	6"	100	104	50	
		150	154		
		200	204		



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
	ⓐ 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
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 CLAMP 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 CLAMP SEE (SK-01), AND SEPARATED TAG IS REQUIRED FOR CLAMP.
4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

SUPPORT DESCRIPTION:

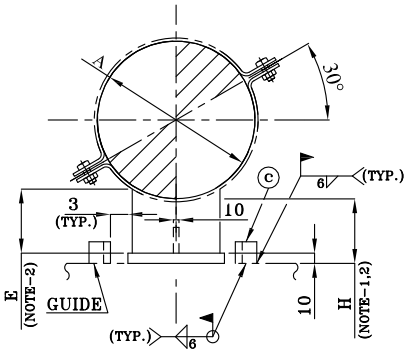
GUIDE CLAMPED SHOE
1/2"~6"

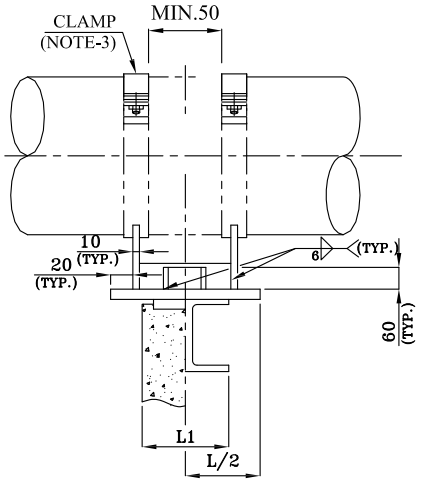
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D00	0001	DW	PI	120	PEDCO	GCS	BK

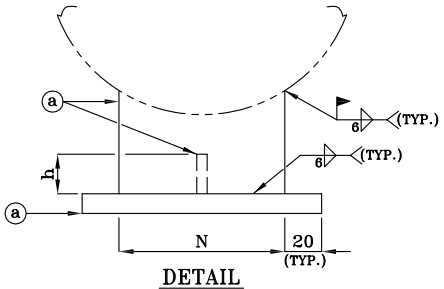




8"~20

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	GUIDE
08	8"	100	125	150	U160
		150	175		
		200	225		
10	10"	100	120		
		150	170		
		200	220		
12	12"	100	130	200	
		150	180		
		200	230		
14	14"	100	128		
		150	178		
		200	228		
16	16"	100	139	250	HEB100
		150	189		
		200	239		
18	18"	100	134		
		150	184		
		200	234		
20	20"	100	130		
		150	180		
		200	230		



DETAIL

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
04	400
05	500
06	600
07	700
08	800
09	900

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 CLAMP 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 CLAMP SEE (SK-01), AND SEPARATED TAG IS REQUIRED FOR CLAMP.
4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

SUPPORT DESCRIPTION:

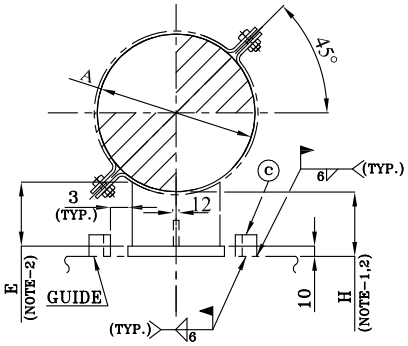
GUIDE CLAMPED SHOE
8"~20"

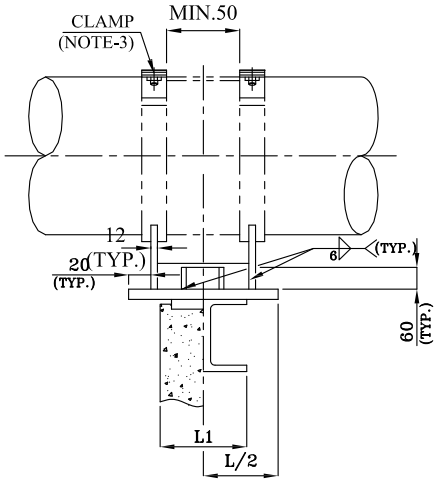
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

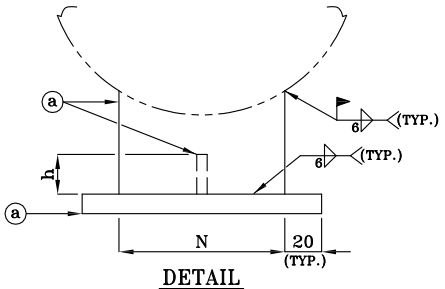
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00





22"~36"



DETAIL

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	GUIDE
22	22"	100	140	300	U200
		150	190		
		200	240		
24	24"	100	137		
		150	187		
		200	237		
26	26"	100	146	350	
		150	196		
		200	246		
28	28"	100	142		
		150	192		
		200	242		
30	30"	100	152	400	
		150	202		
		200	252		
32	32"	100	149		
		150	199		
		200	249		
34	34"	100	145		
		150	195		
		200	245		
36	36"	100	155	450	
		150	205		
		200	255		

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
05	500
06	600
07	700
08	800
09	900
10	1000

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 CLAMP 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 CLAMP SEE (SK-01), AND SEPARATED TAG IS REQUIRED FOR CLAMP.
4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.

SUPPORT DESCRIPTION:

GUIDE CLAMPED SHOE
22"~36"

SHEET	3 OF 3

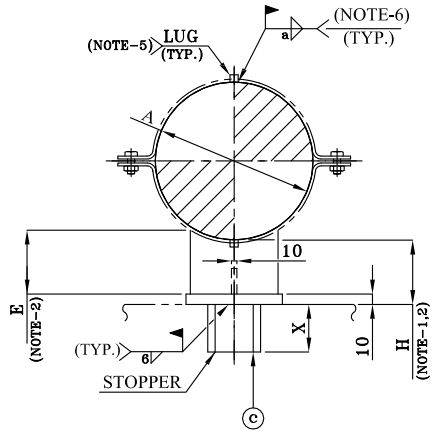
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

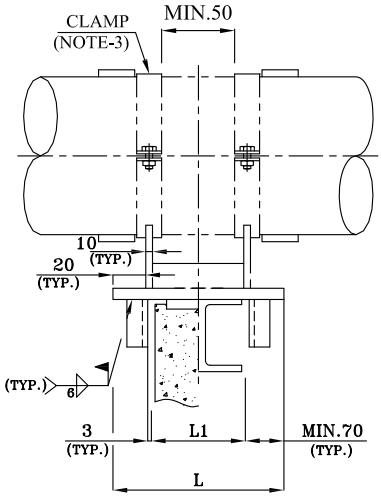
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 111 از 307

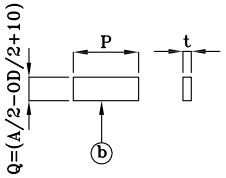




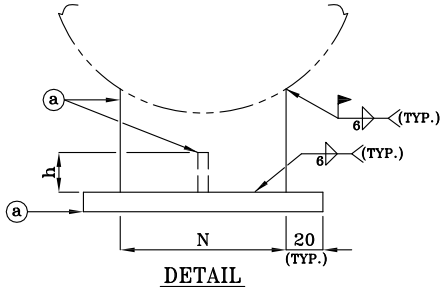
1/2"~6"

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	STOPPER
0A	1/2"	100	103	20	U 80
		150	153		
		200	203		
0B	3/4"	100	104	25	
		150	154		
		200	204		
01	1"	100	104		
		150	154		
		200	204		
1A	1+1/2"	100	104	30	
		150	154		
		200	204		
02	2"	100	104	35	
		150	154		
		200	204		
03	3"	100	104	40	
		150	154		
		200	204		
04	4"	100	104	45	
		150	154		
		200	204		
06	6"	100	104	50	
		150	154		
		200	204		



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
	ⓐ 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
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

STOPPER MARK:(5)

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

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 CLAMP 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 CLAMP SEE (SK-01), AND SEPARATED TAG IS REQUIRED FOR CLAMP.
4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.
5- FOR SIZE OF 1/2" UP 11/2", TWO LUGS AND FOR THAN 2" , FOUR LUGS SHALL BE USED.
6- a=RUN PIPE WALL THICKNESS FOR SIZE OF 2" AND a=6mm FOR LATGER THAN 2".

SUPPORT DESCRIPTION:

STOPPER CLAMPED SHOE
1/2"~6"

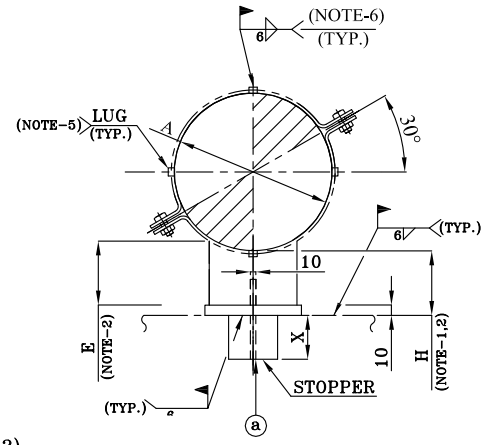
SHEET 1 OF 3

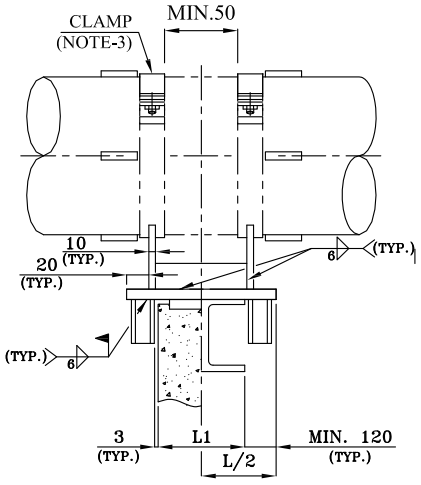
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D00	0001	DW	PI	120	PEDCO	GCS	BK

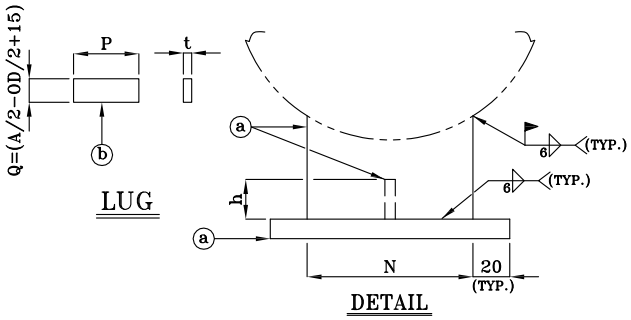




8"~20

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	STOPPER
08	8"	100	125	150	HEB 100
		150	175		
		200	225		
10	10"	100	120		
		150	170		
		200	220		
12	12"	100	130	200	
		150	180		
		200	230		
14	14"	100	128		
		150	178		
		200	228		
16	16"	100	139	250	HEB 120
		150	189		
		200	239		
18	18"	100	134		
		150	184		
		200	234		
20	20"	100	130		
		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
	ⓐ 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
04	400
05	500
06	600
07	700
08	800
09	900

HEIGHT MARK:(3)

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

STOPPER MARK:(5)

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

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 CLAMP 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 CLAMP SEE (SK-01), AND SEPARATED TAG IS REQUIRED FOR CLAMP.
4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.
5- FOR SIZE OF 1/2" UP 11/2", TWO LUGS AND FOR THAN 2" , FOUR LUGS SHALL BE USED.
6- a=RUN PIPE WALL THICKNESS FOR SIZE OF 2" AND a=6mm FOR LATGER THAN 2".

SUPPORT DESCRIPTION:

STOPPER CLAMPED SHOE
8"~20"

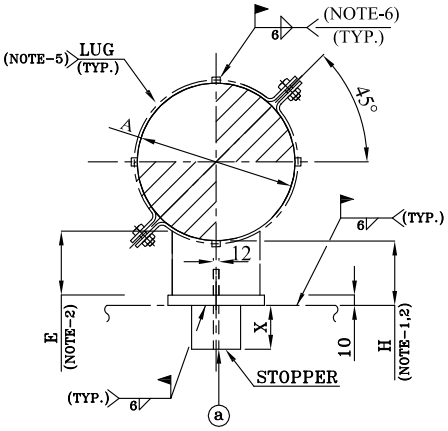
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

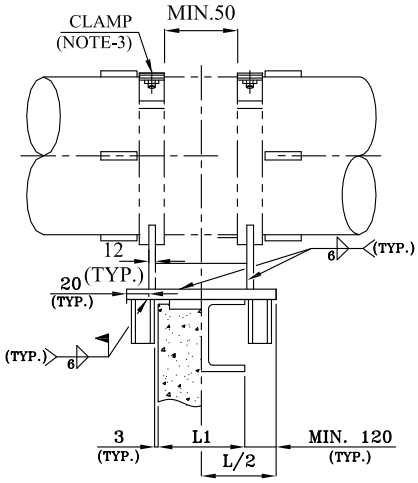
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 113 از 307

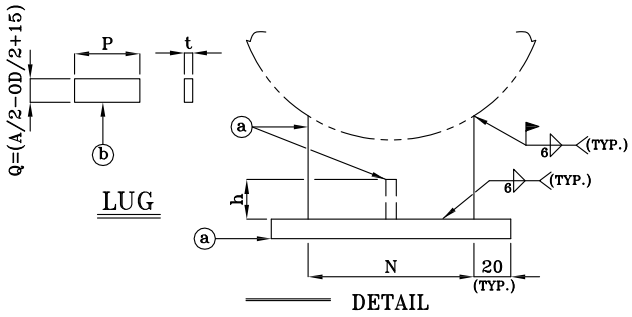




NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	P	t	N	STOPPER
22	22"	100	140	200	12	300	HEB 140
		150	190				
		200	240				
24	24"	100	137				
		150	187				
		200	237				
26	26"	100	146	250		350	
		150	196				
		200	246				
28	28"	100	142				
		150	192				
		200	242				
30	30"	100	152			400	HEB 160
		150	202				
		200	252				
32	32"	100	149	300			
		150	199				
		200	249				
34	34"	100	145				
		150	195				
		200	245				
36	36"	100	155			450	
		150	205				
		200	255				

22"~36"



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
	ⓐ 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
05	500
06	600
07	700
08	800
09	900
10	1000

HEIGHT MARK:(3)

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

STOPPER MARK:(5)

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

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 CLAMP 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 CLAMP SEE (SK-01), AND SEPARATED TAG IS REQUIRED FOR CLAMP.
4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.
5- FOR SIZE OF 1/2" UP 11/2", TWO LUGS AND FOR THAN 2" , FOUR LUGS SHALL BE USED.
6- a=RUN PIPE WALL THICKNESS FOR SIZE OF 2" AND a=6mm FOR LATGER THAN 2".

SUPPORT DESCRIPTION:

STOPPER CLAMPED SHOE
22"~36"

SHEET 3 OF 3

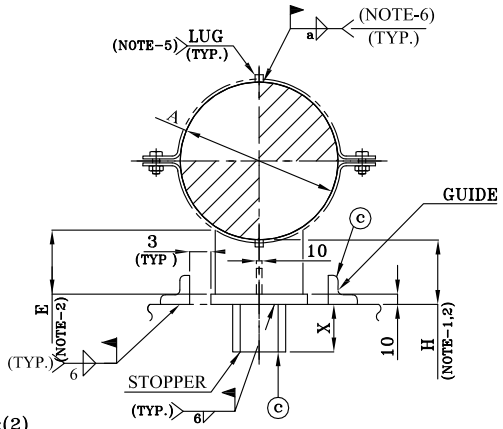
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

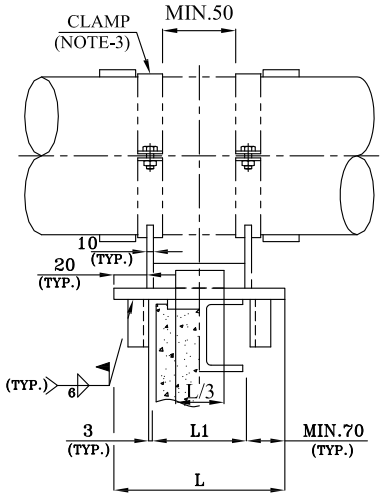
شماره پیمان: 053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D00	0001	DW	PI	120	PEDCO	GCS	BK

شماره صفحه: 114 از 307

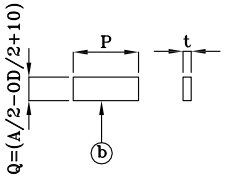




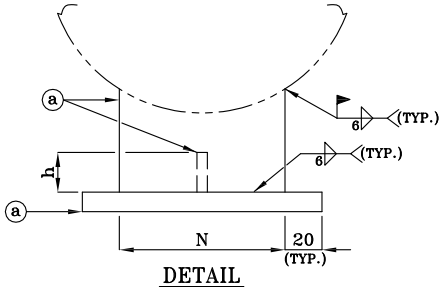
1/2"~6"

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	STOPPER	GUIDE
0A	1/2"	100	103	20	U 80	L 30x30x3
		150	153			
		200	203			
0B	3/4"	100	104	25		
		150	154			
		200	204			
01	1"	100	104			
		150	154			
		200	204			
1A	1+1/2"	100	104	30		
		150	154			
		200	204			
02	2"	100	104	35		
		150	154			
		200	204			
03	3"	100	104	40		
		150	154			
		200	204			
04	4"	100	104	45		
		150	154			
		200	204			
06	6"	100	104	50		
		150	154			
		200	204			



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
	ⓐ 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
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

STOPPER MARK:(5)

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

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 CLAMP 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 CLAMP SEE (SK-01), AND SEPARATED TAG IS REQUIRED FOR CLAMP.
4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.
5- FOR SIZE OF 1/2" UP 11/2", TWO LUGS AND FOR THAN 2" , FOUR LUGS SHALL BE USED.
6- a=RUN PIPE WALL THICKNESS FOR SIZE OF 2" AND a=6mm FOR LATGER THAN 2".

SUPPORT DESCRIPTION:

SEMI ANCHOR CLAMPED SHOE
1/2"~6"

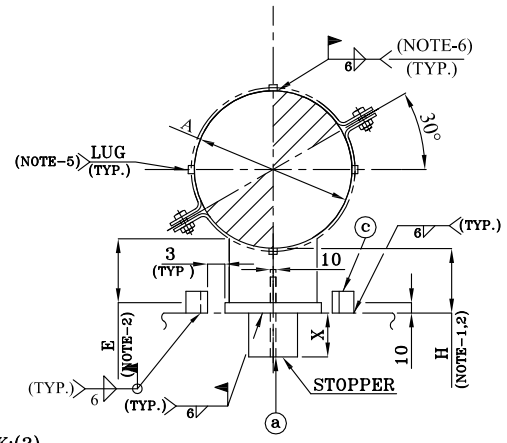
SHEET 1 OF 3

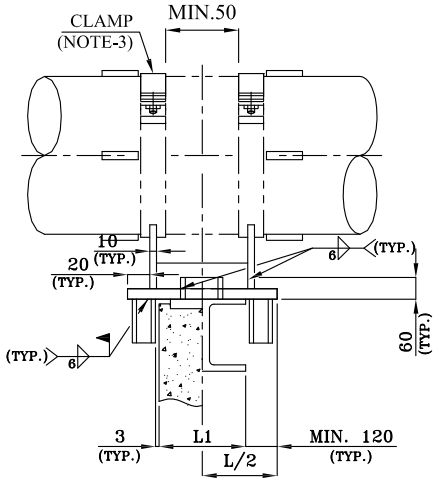
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 115 از 307

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

053-073-9184

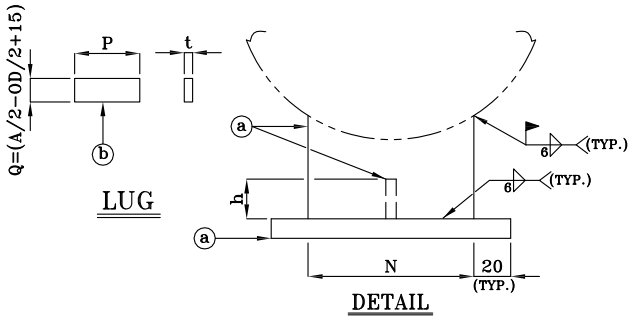




8"~20

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	N	STOPPER	GUIDE
08	8"	100	125	150	HEB 100	U 160
		150	175			
		200	225			
10	10"	100	120			
		150	170			
		200	220			
12	12"	100	130	200		
		150	180			
		200	230			
14	14"	100	128			
		150	178			
		200	228			
16	16"	100	139	250	HEB 120	HEB100
		150	189			
		200	239			
18	18"	100	134			
		150	184			
		200	234			
20	20"	100	130			
		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
	ⓐ 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
04	400
05	500
06	600
07	700
08	800
09	900

HEIGHT MARK:(3)

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

STOPPER MARK:(5)

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

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 CLAMP 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 CLAMP SEE (SK-01), AND SEPARATED TAG IS REQUIRED FOR CLAMP.
4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.
5- FOR SIZE OF 1/2" UP 11/2", TWO LUGS AND FOR THAN 2" , FOUR LUGS SHALL BE USED.
6- a=RUN PIPE WALL THICKNESS FOR SIZE OF 2" AND a=6mm FOR LATGER THAN 2".

SUPPORT DESCRIPTION:

SEMI ANCHOR CLAMPED SHOE
8"~20"

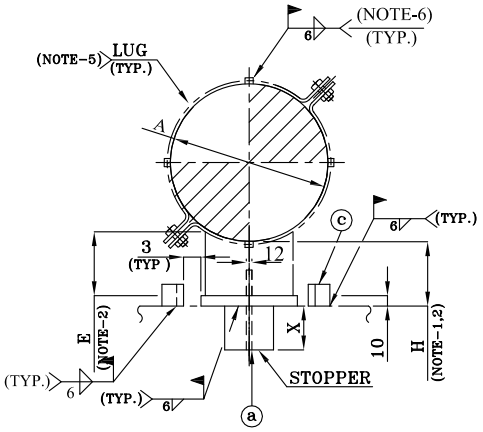
SHEET 2 OF 3

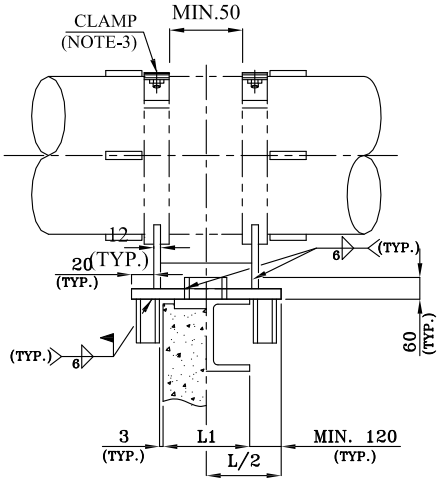
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00

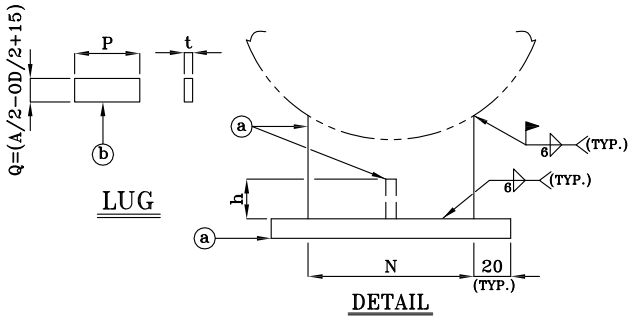




22"~36"

NPS MARK:(2)

NPS MARK	RUN PIPE SIZE	H	E	P	t	N	STOPPER	GUIDE
22	22"	100	140	200	12	300	HEB 140	U 200
		150	190					
		200	240					
24	24"	100	137					
		150	187					
		200	237					
26	26"	100	146	250		350		
		150	196					
		200	246					
28	28"	100	142					
		150	192					
		200	242					
30	30"	100	152			400	HEB 160	
		150	202					
		200	252					
32	32"	100	149	300				
		150	199					
		200	249					
34	34"	100	145					
		150	195					
		200	245					
36	36"	100	155			450		
		150	205					
		200	255					



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
	ⓐ 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
05	500
06	600
07	700
08	800
09	900
10	1000

HEIGHT MARK:(3)

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

STOPPER MARK:(5)

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

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 CLAMP 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 CLAMP SEE (SK-01), AND SEPARATED TAG IS REQUIRED FOR CLAMP.
4- THE SHOE LENGTH SHALL BE DECIDED DEPENDING ON WIDTH OF EXISTING BEAM L1.
5- FOR SIZE OF 1/2" UP 11/2", TWO LUGS AND FOR THAN 2" , FOUR LUGS SHALL BE USED.
6- a=RUN PIPE WALL THICKNESS FOR SIZE OF 2" AND a=6mm FOR LATGER THAN 2".

SUPPORT DESCRIPTION:

SEMI ANCHOR CLAMPED SHOE
22"~36"

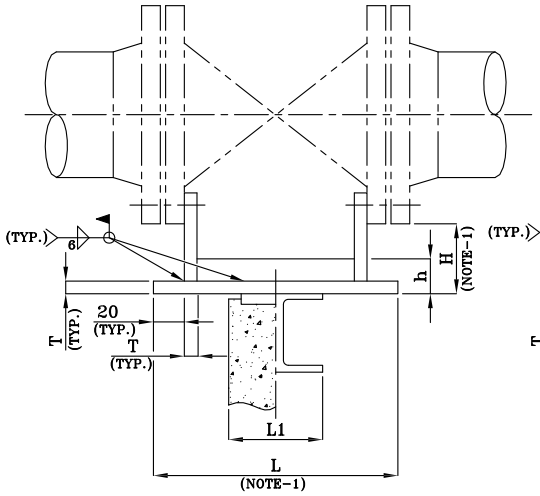
SHEET 3 OF 3

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

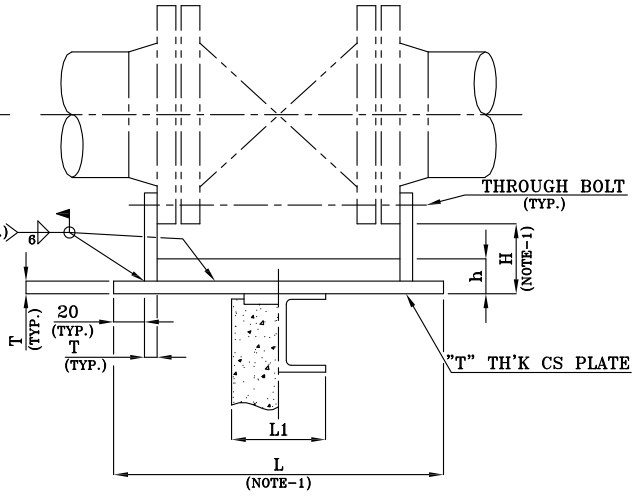
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

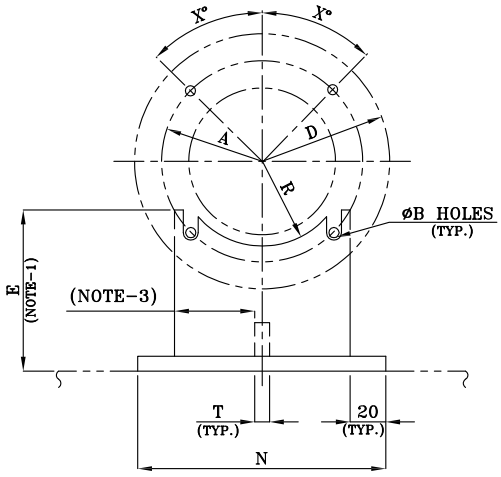
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



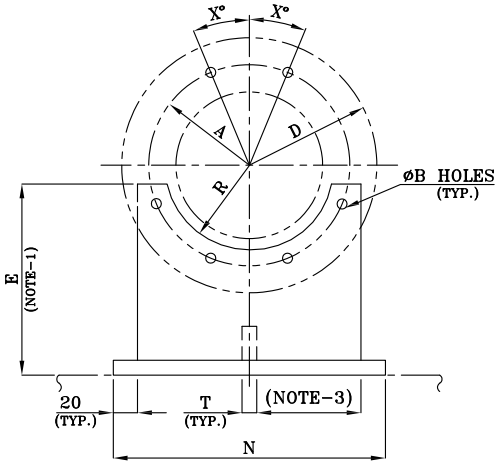
TYPE A



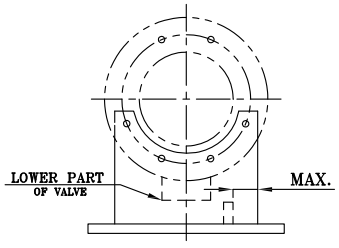
TYPE B



1"~3"



4"~14"



DETAIL

INDICATION:

SB - 19 – [ ][ ][ ] – [ ][ ] – [ ]
(1) (2) (3) (4)

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

NOTE:
1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- 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.
4- 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.

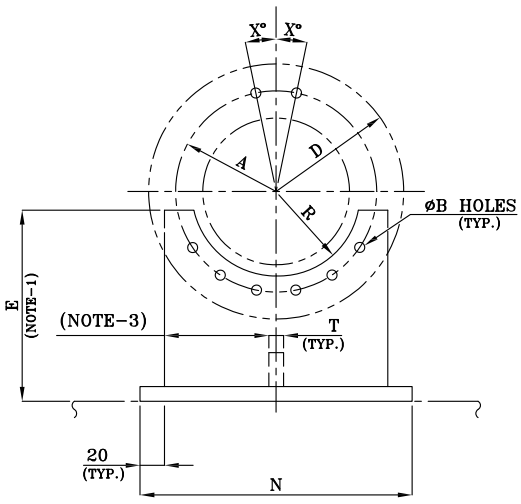
SUPPORT DESCRIPTION:

SLIDE SHOE ON VALVE
1"~40"

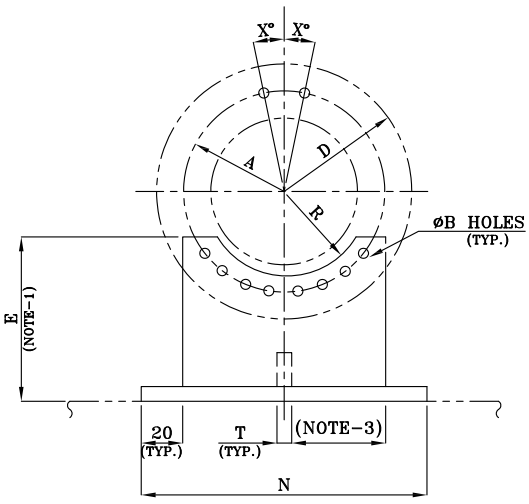
SHEET 1 OF 3

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

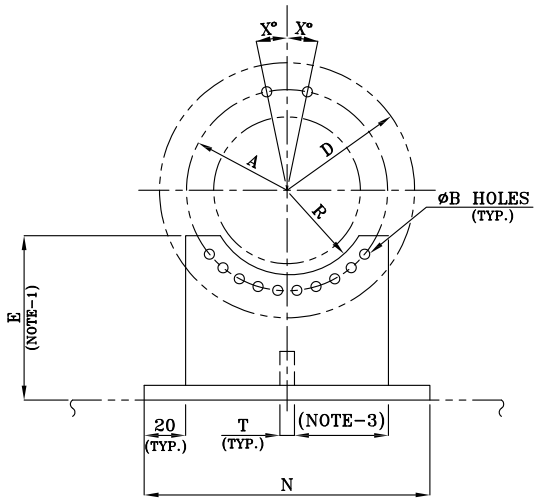
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 118 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	



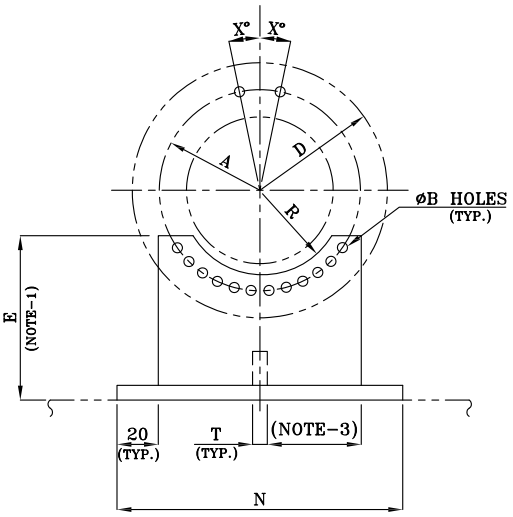
16" ~ 24"



26"



28" ~ 38"



40"

INDICATION:

SB - 19 – [ ][ ][ ] – [ ][ ] – [ ]

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

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

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- 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.
4- 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:

SLIDE SHOE ON VALVE
1"~40"

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	D00

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) (4)

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

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- 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.
4- 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:

SLIDE SHOE ON VALVE
1"~40"

SHEET 3 OF 3

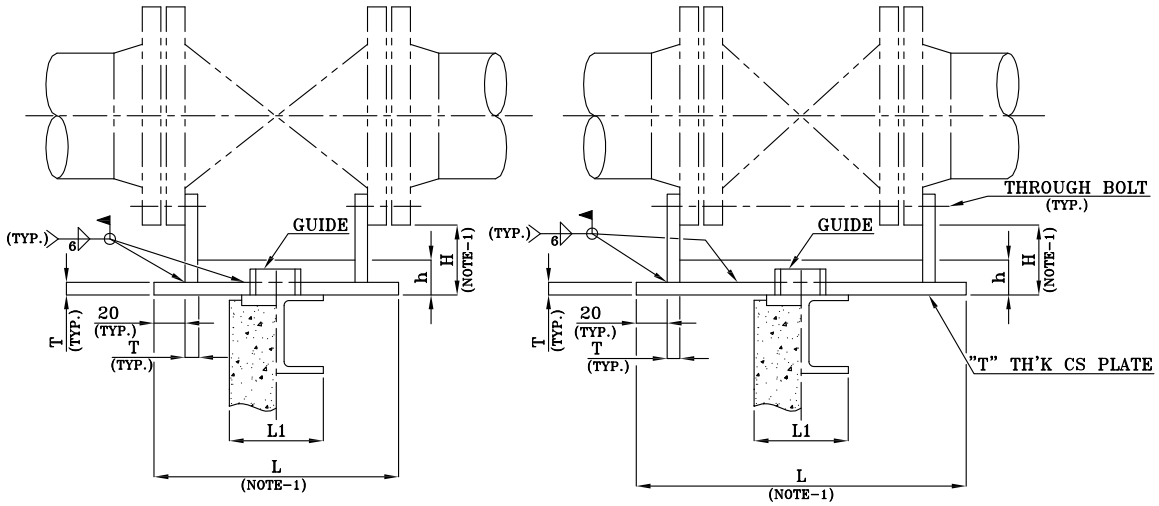
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

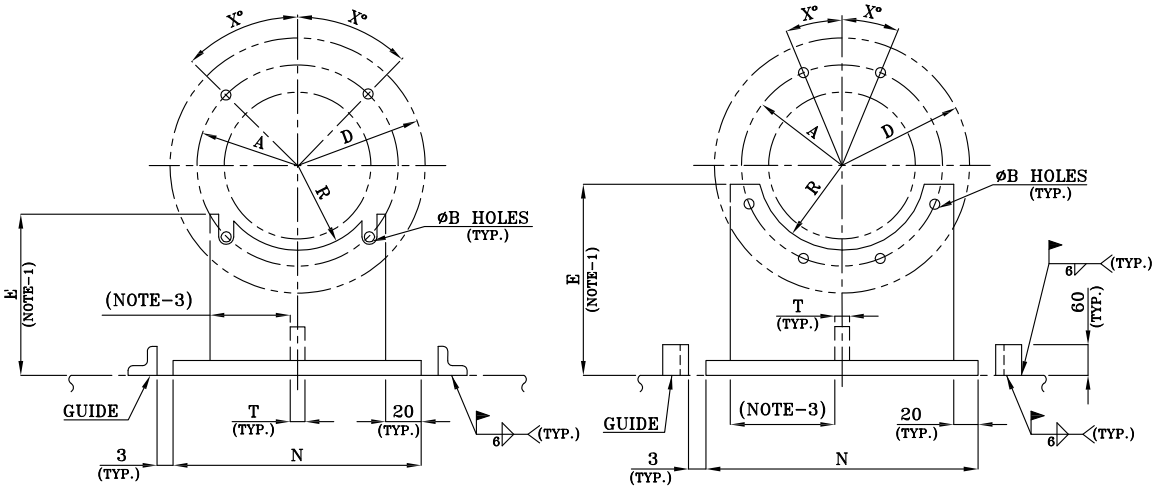
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 120 از 307



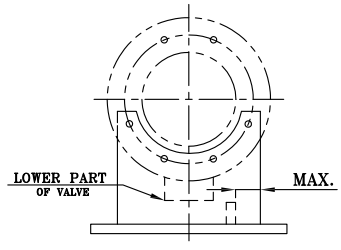
TYPE A

TYPE B



1"~3"

4"~14"



DETAIL

INDICATION:

SB - 20 - □□□ - □□ - □

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

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

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- 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.
4- 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
1"~40"

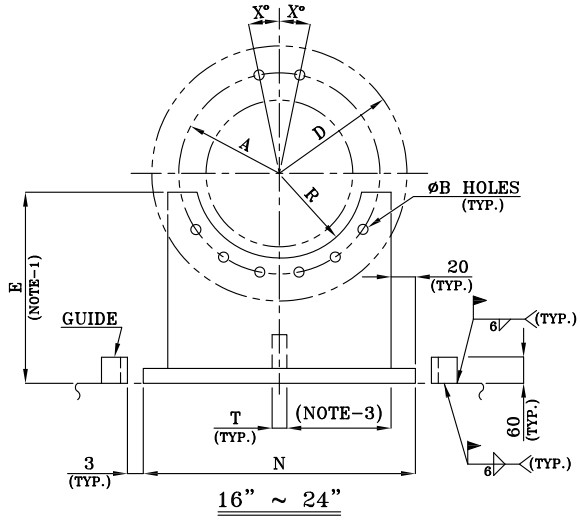
SHEET 1 OF 3

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

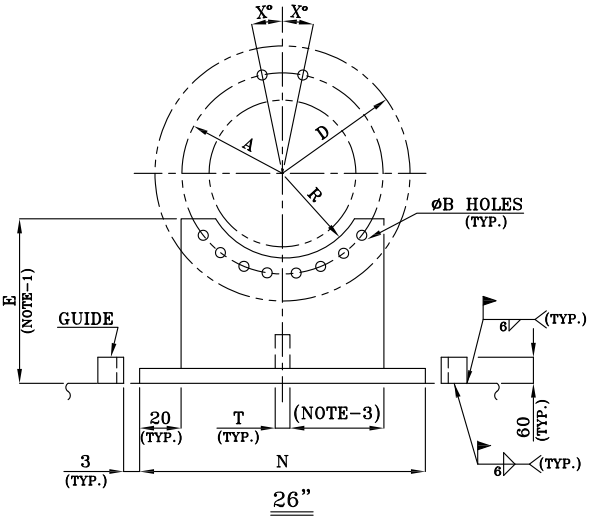
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

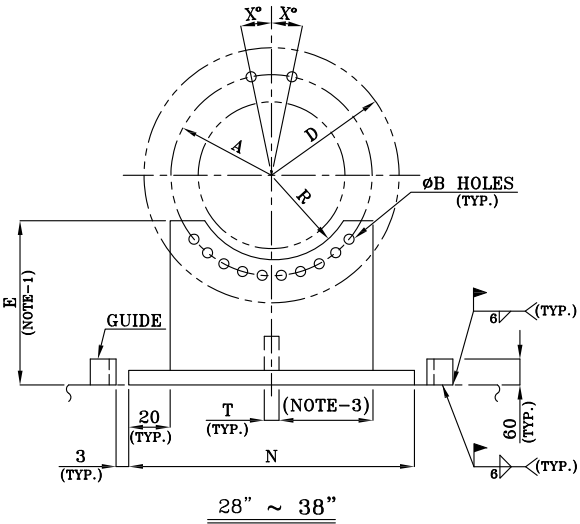
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



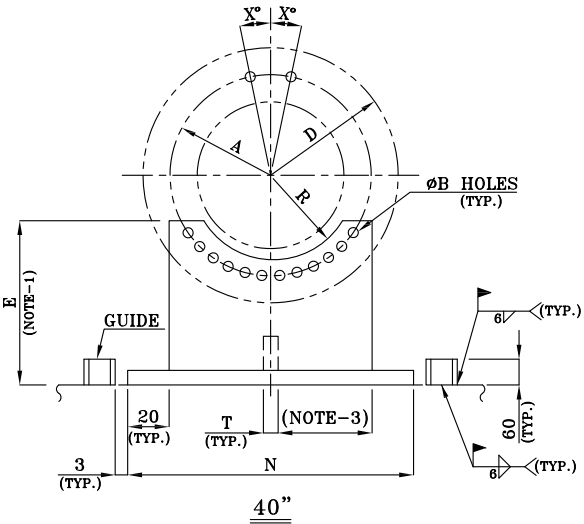
16" ~ 24"



26"



28" ~ 38"



40"

INDICATION:

SB - 20 – [ ][ ][ ] – [ ][ ] – [ ]
(1) (2) (3) (4)

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

NOTE:
1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- 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.
4- 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
1"~40"

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	D00

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) (4)

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

NOTE:
1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- 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.
4- 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.

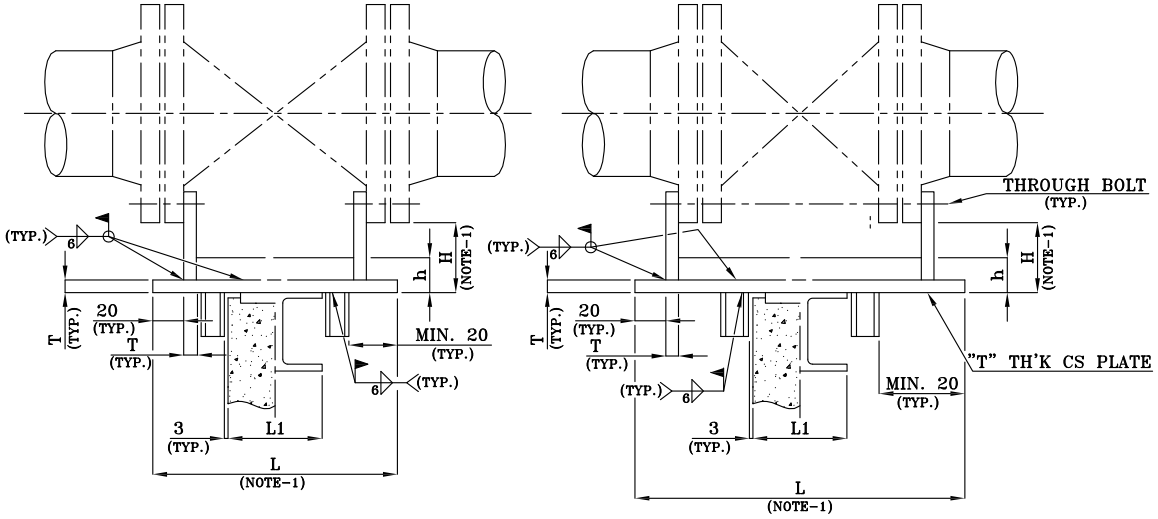
SUPPORT DESCRIPTION:

GUIDE SHOE ON VALVE
1"~40"

SHEET 3 OF 3

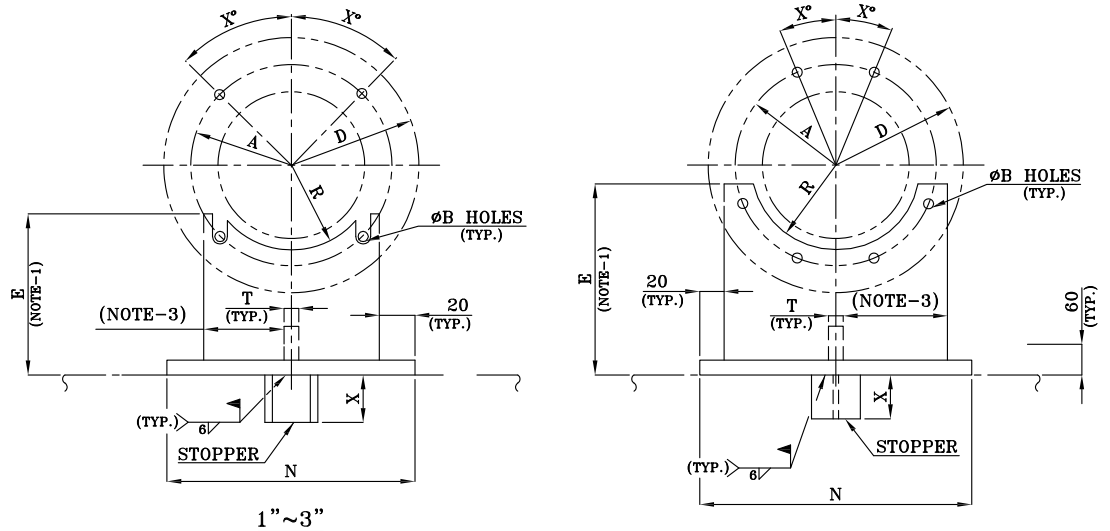
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 123 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	



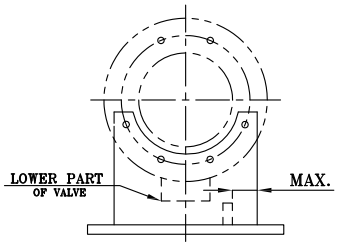
TYPE A

TYPE B



1"~3"

4"~14"



DETAIL

INDICATION:

SB - 21 – □□□ – □□□ – □

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

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

NOTE:

1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- 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.
4- 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
1"~40"
SB-21

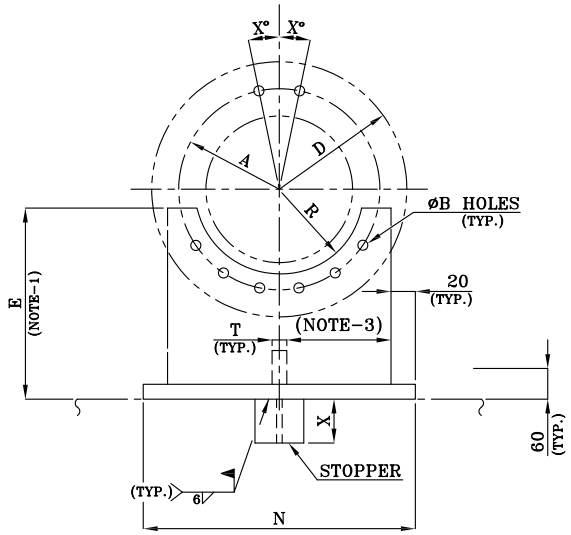
SHEET 1 OF 3

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

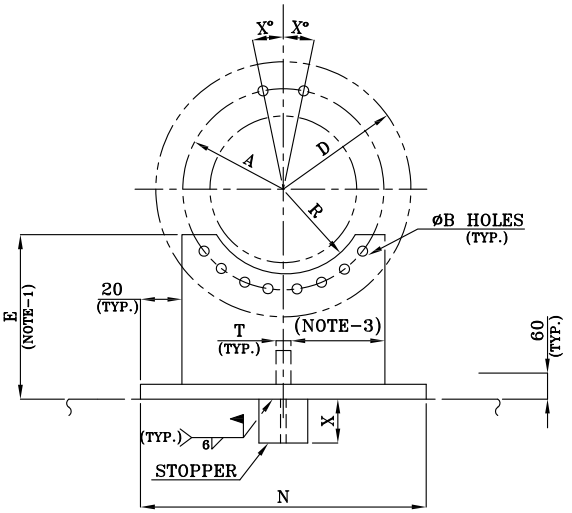
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

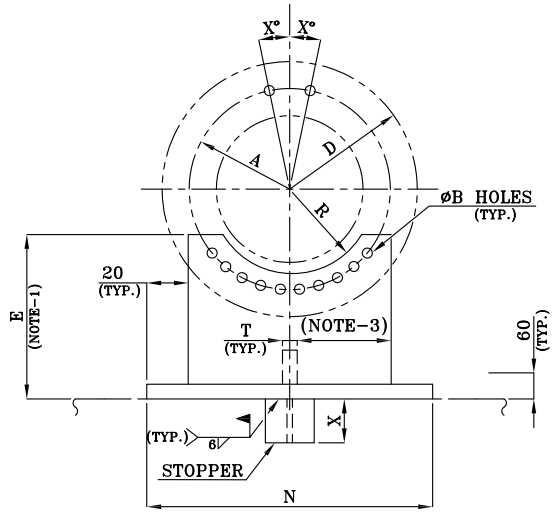
نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D00	0001	DW	PI	120	PEDCO	GCS	BK



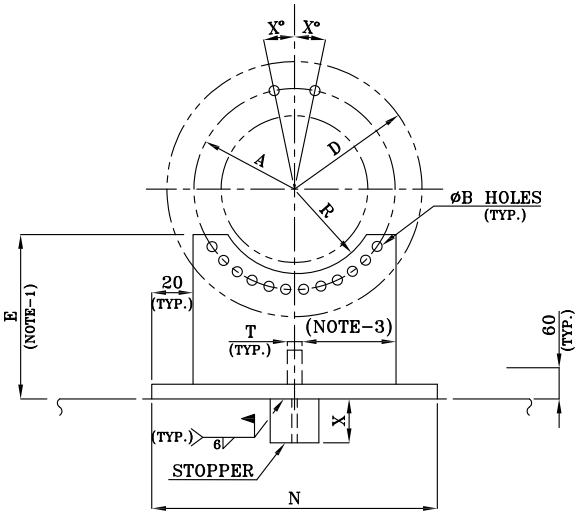
16" ~ 24"



26"



28" ~ 38"



40"

INDICATION:

SB - 21 – [ ][ ][ ] – [ ][ ][ ] – [ ]
(1) (2) (3) (4) (5)

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

NOTE:
1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- 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.
4- 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
1"~40"
SB-21

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	D00

شماره صفحه: 125 از 307

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) (5)

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

NOTE:
1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- 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.
4- 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
1"~40"
SB-21

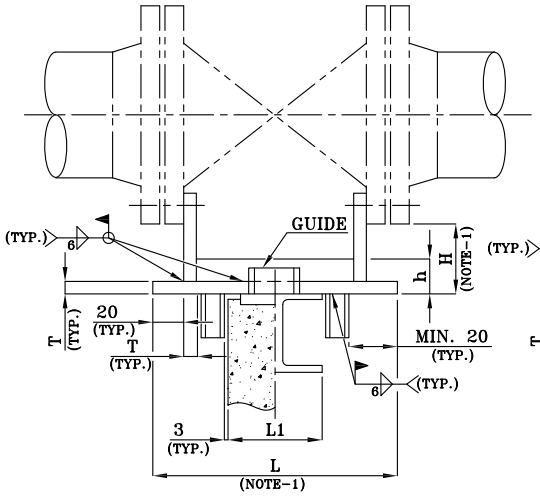
SHEET 3 OF 3

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

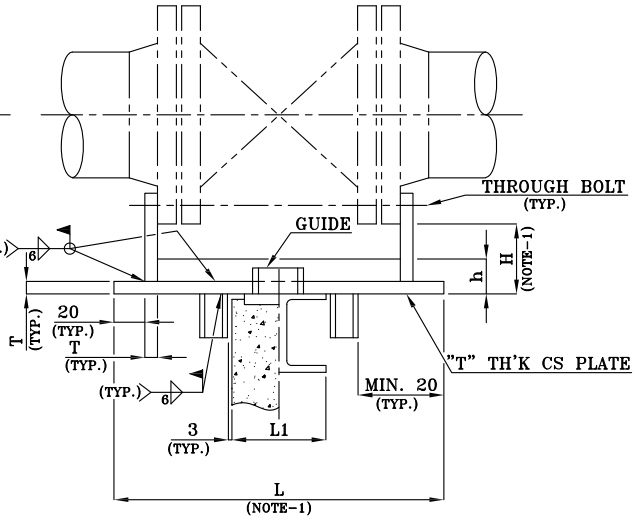
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

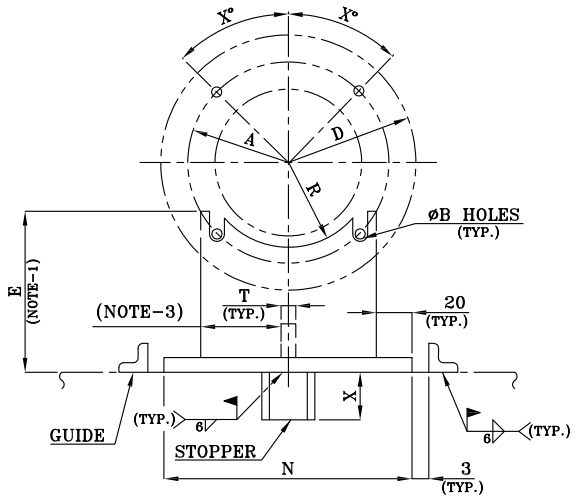
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



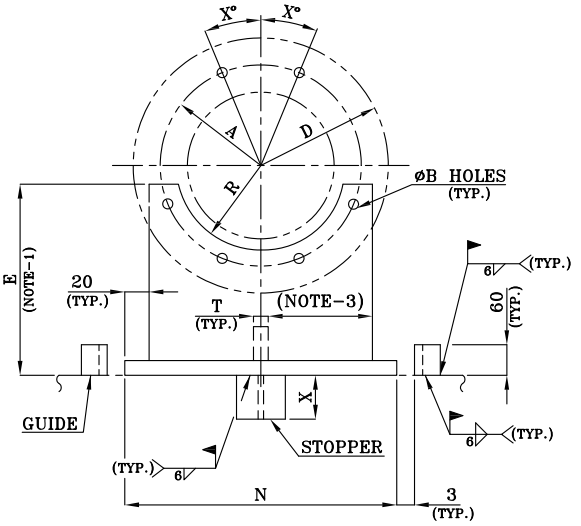
TYPE A



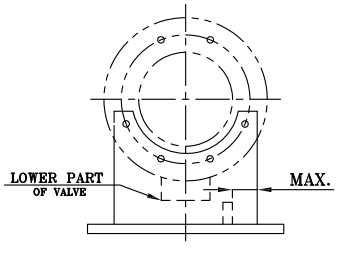
TYPE B



1"~3"



4"~14"



DETAIL

INDICATION:

SB - 22 – [ ][ ][ ] – [ ][ ][ ] – [ ]
(1) (2) (3) (4) (5)

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

NOTE:
1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- 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.
4- 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:

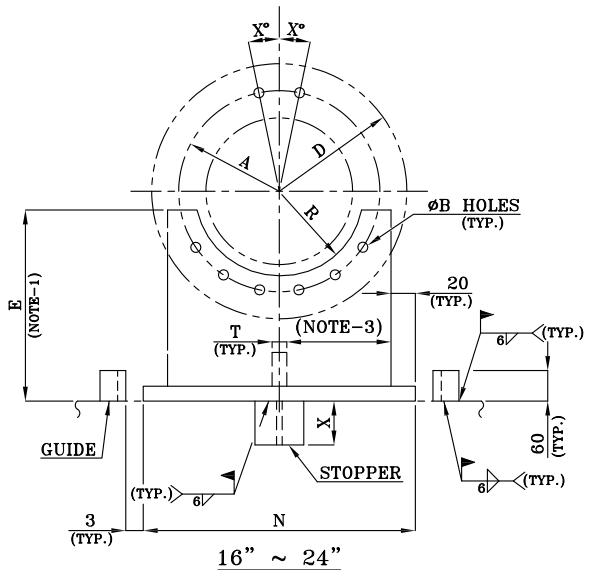
SEMI ANCHOR SHOE ON VALVE
1"~40"
SB-22

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

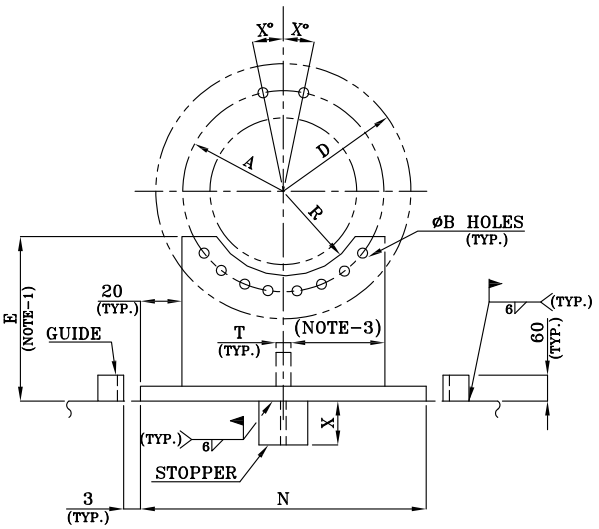
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

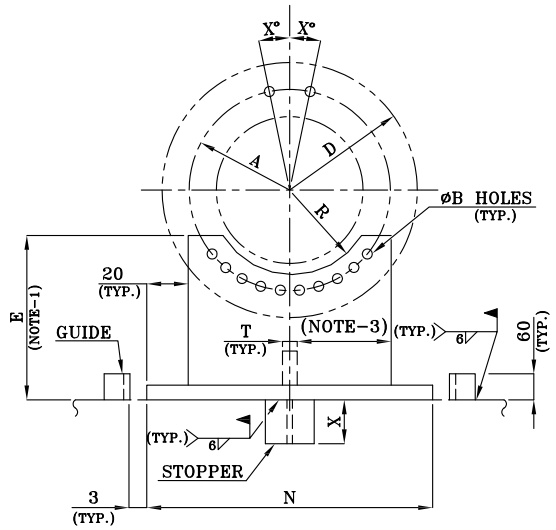
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



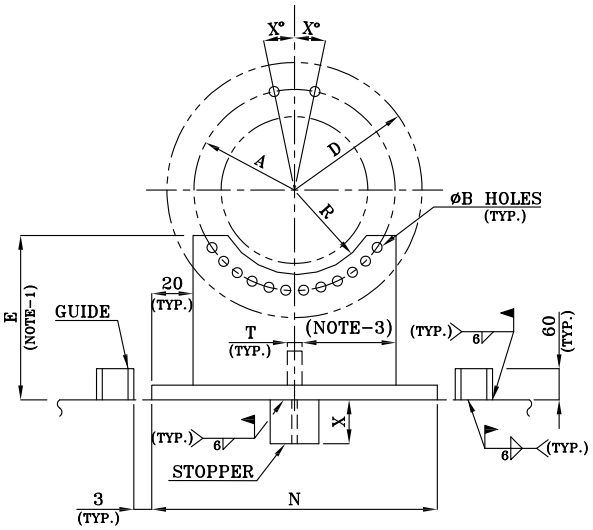
16" ~ 24"



26"



28" ~ 38"



40"

INDICATION:

SB - 22 – [ ][ ][ ] – [ ][ ][ ] – [ ]
(1) (2) (3) (4) (5)

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

NOTE:
1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- 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.
4- 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:

SEMI ANCHOR SHOE ON VALVE
1"~40"
SB-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	D00

شماره صفحه: 128 از 307

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) - (5)

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

NOTE:
1- FOR SHOES WITH ANOMALY HEIGHT OR LINES INCLUDING SLOP, DIMENSION "H" AND "E" SHALL BE ADJUSTED AT FIELD.
3- 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.
4- 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:

SEMI ANCHOR SHOE ON VALVE
1"~40"
SB-22

SHEET 3 OF 3

NISOC

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

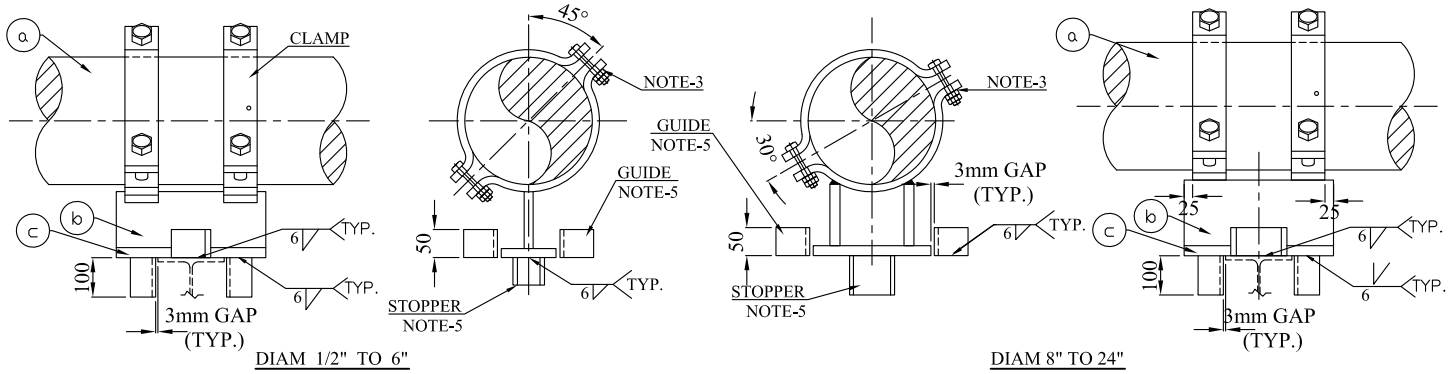
PEDCO
HIRGAN ENERGY

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	D00

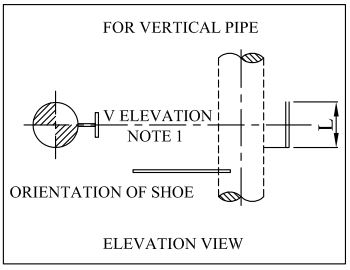
شماره صفحه: 129 از 307

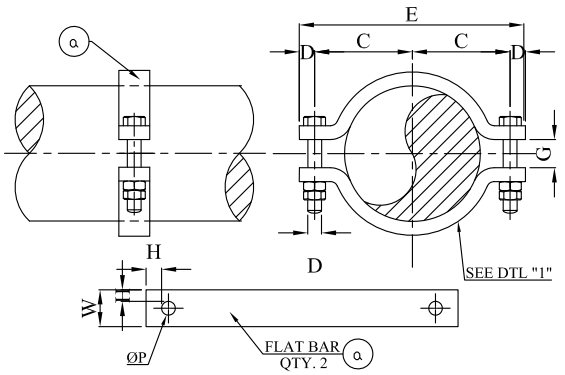


DIAM 1/2" TO 6"

DIAM 8" TO 24"

NPS MARK (2)	RUN PIPE SIZE	STOP MEMBER NOTE.7	GUIDE MEMBER NOTE. 7	STOP ALLOWABLE LOAD (Kg)	ALLOWABLE GUIDE LOAD (Kg) (SHOE BY L=300)
01	1"	UPN 80	L50×50×5	150	50
1A 1	1 1/2"				
02	2"			200	100
03	3"				120
04	4"				150
06	6"			400	
08	8"	UPN 160	UPN 140		1200
					800
					450
10	10"				1500
					900
					500
12	12"				1700
					1500
					1200
14	14"	UPN 200 HEA 160	UPN 200	640	1800
16	16"				2000
18	18"				2700
20	20"				3000
24	24"			850	3300





DES. TEMP. \ MATERIAL OF RUN PIPE / MEMBER	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL	LOW TEMPERATURE CARBON STEEL
−45°C TO 350°C — MATERIAL MARK (1)				K
ⓐ	–	–		A516 Gr.60
ⓑ				A516 Gr.60
ⓒ				A283 Gr.C
0°C TO 350°0 — MATERIAL MARK (1)	A	D	G	
ⓐ	A283 Gr.C	A387 GR.11	A240−304	
ⓑ	A283 Gr.C	A387 GR.11	A240−304	
ⓒ	A283 Gr.C	A283 Gr.C	A283 Gr.C	–
351°0 TO 450°0 — MATERIAL MARK (1)	B	E	H	
ⓐ	A285 Gr.C	A387 GR.11	A240−304	
ⓑ	A285 Gr.C	A387 GR.11	A240−304	
ⓒ	A283 Gr.C	A283 Gr.C	A283 Gr.C	
451°0 TO 550°0 — MATERIAL MARK (1)		F	I	
ⓐ		A387 GR.11	A240−304	
ⓑ	–	A387 GR.11	A240−304	
ⓒ		A285 GR.C	A285 GR.C	

LENGTH MARK (4)	L	THERMAL MOVEMENT
1	200	UP TO 40mm
2	300	41mm TO 75mm
3	400	76mm TO 125mm
4	500	126mm TO 175mm
5	600	176mm TO 230mm
6	700	–
7	800	–
8	900	–
9	1000	–
OTHER THAN ABOVE ACTUAL LENGTH SHALL BE INDICATED		

STATUS MARK(5)	STATUS
G	GUIDE
S	STOP
A	SEMI ANCHOR

HEIGHT MARK (3)	H	INSULATION THK.	h
1	100	UP TO 75mm	70
2	150	76mm TO 125mm	120
3	200	126mm TO 175mm	170
OTHER THAN ABOVE ACTUAL LENGTH SHALL BE INDICATED			H−30

INDICATION:

SB - 23− □□□ − □ − □□ (1) (2) (3) (4) (5)

(1) MATERIAL MARK
(2) NPS MARK
(3) HEIGHT MARK
(4) LENGTH MARK
(5) STATUSE MARK

NOTE:
1. IT MUST BE INDICATED ON SUPPORT LIST FOR VERTICAL PIPE
2. FOR GALVANIZED & STAINLEES STEEL PIPE NON ASBESTOS SHEET (1mm THICKNESS) SHALL BE INSERTED BETWEEN PIPE AND CLAMP.
3. SEE PAGE SB−23 SHEET 2 OF 2 FOR DETAIL OF SHOE AND CLAMP.

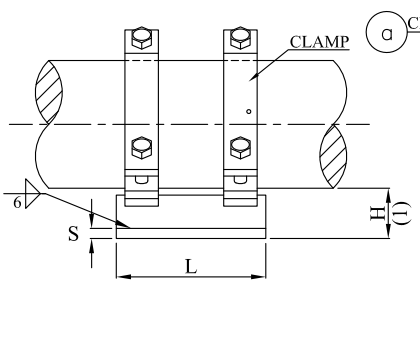
MATERIAL
BOLT AND NUT MATERIALS ARE ASTM A193 B7 AND A194 2H RESPECTIVELY.
SHAPE MATERIAL. ASTM A36

SUPPORT DESCRIPTION:
GUIDE & STOP CLAMPED SHOE WITHOUT LUG FOR HORIZONTAL OR VERTICAL PIPE 1/2"~24 (CS, LTCS, ALLOY STEEL STAINLESS STEEL AND GALVANIZED)

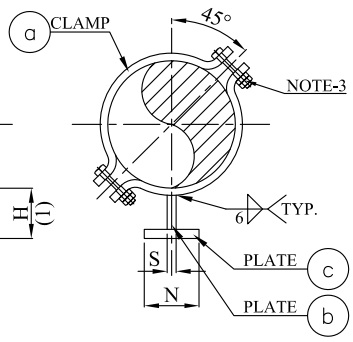
SHEET 1 OF 2

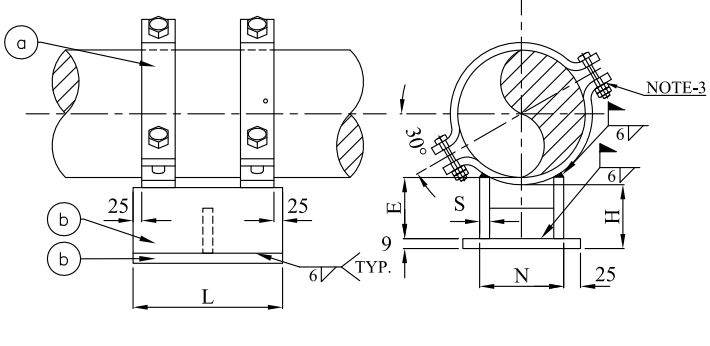
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 130 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



DIAM 1/2" TO 6"





DIAM 8" TO 24"

NPS MARK (2)	RUN PIPE SIZE	CLAMP BODY										HEX BOLT	ALLOW LOAD (kg)	SHOE BODY			
		A	C	D	E	G	H	P	R	W	T			N	H	E	S
01	1"	36	35	15	100	18	5	14	10	32	6	M12x45x30	460	100	–	–	6
1A	11/2"	51	50	15	130	18	5	14	10	32	6	M12x45x30	740				
02	2"	63	55	15	140	18	5	14	10	32	6	M12x45x30	740				9
03	3"	92	75	15	180	18	5	14	10	32	6	M12x45x30	690	150			
04	4"	118	95	25	240	25	10	22	10	50	9	M20x70x35	1220				
06	6"	173	140	35	350	32	10	26	15	75	12	M24x90x45	1300				
08	8"	225	165	35	400	32	10	26	15	75	12	M24x90x45	1300		100	109	
															150	159	
															200	209	
10	10"	280	205	40	490	38	10	33	20	90	16	M32x110x55	1580		100	97	
															150	147	
															200	197	
12	12"	330	230	40	540	38	10	33	20	90	16	M32x110x55	1580		100	93	
															150	143	
															200	193	
14	14"	362	260	50	620	45	15	39	25	100	19	M38x130x70	1700		100	89	
															150	139	
															200	189	
16	16"	414	285	50	670	45	15	39	25	100	19	M38x130x70	2290	250	100	112	
															150	162	
															200	212	
18	18"	464	310	50	720	45	15	39	25	100	19	M38x130x70	2950	300	100	118	
															150	168	
															200	2'8	
20	20"	514	350	50	800	45	15	39	30	125	22	M38x130x70	2950		100	115	
															150	165	
															200	215	
24	24"	616	400	50	900	45	15	39	30	125	22	M38x130x70	2950	350	100	121	
															150	171	
															200	221	

INDICATION:

SB - 23– □□□ – □ – □□ (1) (2) (3) (4) (5)

(1) MATERIAL MARK
(2) NPS MARK
(3) HEIGHT MARK
(4) LENGTH MARK
(5) STATUSE MARK

NOTE:
1. IT MUST BE INDICATED ON SUPPORT LIST FOR VERTICAL PIPE
2. FOR GALVANIZED & STAINLEES STEEL PIPE NON ASBESTOS SHEET (1mm THICKNESS) SHALL BE INSERTED BETWEEN PIPE AND CLAMP.
3. SEE PAGE SB-23 SHEET 2 OF 2 FOR DETAIL OF SHOE AND CLAMP.

MATERIAL
BOLT AND NUT MATERIALS ARE ASTM A193 B7 AND A194 2H RESPECTIVELY.
SHAPE MATERIAL. ASTM A36

SUPPORT DESCRIPTION:

GUIDE & STOP CLAMPED SHOE WITHOUT LUG FOR HORIZONTAL OR VERTICAL PIPE 1/2"~24 (CS, LTCS, ALLOY STEEL STAINLESS STEEL AND GALVANIZED)

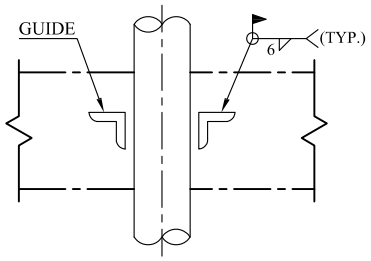
SHEET 2 OF 2

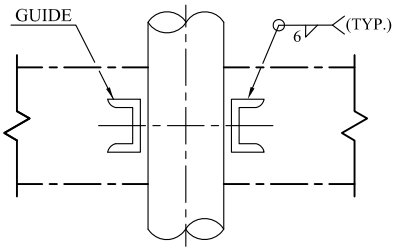
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

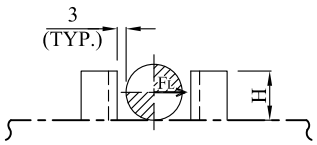
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

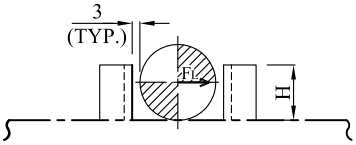
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00







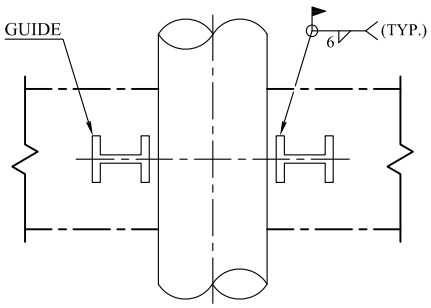
1/2" ~ 11/2"

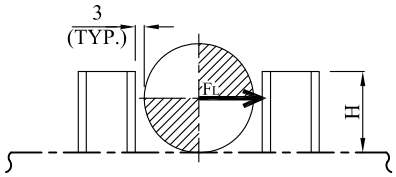


2" ~ 14"

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE	GUIDE	H	ALLOW. 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:
STANDARD PROFILE: ASTM A36

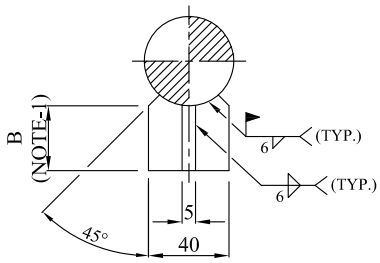
SUPPORT DESCRIPTION:

GUIDE
(BARE PIPE) 1/2"~56"
SC-01

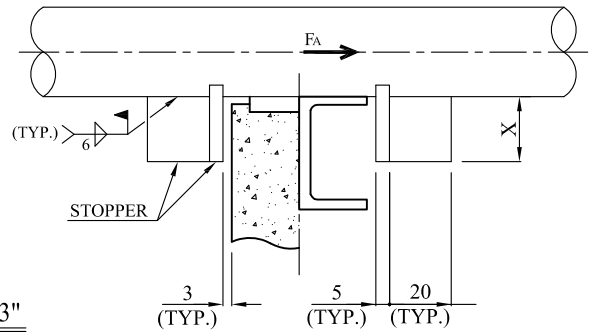
SHEET 1 OF 1

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

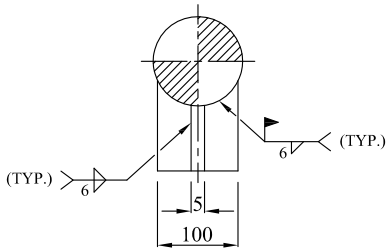
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 132 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	

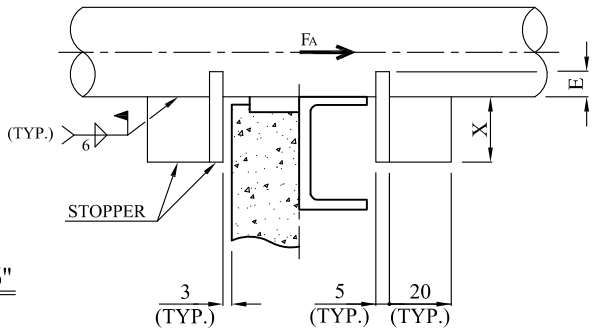


1/2" ~ 1"
1+1/2" ~ 3"



1/2" ~ 3"

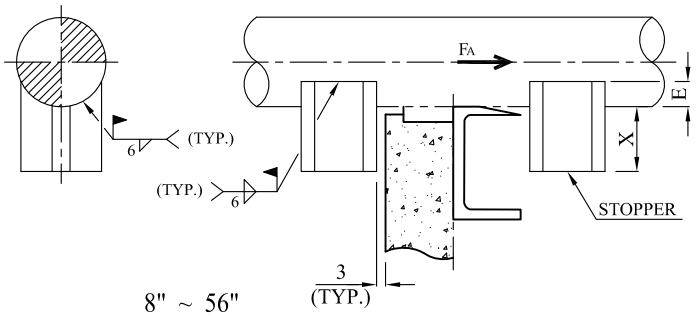




4" ~ 6"

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"			



8" ~ 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

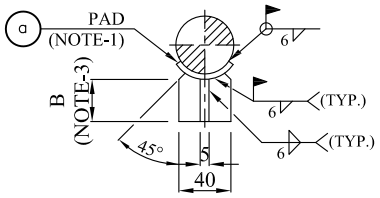
SUPPORT DESCRIPTION:

STORRER
(CS-WITHOUT PWHT) 1/2" ~ 56"
SC-02

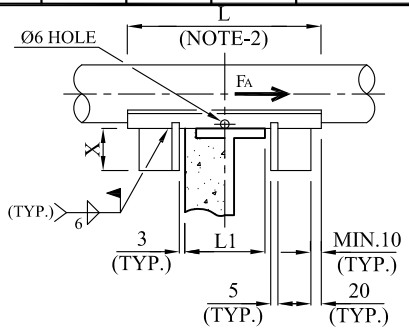
SHEET 1 OF 1

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

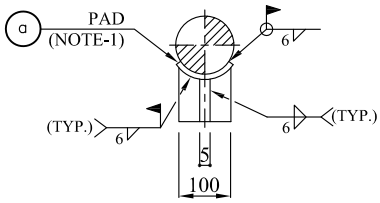
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 133 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00

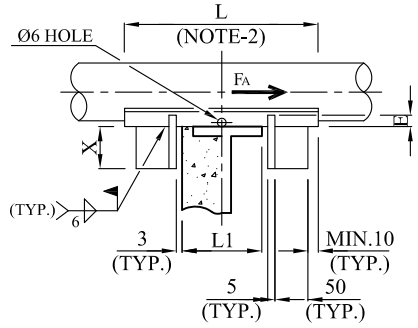


1/2" ~ 1"
1 1/2" ~ 3"



1/2" ~ 3"

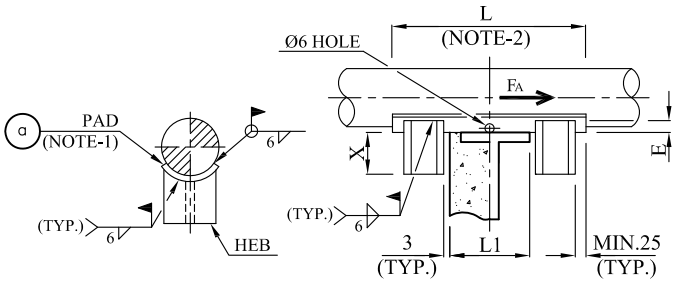




4" ~ 6"

STOPPER MARK:(3)

MARK	X
1	50
2	100
3	150
4	200



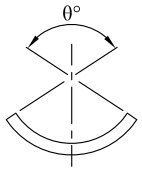
8" ~ 56"

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"				
30	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



DETAIL OF PAD

INDICATION:

SC - 03 – [ ][ ] – [ ][ ]
(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

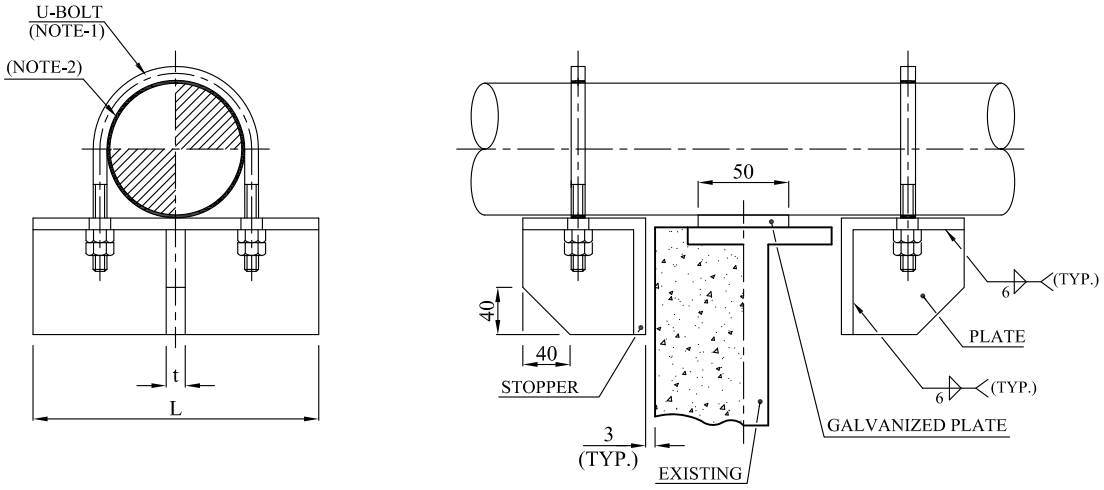
SUPPORT DESCRIPTION:

STORRER
(CS-WITH PWHT, AS, SS) 1/2" ~ 56"
SC-03

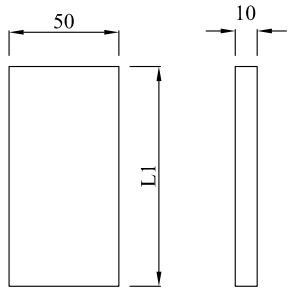
SHEET	1 OF 1

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: 134 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



1/2" ~ 8"



GALVANIZED PLATE

NPS MARK:(2)

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

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 283 Gr.C

SUPPORT DESCRIPTION:

STORRER
(GALVANIZED PIPE) 1/2" ~ 8"
SC-04

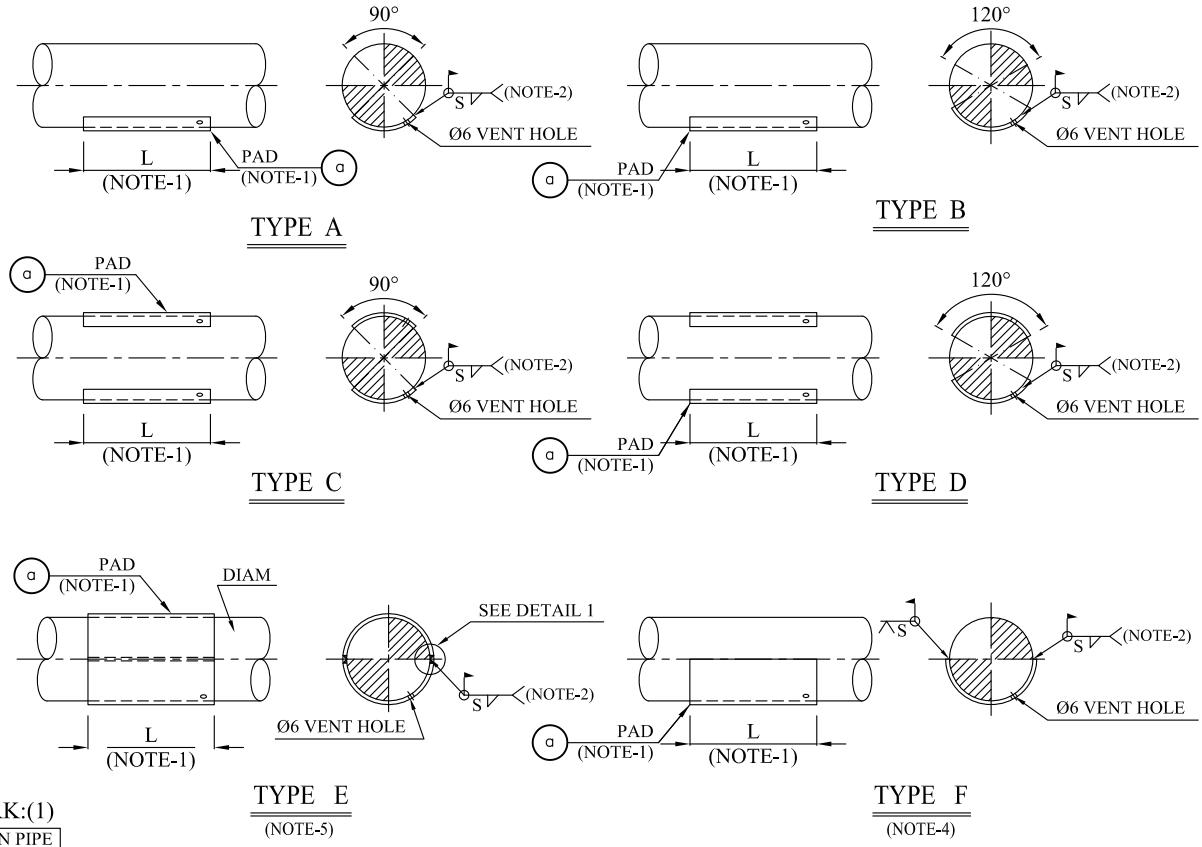
SHEET 1 OF 1

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	D00

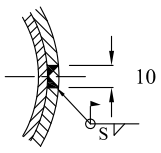


NPS MARK:(1)

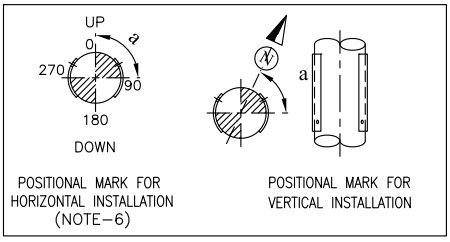
NPS MARK	RUN PIPE SIZE
02	2"
03	3"
04	4"
06	6"
08	8"
10	10"
12	12"
14	14"
16	16"
18	18"
20	20"
24	24"
26	26"
28	28"
30	30"
32	32"
34	34"
36	36"
38	38"
40	40"
42	42"
44	44"
48	48"
52	52"
56	56"

LENGTH MARK:(2)

MARK	L
1	300
2	400
3	500
4	600
5	700
6	800
7	900
8	1000



DETAIL 1



INDICATION:

SC - 05- [ ][ ][ ] - [ ]
(1) (2) (3)

1-TYPE
2-NPS MARK
3-ORIENTATION (a)

NOTE:
1- PAD (MATERIAL@) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN PIPE.
2- WELDING THICKNESS "S", SHOULD BE EQUAL TO PAD THICKNESS.
3.1-WHEN PADS FOR MATERIAL COMPATIBILITY PURPOSES IS NOT REQUIRED (e.g. CARBON STEEL PIPES WITHOUT PWHT), PAD FOR BEARING PROTECTION PURPOSES WILL BE REQUIRED FOR PIPES 18" AND LARGER.
3.2-FOR BARE GAS PIPES WITH SIZE >18" FOR THICKNESS > 19.5mm (REGARDLESS OF LOAD) THERE IS NO NEED FOR CONSIDERING PAD, EXCEPT FPR SPECIAL CASES RECOGNIZED BY STRESS ENGINEER.
4- USE ON THIN PIPE WHEN REQUIRED BY STRESS CALCULATION.
5- USE WHEN REQUIRED BY STRESS CALCULATION.
6- LOOKING TO NORTH OR EAST DIRECTION.

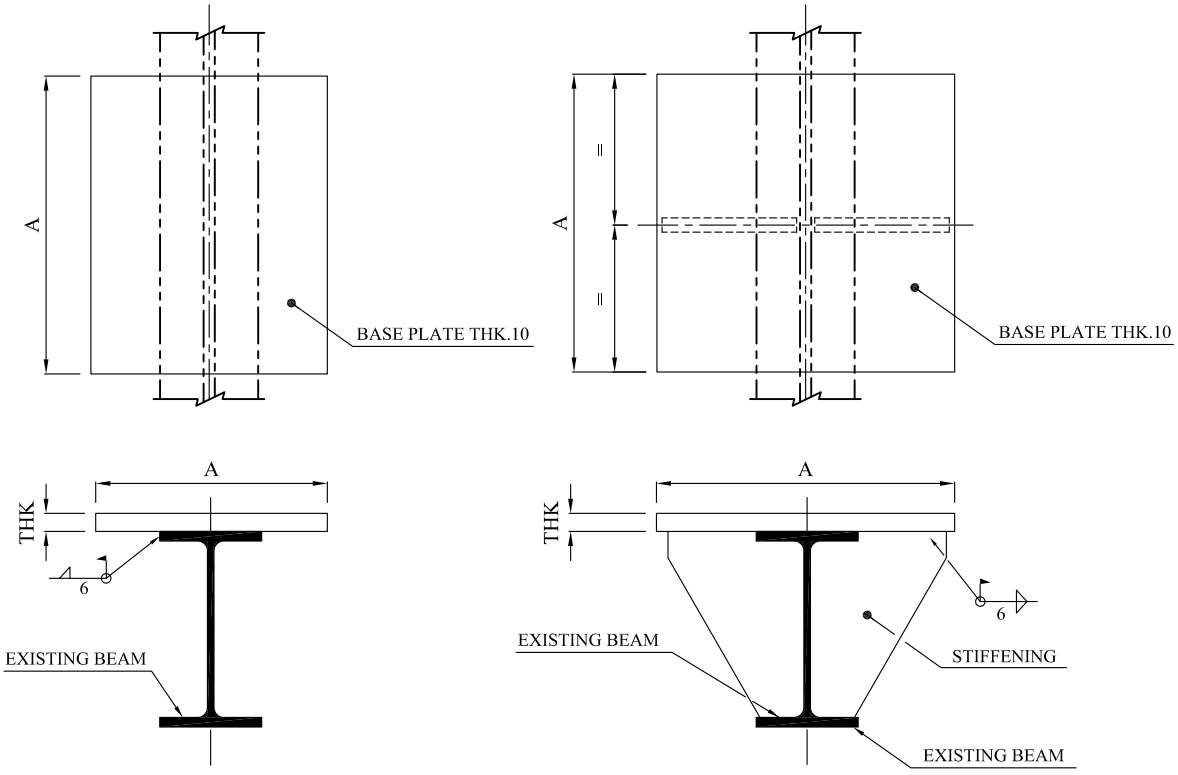
SUPPORT DESCRIPTION:

REINFORCING PAD
2" ~ 56"
SC-05

SHEET 1 OF 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: 136 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



TYPE A

TYPE B

SIZE MARK & TYPE (1), (2):

SIZE	A	THK	TYPE
1	160	10	A
2	190	10	
3	220	10	
4	270	10	B
5	310	15	
6	370	15	

INDICATION:

SC - 06- □□
(1) (2)

1-SIZE MARK
2-TYPE

NOTE:
1- STIFFENING PLATE TO BE CUT AND FORM AT FIELD.

SUPPORT DESCRIPTION:

BASE PLATE
ON STEEL SHAPES
SC-06

SHEET 1 OF 1

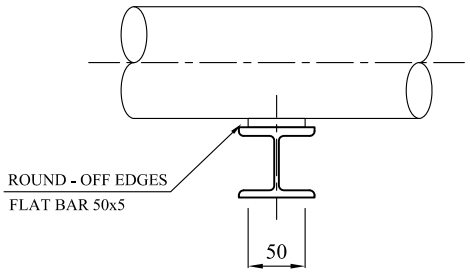
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

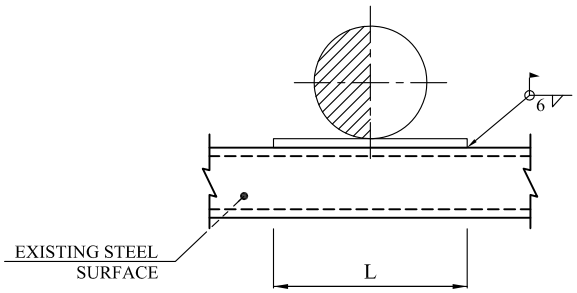
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 137 از 307





NPS MARK:(1)

NPS MARK	RUN PIPE SIZE	L
02	2"	80
03	3"	100
04	4"	100
06	6"	150
08	8"	150
10	10"	200
12	12"	200
14	14"	200
16	16"	200
18	18"	200
20	20"	200
24	24"	200

INDICATION:

SC - 07- [ ]
(1)

1-NPS MARK

NOTE:

MATERIAL:

1- FLAT BAR:

MATERIAL OF RUN PIPE	FLAT BAR
CARBON STEEL	A36
GALV. CARBON STEEL	A36 (G)
STAINLESS STEEL	A240-304

1- WEDGE SHALL BE USED FOR GALV. CARBON STEEL & STAINLESS STEEL.

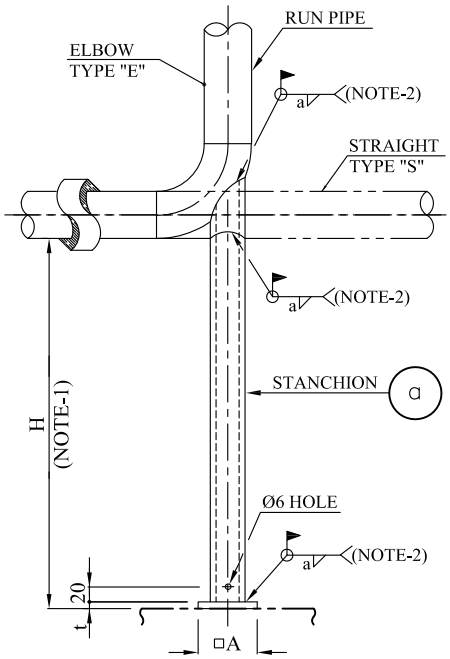
SUPPORT DESCRIPTION:

SHIM PLATE
(2" - 24")
SC-07

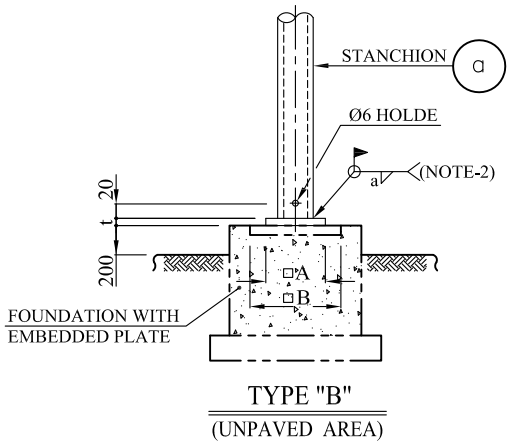
SHEET 1 OF 1

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

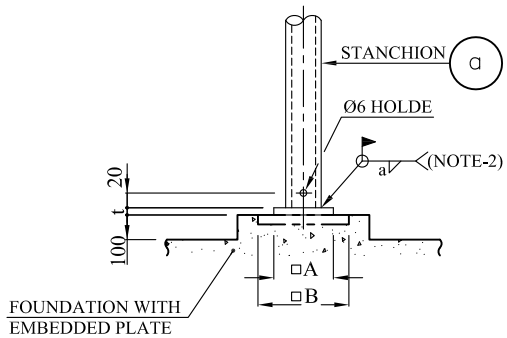
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 138 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	



TYPE "A"
(STEEL SURFACE)



TYPE "B"
(UNPAVED AREA)



TYPE "C"
(PAVED AREA)

NPS MARK: (3)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE MARK	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	

HEGGHT 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 MARK
2-TYPE OF FOUNDATION
3-NPS MARK
4-HEGHT MARK

NOTE:
1- TO BE ADJUSTED AT FIELD.
2- FOR STANCHION SIZE <4", a=TRUNNION WALL THICKNESS, FOR TRUNNION SIZE >4", a=6mm.
3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).
4- MAX. DESIGN TEMP. FOR RUN PIPE SHALL NOT EXCEED 400 Cø.

MATERIAL:
STANCHION@ : A53 Gr.B, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:

SLID STOOL
(CS-WITHOUT PWHT) 2"~36"
SD-01

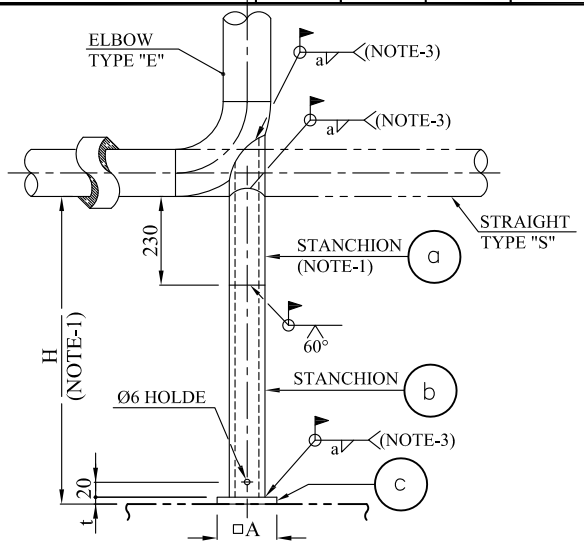
SHEET 1 OF 1

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

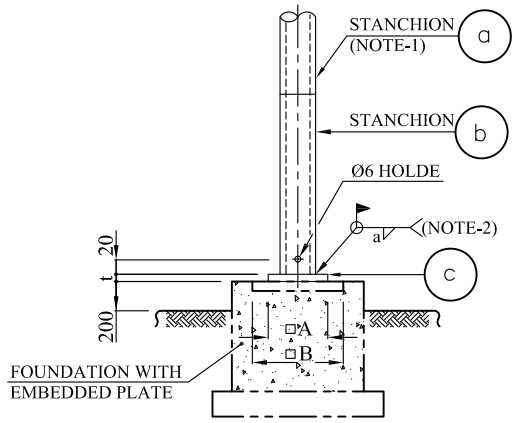
شماره پیمان: 053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



TYPE "A"
(STEEL SURFACE)



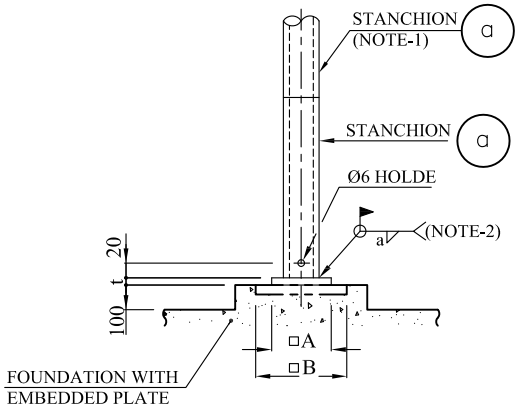
TYPE "B"
(UNPAVED AREA)

NPS MARK: (4)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE MARK	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	

HEGHT 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	–	–	–
	ⓑ	A240 Gr.B	A240 Gr.B	A240 Gr.B
	ⓒ	A283 Gr.C	A283 Gr.C	A283 Gr.C
400°C TO 550°C	MARK	B	D	F
	ⓐ NOTE-1	–	–	–
	ⓑ	–	A240 Gr.B	A240 Gr.B
	ⓒ	–	A285 Gr.C	A285 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-HEGHT MARK

NOTE:
1- TO BE ADJUSTED AT FIELD.
2- FOR STANCHION SIZE <4", a=TRUNNION WALL THICKNESS, FOR TRUNNION SIZE >4", a=6mm.
3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).
4- MAX. DESIGN TEMP. FOR RUN PIPE SHALL NOT EXCEED 400 Cø.

MATERIAL:
STANCHION :ⓐ53 Gr.B, PLATE: A283 Gr.C

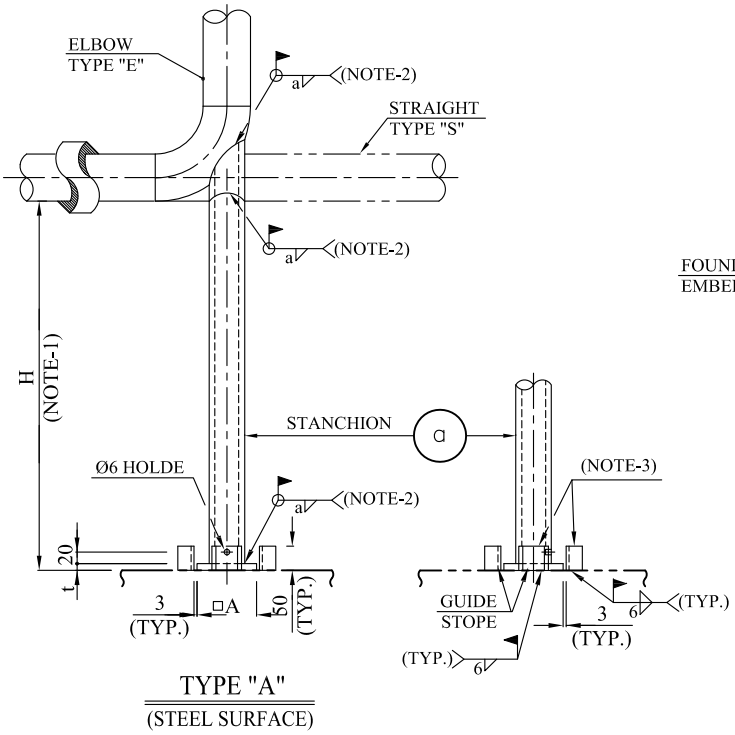
SUPPORT DESCRIPTION:

SLID STOOL
(CS-WITH PWHT, AS, SS) 2"~36"
SD-02

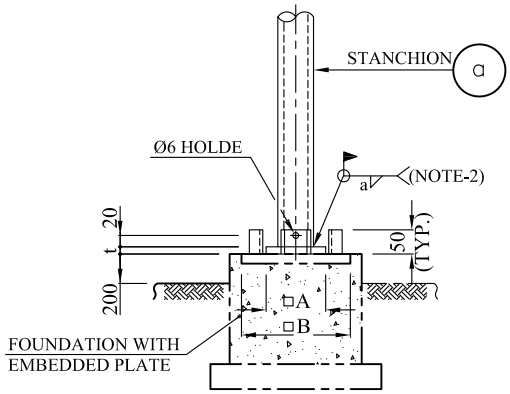
SHEET 1 OF 1

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

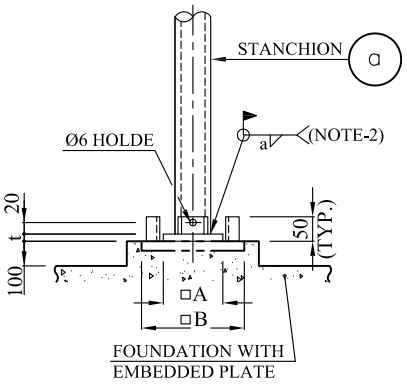
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 140 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



TYPE "A"
(STEEL SURFACE)



TYPE "B"
(UNPAVED AREA)



TYPE "C"
(PAVED AREA)

NPS MARK: (4)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE MARK	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		

HEGHT 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-HEGHT MARK

NOTE:
1- TO BE ADJUSTED AT FIELD.
2- FOR STANCHION SIZE <4", a=TRUNNION WALL THICKNESS, FOR TRUNNION 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 Cø.

MATERIAL:
STANCHION@ :A53 Gr.B, PLATE: A283 Gr.C, STANDARD PROFILE: ASTM A36

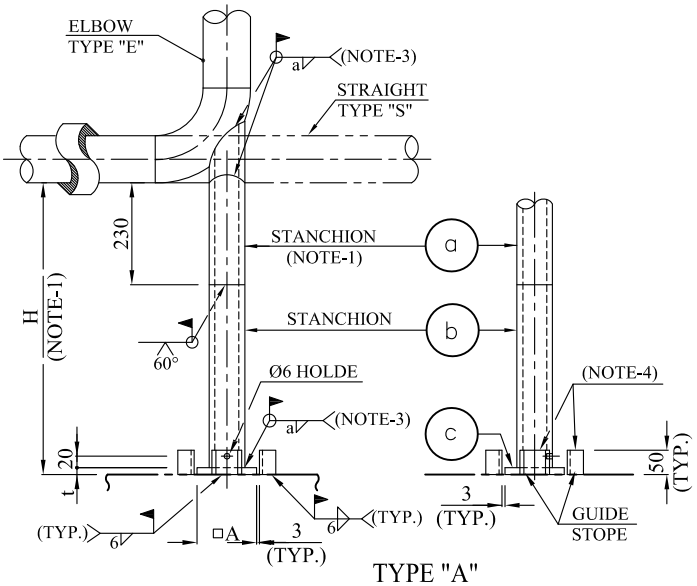
SUPPORT DESCRIPTION:

GUIDE/LINE STOP/SEMI ANCHOR
STOOL (CS-WITHOUT PWHT) 2"~36"
SD-03

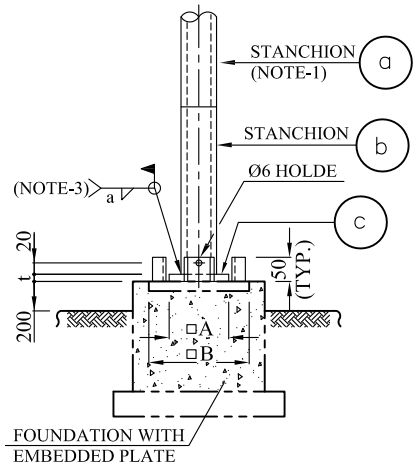
SHEET	1 OF 1

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: 141 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



TYPE "A"
(STEEL SURFACE)



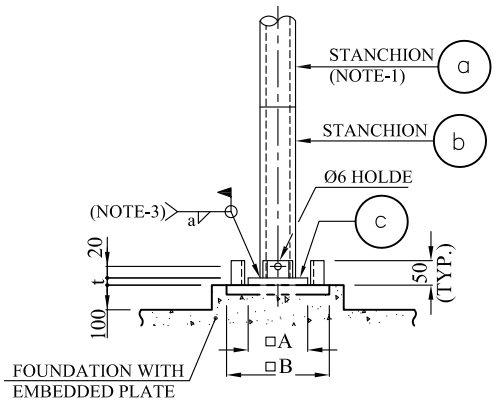
TYPE "B"
(UNPAVED AREA)

NPS MARK: (5)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE MARK	STANCHION PIPE THK.	A	B	t	GUIDE OR STOPPER
02	2"	1 1/2"	SCH80	120	280	10	U100
03	3"	2"					
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"	STD	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		

HEGHT 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-HEGHT 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=TRUNNION WALL THICKNESS, FOR TRUNNION 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

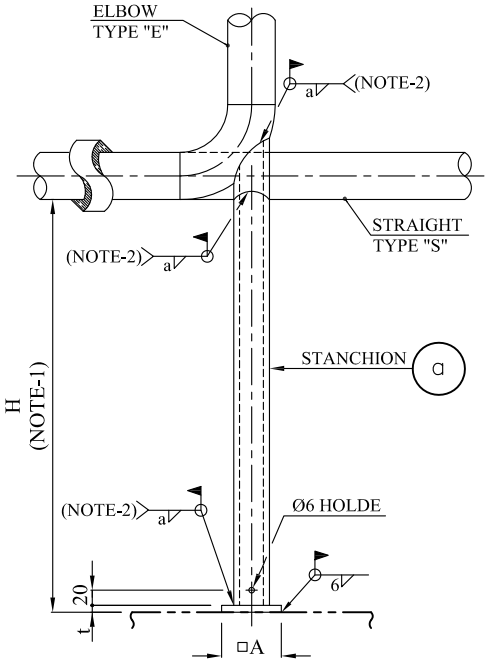
SHEET 1 OF 1

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

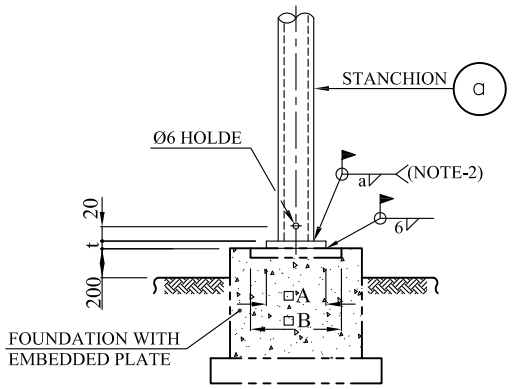
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

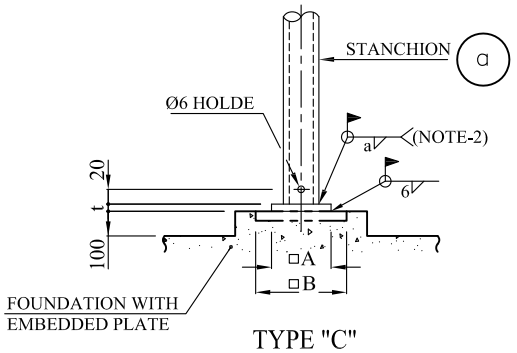
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



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	

HEGGHT 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 MARK RUN PIPE
2-TYPE OF FOUNDATION
5-NPS MARK
4-HEIGTH MARK

NOTE:
1- TO BE ADJUSTED AT FIELD.
2- FOR STANCHION SIZE <4" , a=TRUNNION WALL THICKNESS, FOR TRUNNION 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@ : A53 Gr.B, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:
FIXED STOOL
(CS-WITHOUT PWHT) 2"~36"
SD-05

SHEET 1 OF 1

NISOC

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

PEDCO

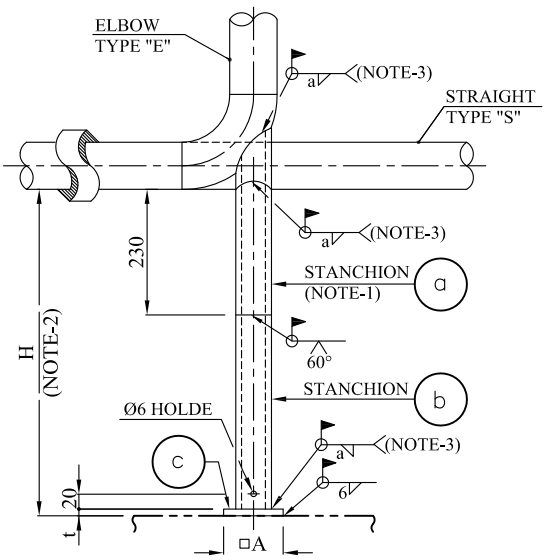
HIRGAN ENERGY

شماره پیمان:
053-073-9184

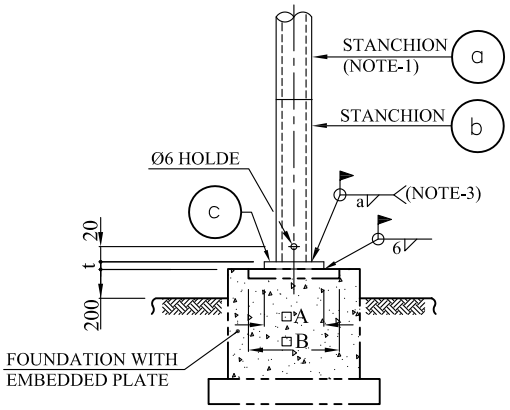
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 143 از 307



TYPE "A"
(STEEL SURFACE)



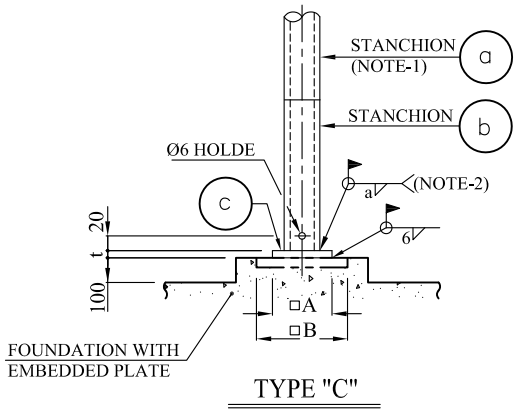
TYPE "B"
(UNPAVED AREA)

NPS MARK: (4)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	A	B	t
02	2"	1 1/2"	SCH80	120	280	10
03	3"	2"	STD	140	300	
04	4"	3"		160	320	
06	6"	4"		220	390	
08	8"	6"				
10	10"					
12	12"	8"		260	470	
14	14"					
16	16"	10"		320	530	12
18	18"					
20	20"	12"		350	610	
24	24"	14"		400	660	
26	26"					
28	28"	16"		450	750	15
30	30"					
32	32"	18"		500	880	
34	34"					
36	36"	20"		550	930	

HEIGHT MARK:(5)

MARK	H
	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 MATERRIAL @ AND SHALL BE WELDED BEFORE PWHT.
2- TO BE ADJUSTED AT FIELD.
3- FOR STANCHION SIZE <4", a=TRUNNION WALL THICKNESS, FOR TRUNNION SIZE >4", a=6mm.
4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

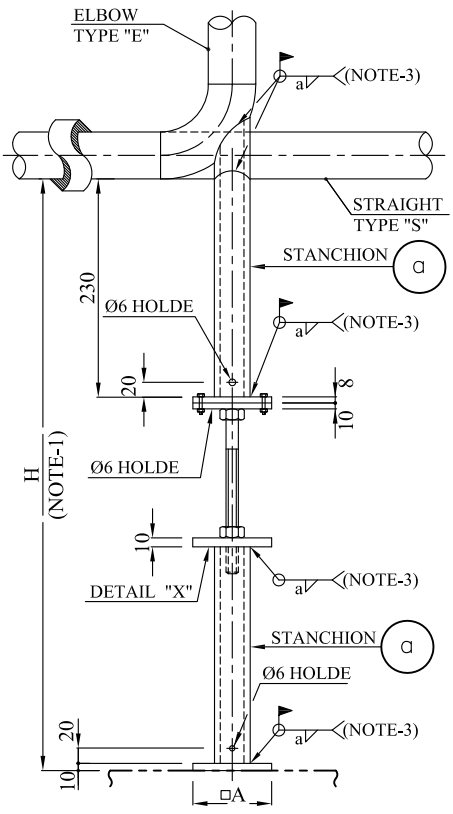
SUPPORT DESCRIPTION:

FIXED STOOL
(CS-WITH PWHT, AS, SS) 2"~36"
SD-06

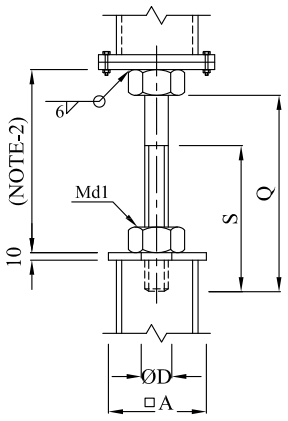
SHEET 1 OF 1

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

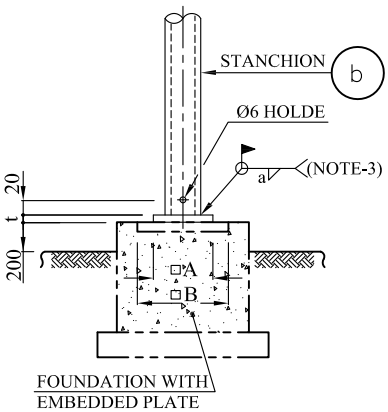
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 144 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



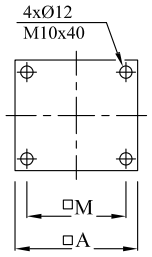
TYPE "A"
(STEEL SURFACE)



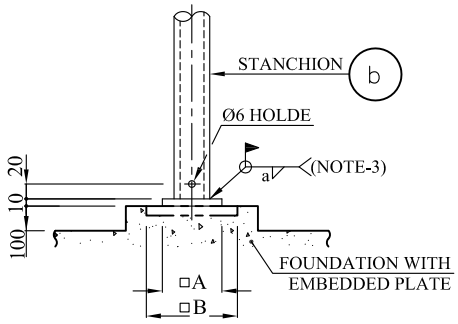
DETAIL "X"



TYPE "B"
(UNPAVED AREA)



DETAIL "W"



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.	A	M	B	Q	S	ØD	Md1
02	2"	1 1/2"	SCH80	140	90	180	160	140	26	M24
03	3"	2"	STD							
04	4"									
06	6"	3"			100		170	150	32	M30

INDICATION:

SD - 07- [ ][ ] - [ ][ ][ ]
(1) (2) (3) (4)

1-TYPE MARK RUN PIPE
2-TYPE OF FOUNDATION
3-NPS MARK
4-HEIGTH MARK

NOTE:
1- TO BE ADJUSTED AT FIELD.
2- FOR ADJUSTING, "G" SHOULD BE BETWEEN 50 AND 140 (50<G<140).
3- FOR STANCHION SIZE <4", a=TRUNNION WALL THICKNESS, FOR TRUNNION SIZE >4", a=6mm.
4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).
5- MAX. DESIGN TEMP. FOR RUN PIPE SHALL NOT EXCEED 400 Cø.

MATERIAL:
STANCHION@ : A53 Gr.B, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:
ADJUSTABLE SLIDE STOOL
(CS-WITHOUT PWHT) 2"~6"
SD-07

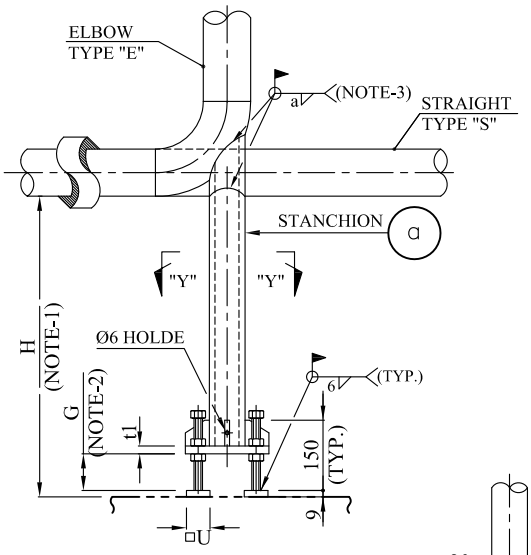
SHEET 1 OF 2

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

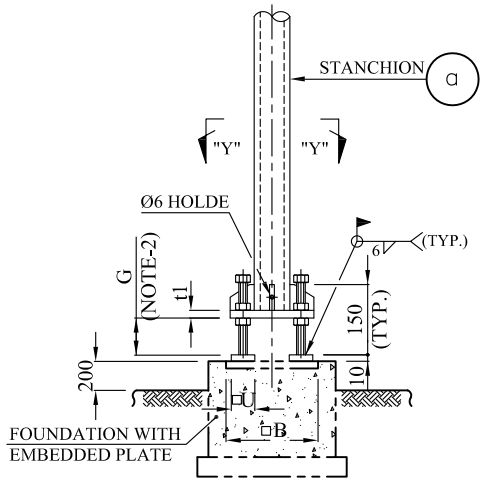
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

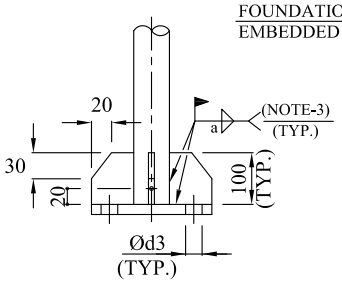
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



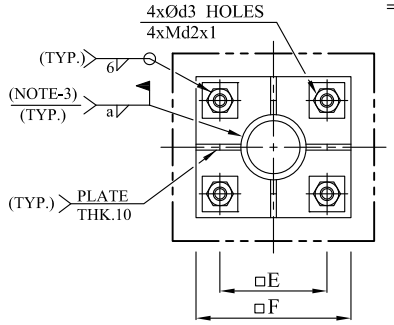
TYPE "A"
(STEEL SURFACE)



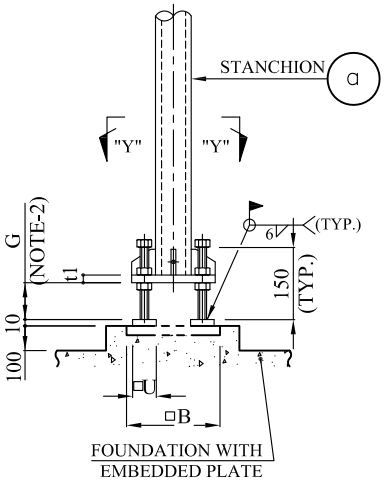
TYPE "B"
(UNPAVED AREA)



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	Md2x1
08	8"	4"	STD	350	240	170	55	12	26	M24x150
10	10"									
12	12"	6"		400	290	220	60	20	30	M27x150
14	14"	8"		460	350	260	70	20	30	M27x150
16	16"									
18	18"	10"		510	400	300	70	20	32	M30x150
20	20"									
24	24"	12"		560	450	350	80	20	36	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 AT FIELD.
2- FOR ADJUSTING, "G" SHOULD BE BETWEEN 50 AND 140 (50<G<140) .
3- FOR STANCHION SIZE <4", a=TRUNNION WALL THICKNESS, FOR TRUNNION SIZE >4", a=6mm.
4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).
5- MAX. DESIGN TEMP. FOR RUN PIPE SHALL NOT EXCEED 400 Cø.

MATERIAL:
STANCHION@ : A53 Gr.B, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:
ADJUSTABLE SLIDE STOOL
(CS-WITHOUT PWHT) 8"~24"
SD-07

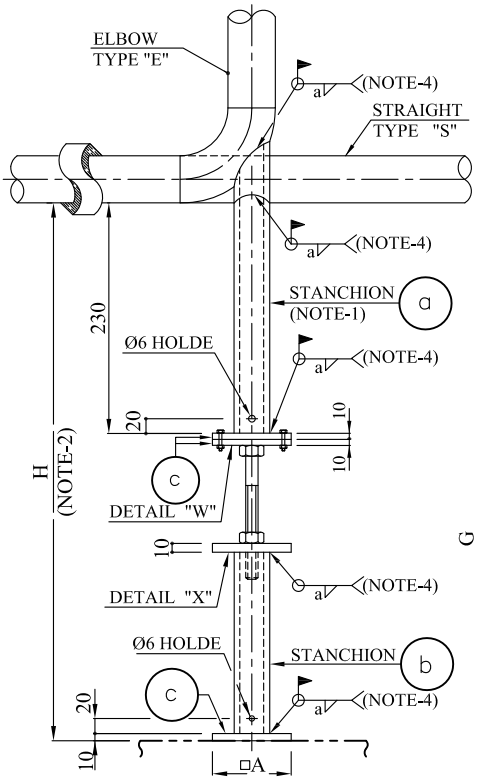
SHEET 2 OF 2

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

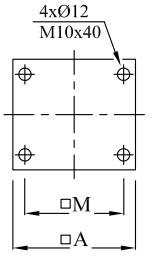
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

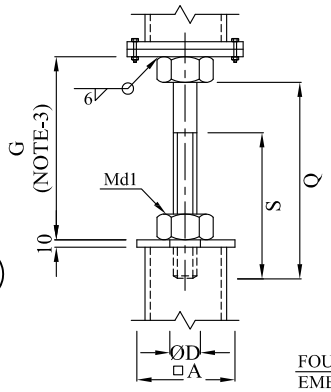
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



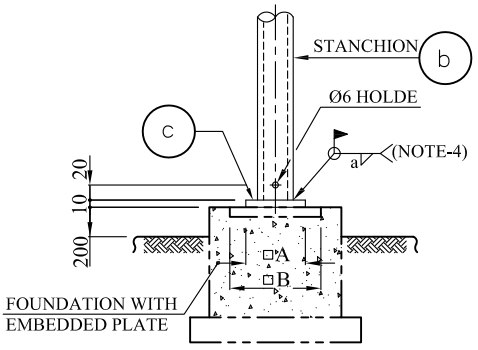
TYPE "A"
(STEEL SURFACE)



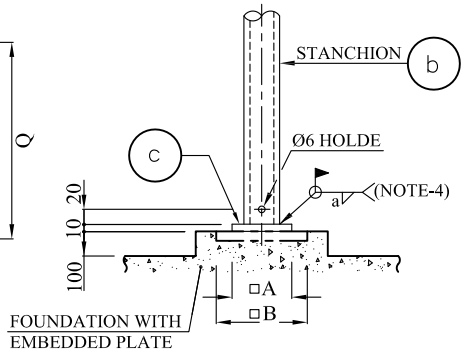
DETAIL "W"



DETAIL "X"



TYPE "B"
(UNPAVED AREA)



TYPE "C"
(PAVED AREA)

NPS MARK: (4)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	A	M	B	Q	S	ØD	Md1
02	2"	1+1/2"	SCH80	140	90	180	160	140	26	M24
03	3"	2"	STD							
04	4"									
06	6"	3"			100		170	150	32	M30

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 - 08– □□ – □□□ – □
(1) (2) (3) (4) (4)

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 MATERRIAL @ AND SHALL BE WELDED BEFORE PWHT.
2- TO BE ADJUSTED AT FIELD.
3- FOR ADJUSTING, "G" SHOULD BE BETWEEN 50 AND 140 (50<G<140).
4- FOR STANCHION SIZE <4", a=TRUNNION WALL THICKNESS, FOR TRUNNION SIZE >4", a=6mm.
5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

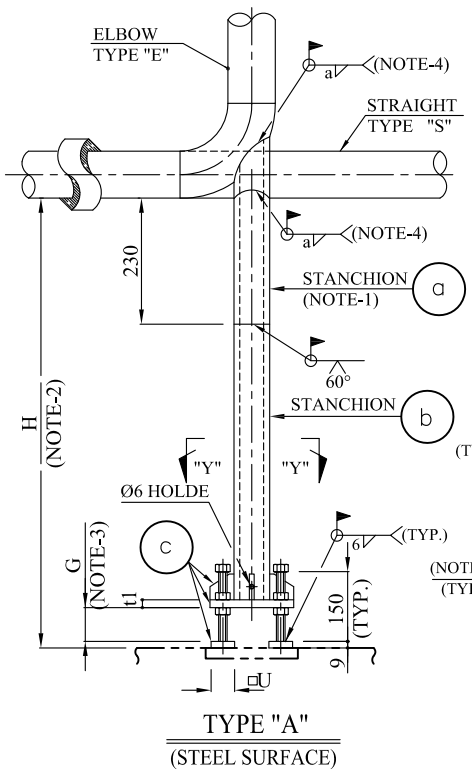
MATERIAL:
BOLT & NUT: A325

SUPPORT DESCRIPTION:
ADJUSTABLE SLIDE STOOL
(CS-WITH PWHT, AS, SS) 2" ~ 6"
SD-08

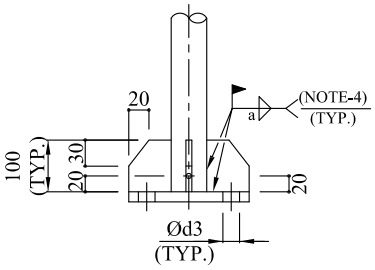
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184	STANDARD PIPE SUPPORT DRAWINGS	شماره صفحه: 147 از 307

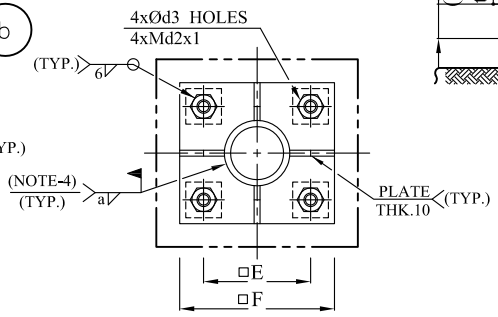
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



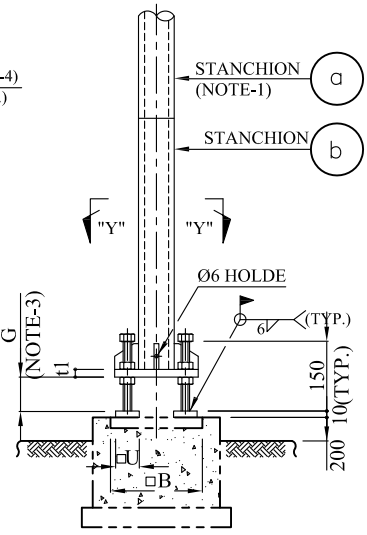
TYPE "A"
(STEEL SURFACE)



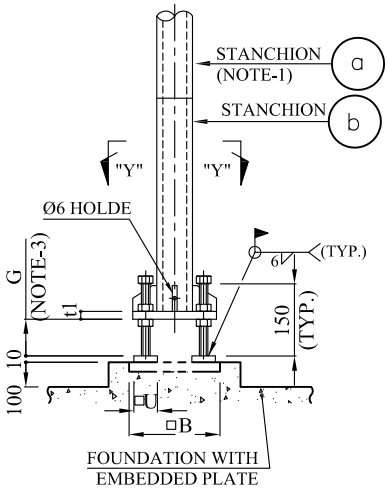
DETAIL OF PLATE



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
	ⓐ 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

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	Md2x1
08	8"	4"	STD	350	240	170	55	12	26	M24x150
10	10"									
12	12"	6"		400	290	220	60	20	30	M27x150
14	14"	8"		460	350	260	70	20	30	M27x150
16	16"									
18	18"	10"		510	400	300	70	20	32	M30x150
20	20"									
24	24"	12"		560	450	350	80	20	36	M33x150

INDICATION:

SD - 08– □□ – □□□ – □

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

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 MATERRIAL@ AND SHALL BE WELDED BEFORE PWHT.
2- TO BE ADJUSTED AT FIELD.
3- FOR ADJUSTING, "G" SHOULD BE BETWEEN 50 AND 140 (50<G<140).
4- FOR STANCHION SIZE <4", a=TRUNNION WALL THICKNESS, FOR TRUNNION SIZE >4", a=6mm.
5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

MATERIAL:

BOLT & NUT: A325

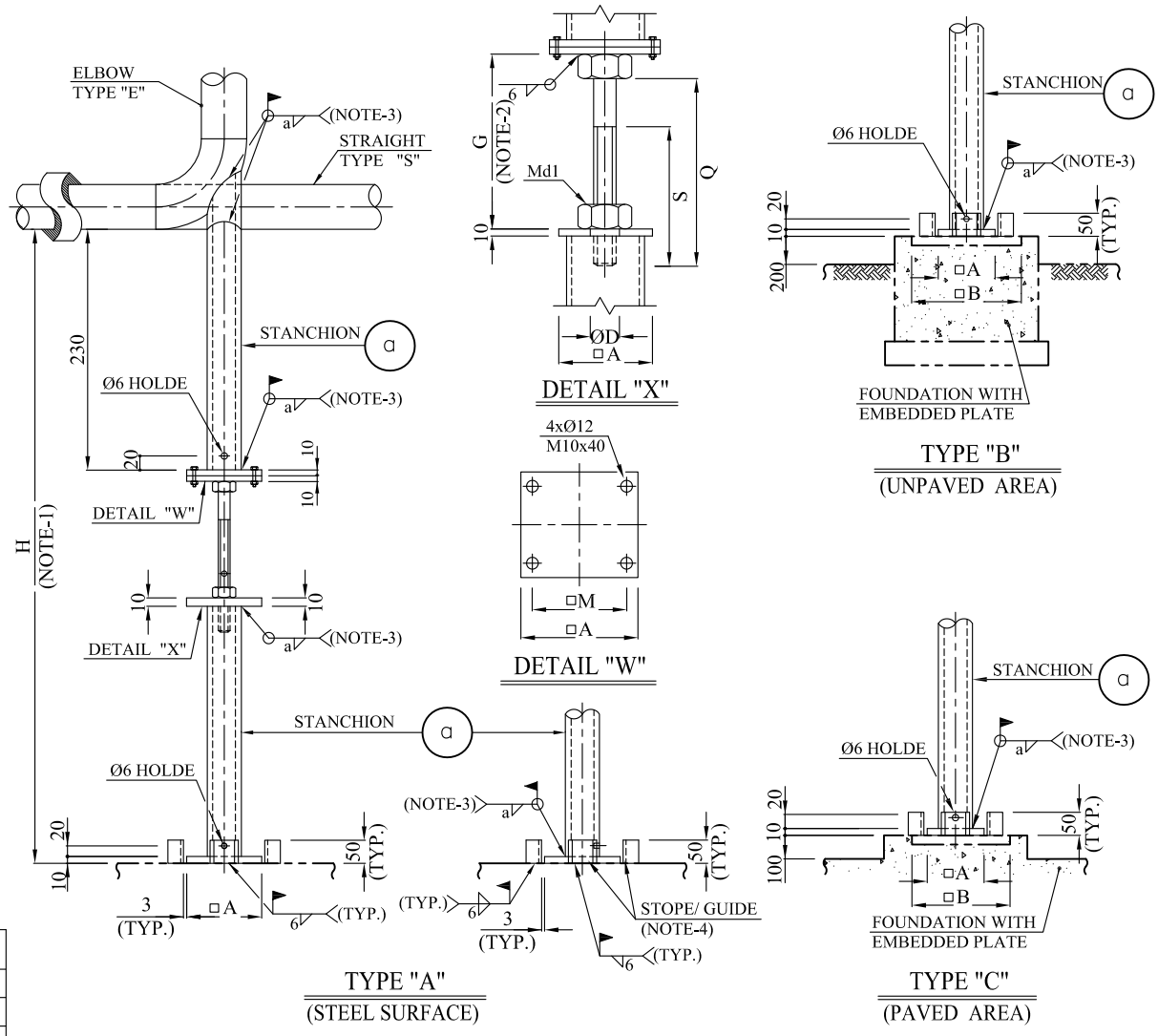
SUPPORT DESCRIPTION:

ADJUSTABLE SLIDE STOOL
(CS-WITH PWHT, AS, SS) 8" ~ 24"
SD-08

SHEET	2 OF 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: 148 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



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		A	M	B	Q	S	ØD	Md1	STOP/ GUIDE
		PIPE SIZE	PIPE THK.								
02	2"	1 1/2"	SCH80	140	90	180	160	140	26	M24	U100
03	3"	2"	STD								
04	4"										
06	6"	3"			100		170	150	32	M30	–

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

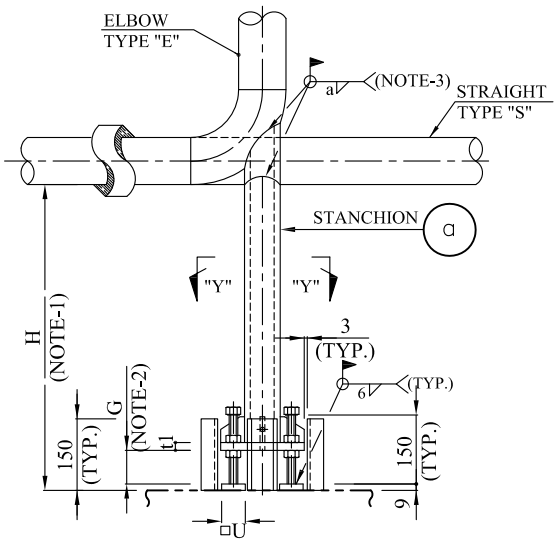
NOTE:
1- TO BE ADJUSTED IN THE FIELD.
2- FOR ADJUSTING, "G" SHOULD BE BETWEEN 50 AND 140 (50<G<140).
3- FOR STANCHION SIZE <4" , a=TRUNNION WALL THICKNESS, FOR TRUNNION SIZE >4" , a=6mm.
4- "G" INDICATES "GUIDE" & "L" INDICATES "LINE STOP" AND "S" INDICATED "SEMI ANCHOR" FOR TYPES OF FUNCTION.
5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).
6- MAX. DESIGN TEMP. FOR RUN PIPE SHALL NOT EXCEED 400 C.

MATERIAL:
STANCHION@ : A53 Gr.B, PLATE: A283 Gr.C

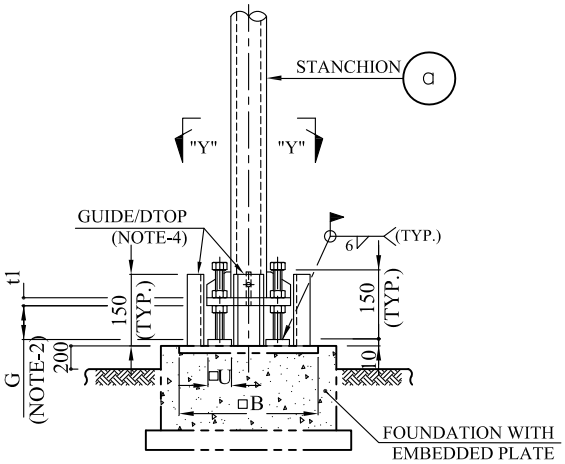
SUPPORT DESCRIPTION:
ADJUSTABLE GUIDE STOP/SEMI ANCHOR STOOL(CS-WITHOUT PWHT) 2"~6"
SD-09

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

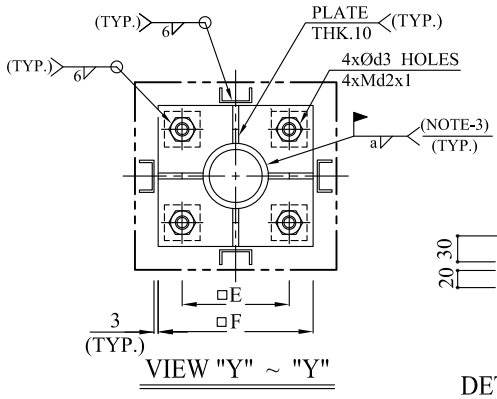
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 149 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	



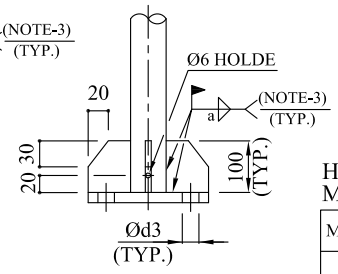
TYPE "A"
(STEEL SURFACE)



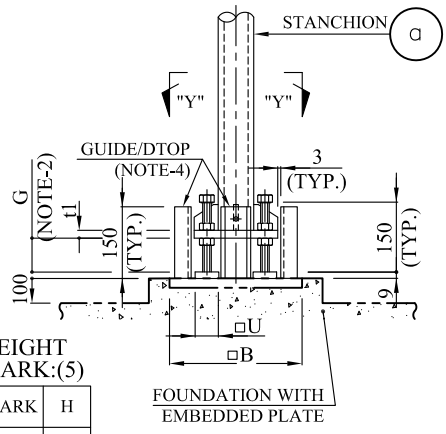
TYPE "B"
(UNPAVED AREA)



VIEW "Y" ~ "Y"



DETAIL OF PLATE



TYPE "C"
(PAVED AREA)

NPS MARK: (4)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	B	F	E	U	t1	Ød3	Md2x1	STOP/ GUIDE
08	8"	4"	STD	450	240	170	55	12	26	M24x150	U120
10	10"										
12	12"	6"		500	290	220	60	20	30	M27x150	U180
14	14"	8"		460	350	260	70	20	30	M27x150	U200
16	16"										

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 - 09- □□□ - □□□
(1) (2) (3)(3) (4) (5)

1-TYPE OF RUN PIPE
2-TYPE OF FOUNDATION
3-TYPE OF FUNCTION
4-NPS MARK
5-HEIGHT MARK

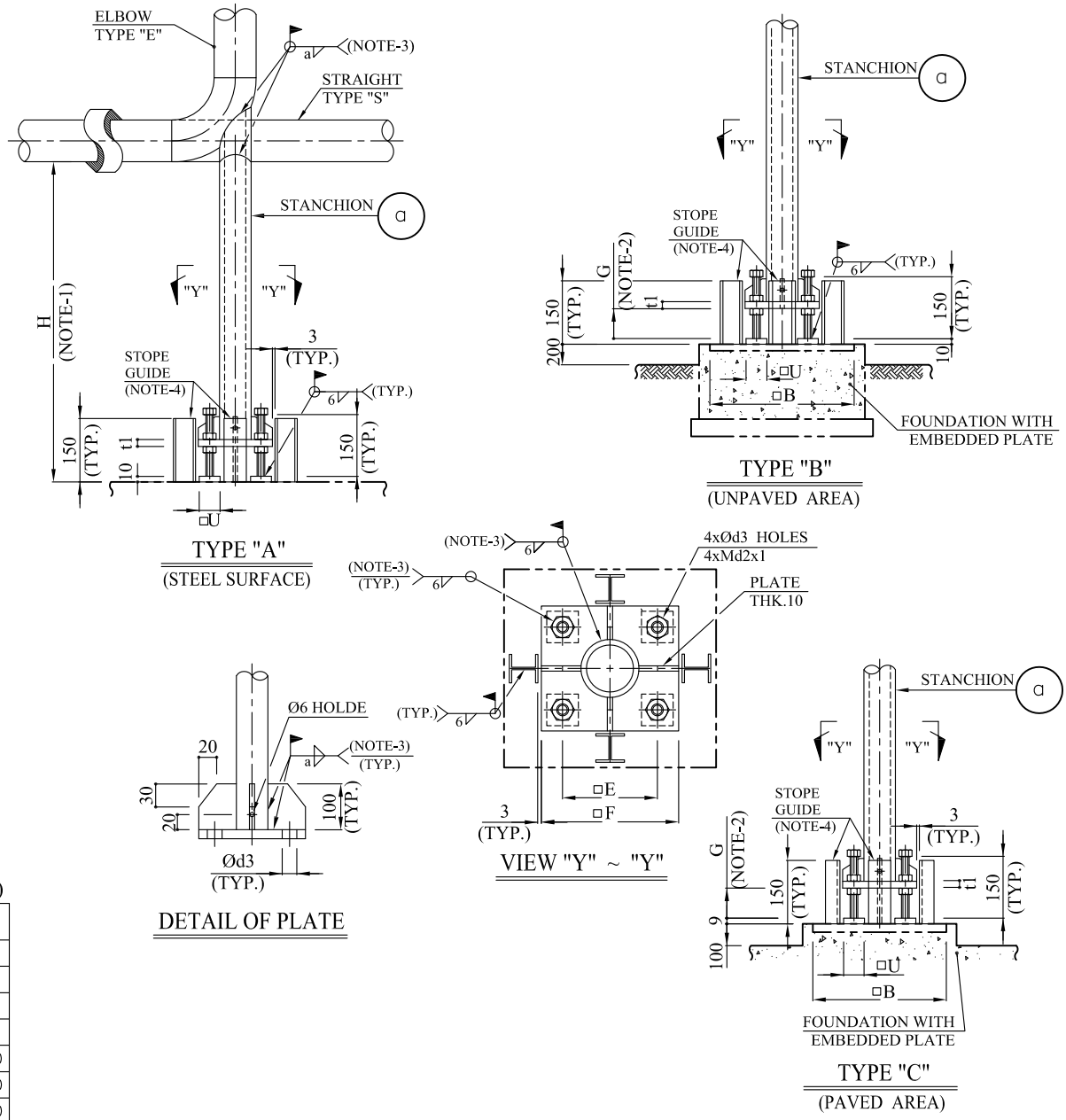
NOTE:
1- TO BE ADJUSTED IN THE FIELD.
2- FOR ADJUSTING, "G" SHOULD BE BETWEEN 50 AND 140 (50<G<140).
3- FOR STANCHION SIZE <4" , a=TRUNNION WALL THICKNESS, FOR TRUNNION SIZE >4", a=6mm.
4- "G" INDICATES "GUIDE" & "L" INDICATES "LINE STOP" AND "S" INDICATED "SEMI ANCHOR" FOR TYPES OF FUNCTION.
5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).
6- MAX. DESIGN TEMP. FOR RUN PIPE SHALL NOT EXCEED 400 Cø.

MATERIAL:
STANCHION@ : A53 Gr.B, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:
ADJUSTABLE GUIDE STOP/SEMI ANCHOR STOOL(CS-WITHOUT PWHT) 8"~16"
SD-09

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 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	



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		B	F	E	U	t1	Ød3	Md2x1	STOP/ GUIDE
		PIPE SIZE	PIPE THK.								
18	18"	10"	STD	650	400	300	70	20	32	M30x150	HEB100
20	20"										
24	24"	12"		700	450	350	80	20	36	M33x150	

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=TRUNNION WALL THICKNESS, FOR TRUNNION SIZE >4" , a=6mm.
4- "G" INDICATES "GUIDE" & "L" INDICATES" LINE STOP" AND "S" INDICATED " 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 Cø.

MATERIAL:
STANCHION@ : A53 Gr.B, PLATE: A283 Gr.C, STANDARD PROFILE: ASTM A36, BOLT & NUT:A325

SUPPORT DESCRIPTION:
ADJUSTABLE GUIDE STOP/SEMI ANCHOR STOOL(CS-WITHOUT PWHT) 18"~24"
SD-09

SHEET 3 OF 3

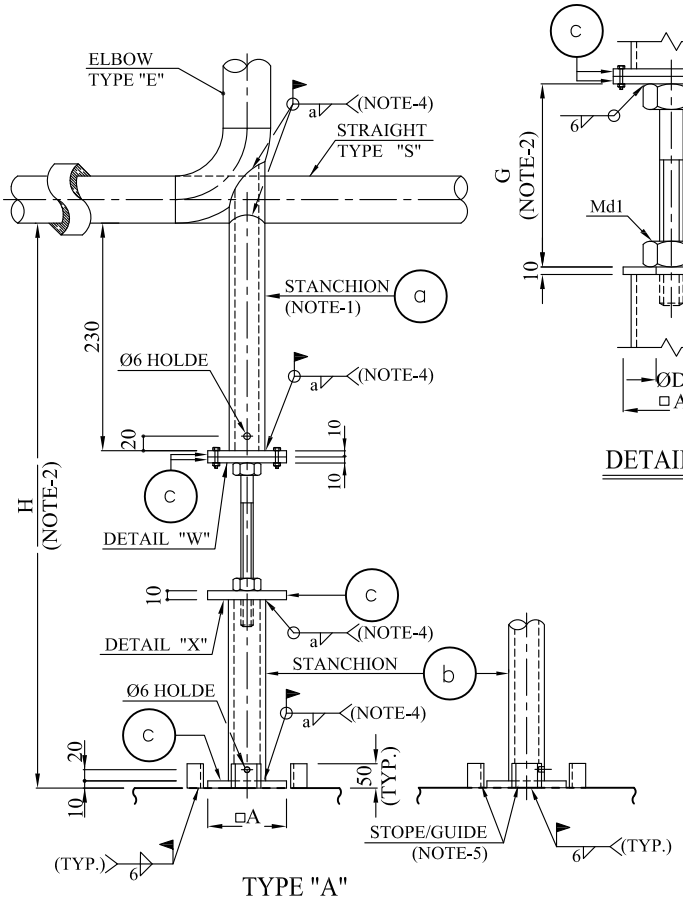
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

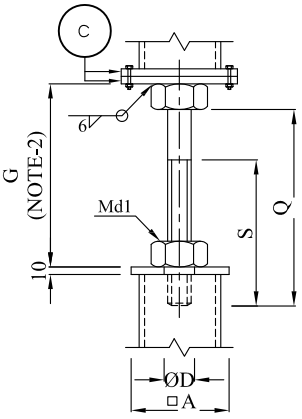
STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D00	0001	DW	PI	120	PEDCO	GCS	BK

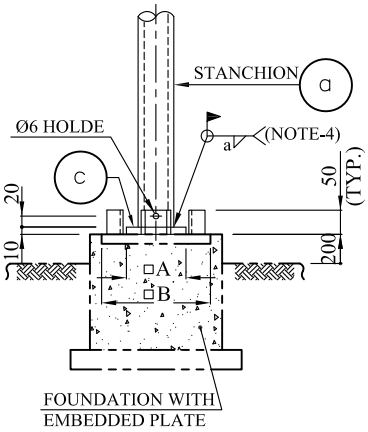
شماره صفحه: 151 از 307



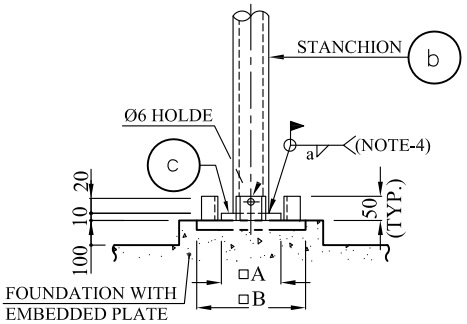
TYPE "A"
(STEEL SURFACE)



DETAIL "X"



TYPE "B"
(UNPAVED AREA)



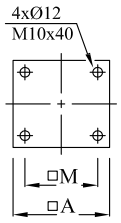
TYPE "C"
(PAVED AREA)

NPS MARK: (5)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	A	M	B	Q	S	ØD	Md1	STOP/ GUIDE
02	2"	1+1/2"	SCH80	140	90	310	160	140	26	M24	U100
03	3"	2"	STD								
04	4"										
06	6"	3"			100		170	150	32	M30	

HEIGHT MARK:(6)

MARK	H
1	600
2	700
3	800
4	900
5	1000
6	1100
7	1200
8	1300
9	1400



DETAIL "W"

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 - 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

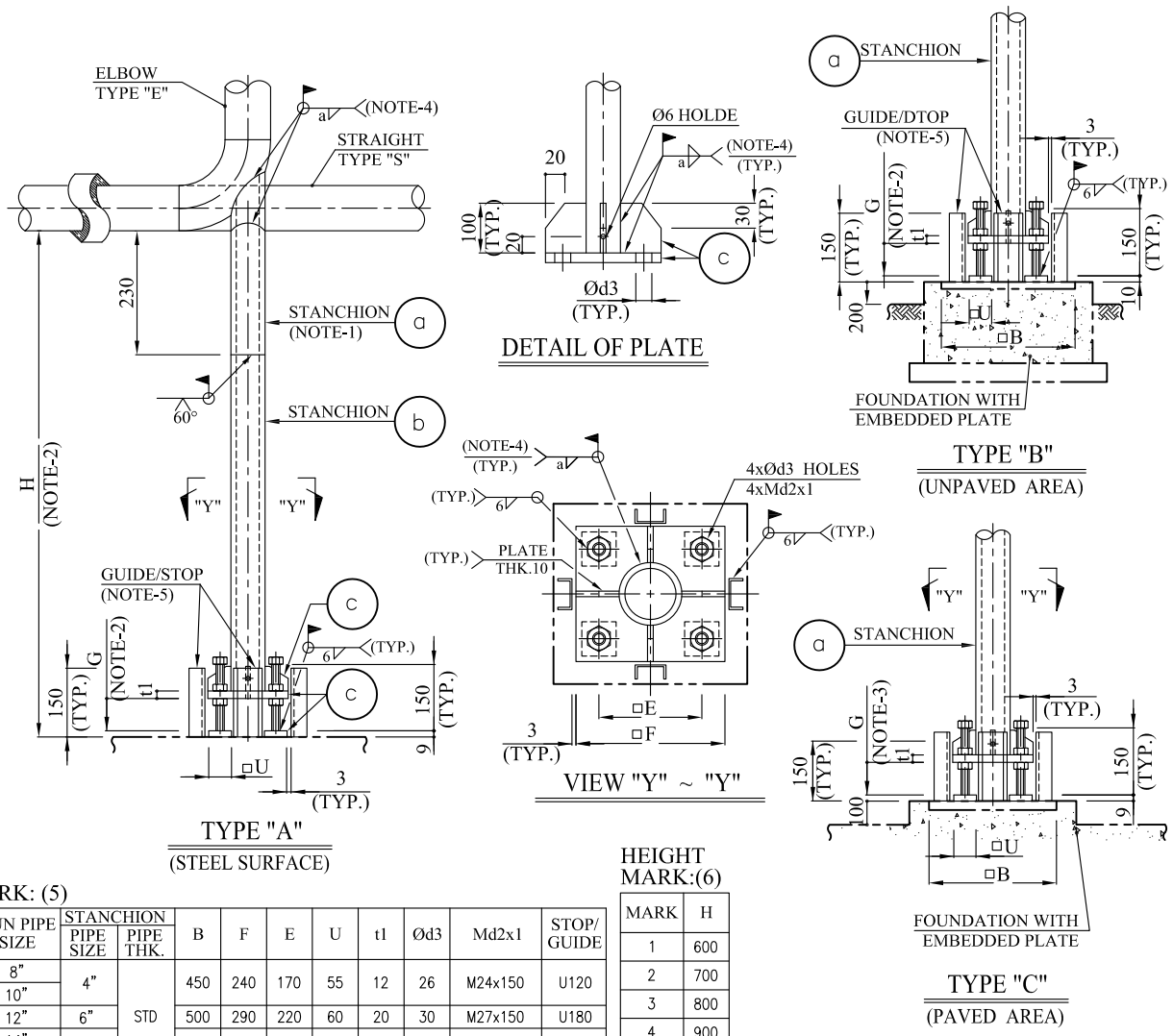
NOTE:
1- SAME MATERIAL OF RUN PIPE CAN BE APPLIED FOR MATERRIAL @ AND SHALL BE WELDED BEFORE PWHT.
2- TO BE ADJUSTED AT FIELD.
3- FOR ADJUSTING, "G" SHOULD BE BETWEEN 50 AND 140 (50<G<140).
4- FOR STANCHION SIZE <4", a=TRUNNION WALL THICKNESS, FOR TRUNNION SIZE >4", a=6mm.
5- "G" INDICATES "GUIDE" & "L" INDICATES "LINE STOP" AND "S" INDICATED "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)2"~6"
SD-10

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: 152 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



NPS MARK: (5)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	B	F	E	U	t1	Ød3	Md2x1	STOP/ GUIDE
08	8"	4"	STD	450	240	170	55	12	26	M24x150	U120
10	10"										
12	12"	6"		500	290	220	60	20	30	M27x150	U180
14	14"	8"		600	350	260	70	20	30	M27x150	U200
16	16"										

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
	ⓐ 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- 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=TRUNNION WALL THICKNESS, FOR TRUNNION SIZE >4" , a=6mm.
4- "G" INDICATES "GUIDE" & "L" INDICATES "LINE STOP" AND "S" INDICATED "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@ : A53 Gr.B, PLATE: A283 Gr.C

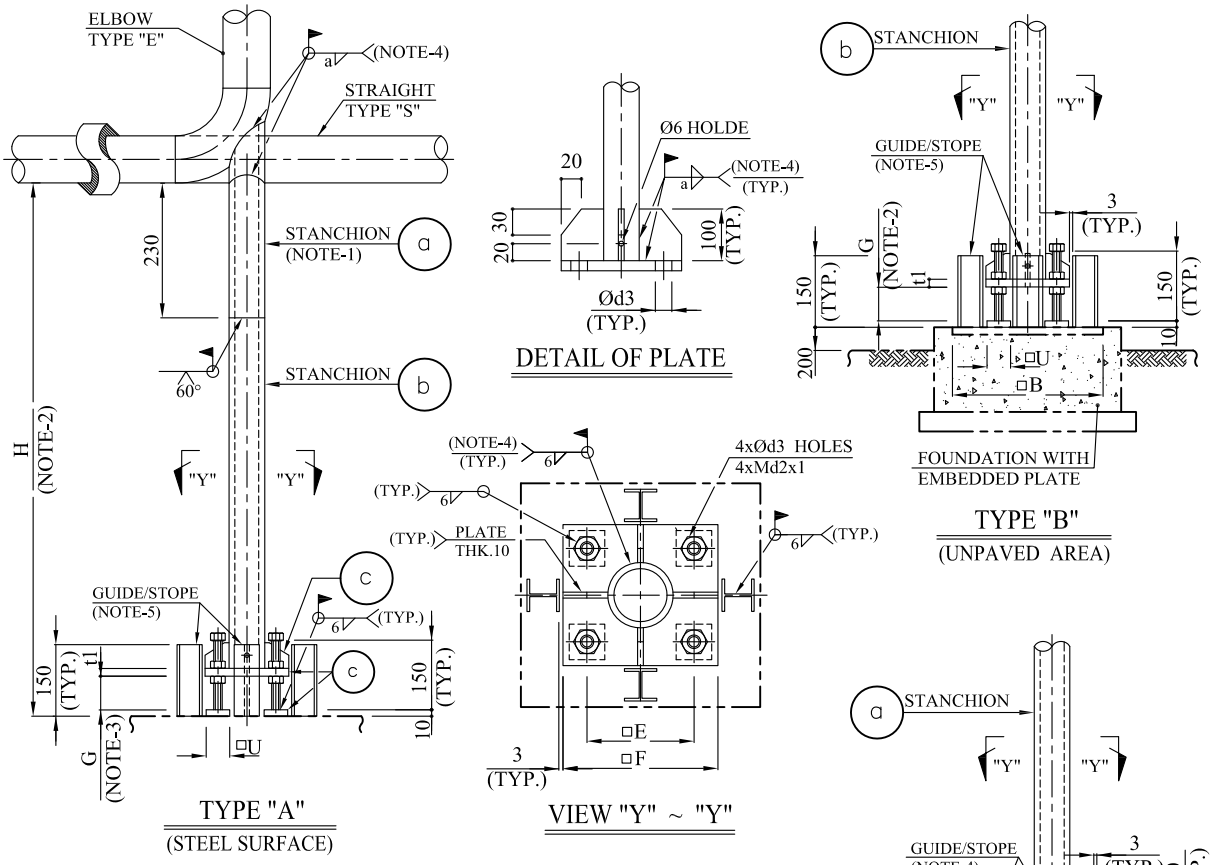
SUPPORT DESCRIPTION:
ADJUSTABLE GUIDE/LINE STOP/SEMI ANCHOR STOOL(CS-WITH PWHT,AS,SS)8"~16"
SD-10

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	D00



NPS MARK: (5)

NPS MARK	RUN PIPE SIZE	STANCHION PIPE SIZE	STANCHION PIPE THK.	B	F	E	U	t1	Ød3	Md2x1	STOP/ GUIDE
18	18"	10"	STD	650	400	300	70	20	32	M30x150	HEB100
20	20"										
24	24"	12"		700	450	350	80	20	36	M33x150	

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- 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=TRUNNION WALL THICKNESS, FOR TRUNNION SIZE >4", a=6mm.
4- "G" INDICATES "GUIDE" & "L" INDICATES "LINE STOP" AND "S" INDICATED "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 Cø.

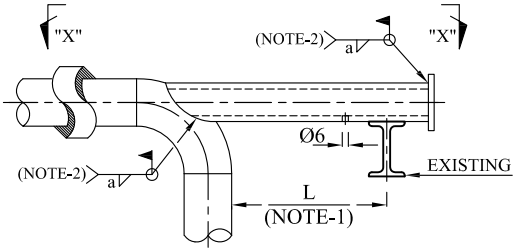
MATERIAL:
STANDARD PROFILE: ASTM A36, BOLT & NUT:A325

SUPPORT DESCRIPTION:
ADJUSTABLE GUIDE/LINE STOP/SEMI ANCHOR STOOL(CS-WITH PWHT,AS,SS)18"~24"
SD-10

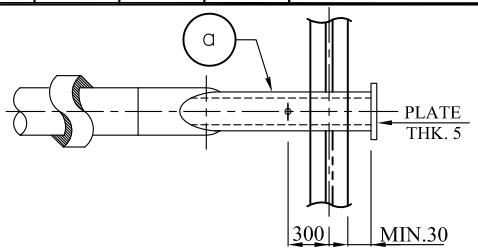
SHEET 3 OF 3

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

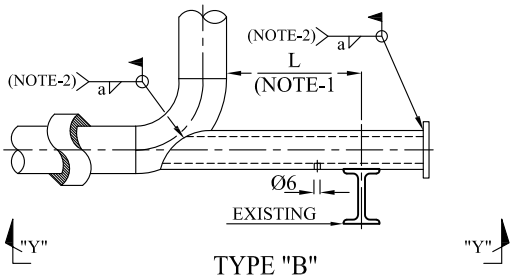
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 154 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



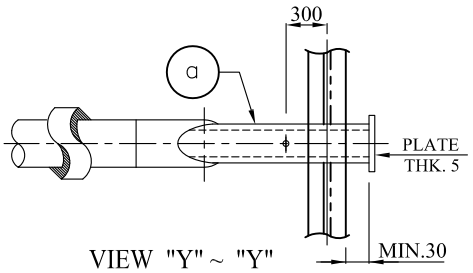
TYPE "A"
VERTICAL BEND (DOWNWARD)



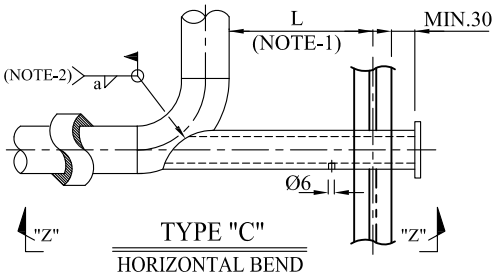
VIEW "X" ~ "X"



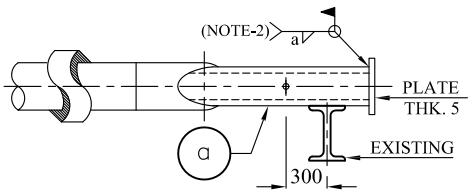
TYPE "B"
VERTICAL BEND (UPWARD)



VIEW "Y" ~ "Y"



TYPE "C"
HORIZONTAL BEND



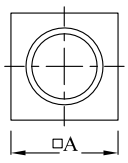
VIEW "Z" ~ "Z"

HEIGHT 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=TRUNNION WALL THICKNESS, FOR TRUNNION SIZE >4", a=6mm.
3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).
4- MAX. DESIGN TEMP. FOR RUN PIPE SHALL NOT EXCEED 400 Cø.
5- IN CASE THERE IS GAP BETWEEN EXISTING SUPPORT MEMBER AND BOTTOM OF STANCHION, SHIM PLATE OR PROPER MEMBER TO BE CONSIDERED.

SUPPORT DESCRIPTION:

DUMMY PIPE FOR 90° ELBOW
(CS-WITHOUT PWHT) 2" ~ 36"
SD-11

SHEET	1 OF 1

NISOC

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

PEDCO

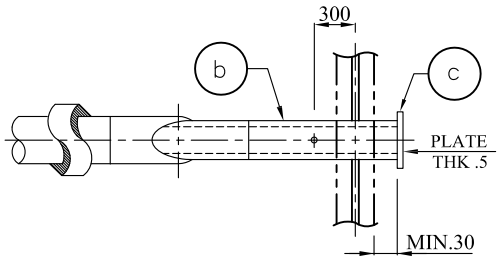
HIRGAN ENERGY

شماره پیمان:
053-073-9184

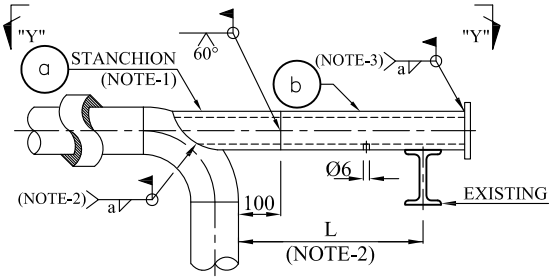
STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D00	0001	DW	PI	120	PEDCO	GCS	BK

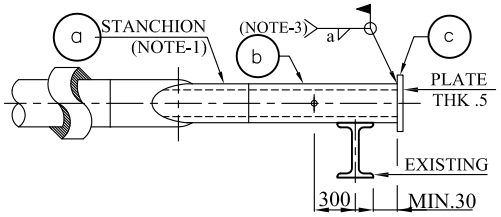
شماره صفحه: 155 از 307



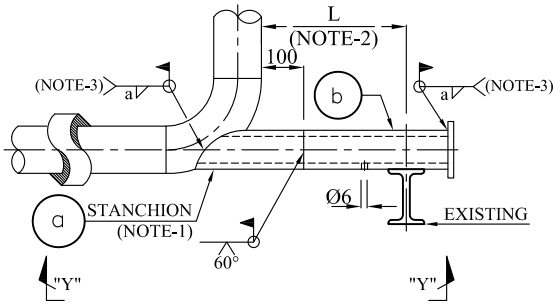
VIEW "Y" ~ "Y"



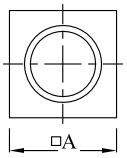
TYPE "A"
VERTICAL BEND (DOWNWARD)



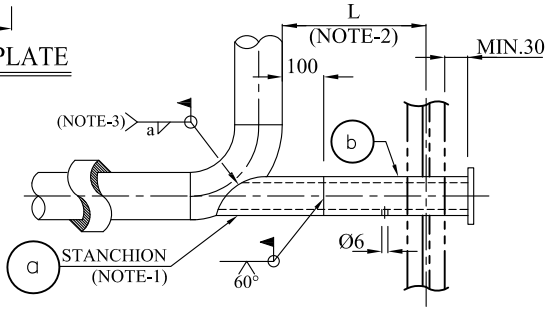
VIEW "Z" ~ "Z"



TYPE "B"
VERTICAL BEND (UPWARD)



DETAIL OF PLATE



TYPE "C"
HORIZONTAL BEND

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 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 - 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 MATERRIAL @ AND SHALL BE WELDED BEFORE PWHT.
2- TO BE ADJUSTED IN THE FIELD.
3- FOR STANCHION SIZE <4", a=TRUNNION WALL THICKNESS, FOR TRUNNION SIZE >4", a=6mm.
4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).
5- IN CASE THERE IS GAP BETWEEN EXISTING SUPPORT MEMBER AND BOTTOM OF STANCHION, SHIM PLATE OR PROPER MEMBER TO BE CONSIDERED.

SUPPORT DESCRIPTION:

DUMMY PIPE FOR 90° ELBOW
(CS-WITH PWHT,AS,SS) 2" ~ 36"
SD-12

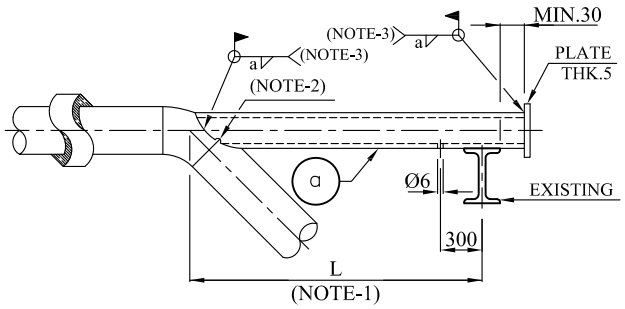
SHEET 1 OF 1

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

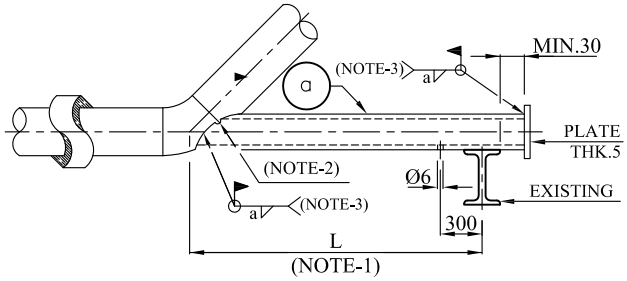
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



TYPE "A"



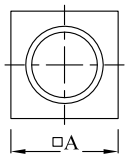
TYPE "B"

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=TRUNNION WALL THICKNESS, FOR TRUNNION SIZE >4", a=6mm.
4- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).
5- MAX. DESIGN TEMP. FOR RUN PIPE SHALL NOT EXCEED 400 Cø.

MATERIAL:
DUMMY @ : A53 Gr.B, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:

DUMMY PIPE FOR 45° ELBOW
(CS-WITHOUT PWHT) 2" ~ 36"
SD-13

SHEET	1 OF 1

NISOC

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

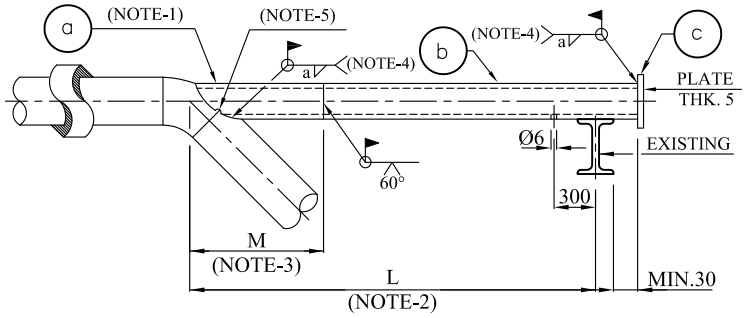
PEDCO

HIRGAN ENERGY

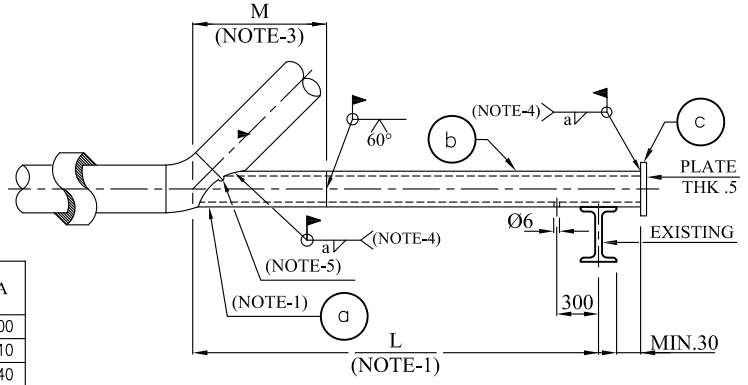
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



TYPE "A"



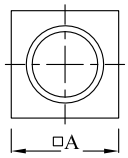
TYPE "B"

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"	STD	140
06	6"	4"	STD	170
08	8"	6"	STD	220
10	10"	6"	STD	220
12	12"	8"	STD	270
14	14"	8"	STD	270
16	16"	10"	STD	320
18	18"	10"	STD	320
20	20"	12"	STD	350
24	24"	14"	STD	400
26	26"	14"	STD	400
28	28"	16"	STD	450
30	30"	16"	STD	450
32	32"	18"	STD	500
34	34"	18"	STD	500
36	36"	20"	STD	550



DETAIL OF PLATE

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 MATERRIAL @ 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=TRUNNION WALL THICKNESS, FOR TRUNNION 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) .

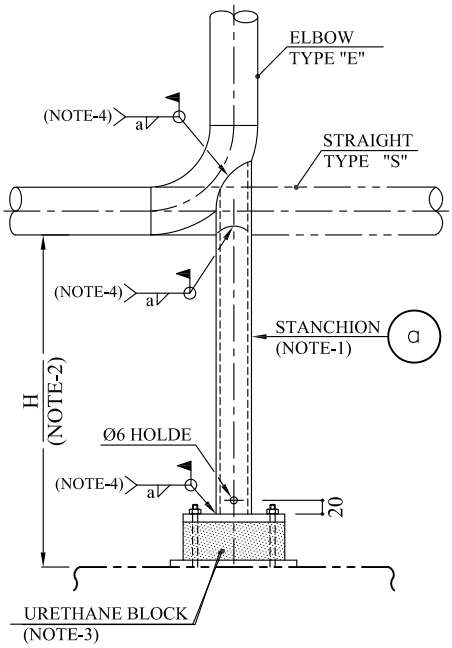
SUPPORT DESCRIPTION:

DUMMY PIPE FOR 45° ELBOW
(CS-WITH PWHT, AS ,SS) 2" ~ 36"
SD-13

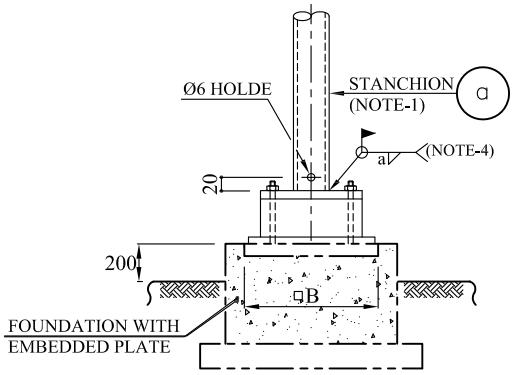
SHEET 1 OF 1

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

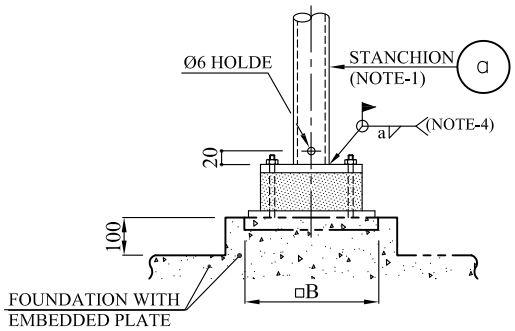
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 158 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



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
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 MATERRIAL @ AND SHALL BE WELDED BEFORE PWHT.
2- TO BE ADJUSTED IN THE FIELD.
3- FOR DETAIL OF URETHANE BLOCK SEE (G-05).
4- FOR STANCHION SIZE <4", a=TRUNNION WALL THICKNESS, FOR TRUNNION SIZE >4", a=6mm.
5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

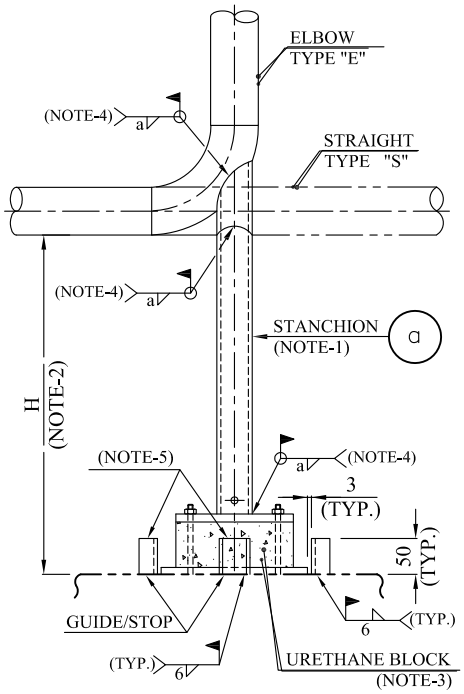
SUPPORT DESCRIPTION:

SLIDE STOOL
(COLD INSULATION) 2"~36"
SD-15

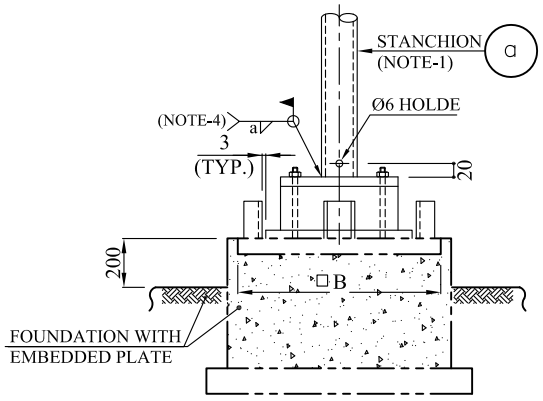
SHEET 1 OF 1

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

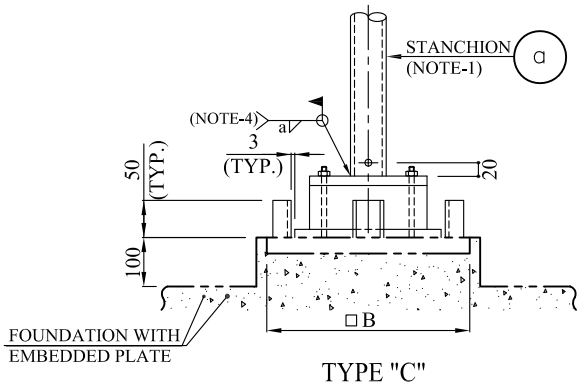
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 159 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



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/ 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 MATERRIAL @ .
2- TO BE ADJUSTED IN THE FIELD.
3- FOR THE DETAIL OF URETHANE BLOCK SEE (G-05).
4- FOR STANCHION SIZE <4", a=TRUNNION WALL THICKNESS, FOR TRUNNION SIZE >4", a=6mm.
5- "G" INDICATES "GUIDE" & "L" INDICATES" LINE STOP" AND "S" INDICATED " SEMI ANCHOR" FOR TYPES OF FUNCTION.
6- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).

MATERIAL:
STANDARD PROFILE ASTM A36

SUPPORT DESCRIPTION:
GUIDE/LINE STOP/SEMI ANCHOR STOOL
(COLD INSULATION) 2"~36"
SD-16

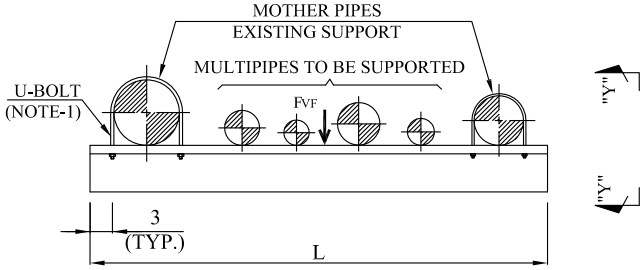
SHEET 1 OF 1

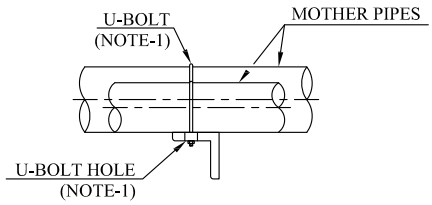
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

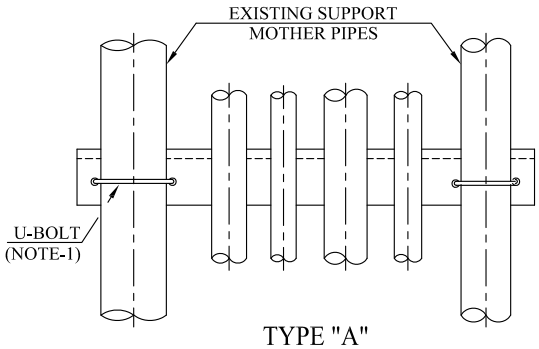
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

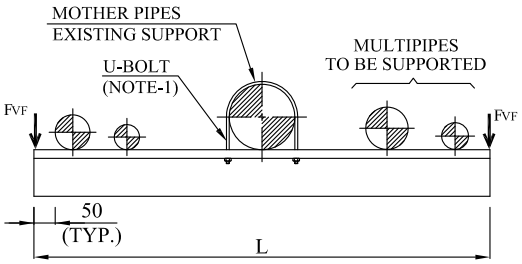




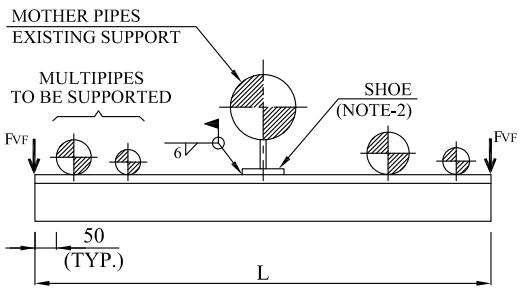
VIEW "Y" ~ "Y"



TYPE "A"



TYPE "B"



TYPE "C"

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

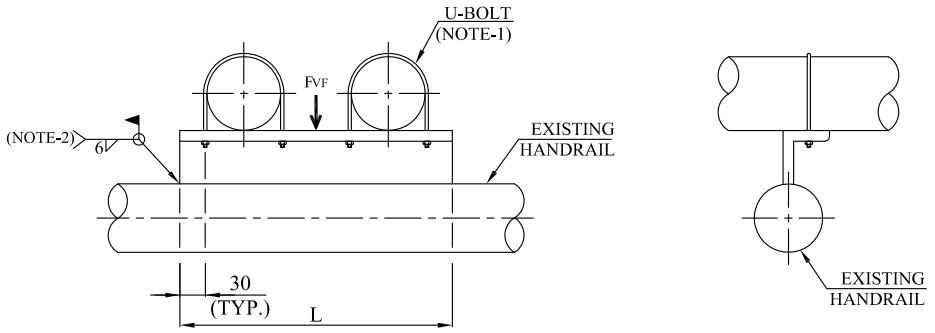
SUPPORT DESCRIPTION:

ANGLE SUPPORT
1/2" ~ 6"
SE-01

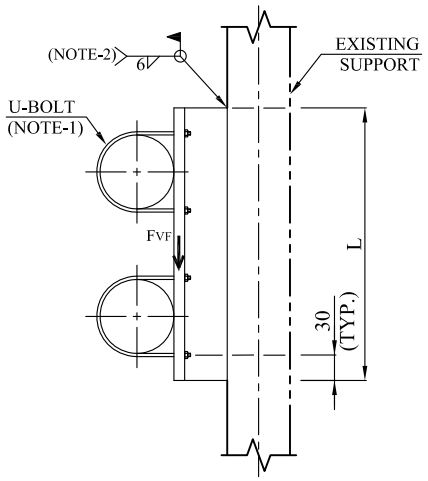
SHEET 1 OF 1

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: 161 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



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)-F_{VF}, TYPE- "A"		ALLOW. LOAD (kg)-F_{VF}, 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- 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

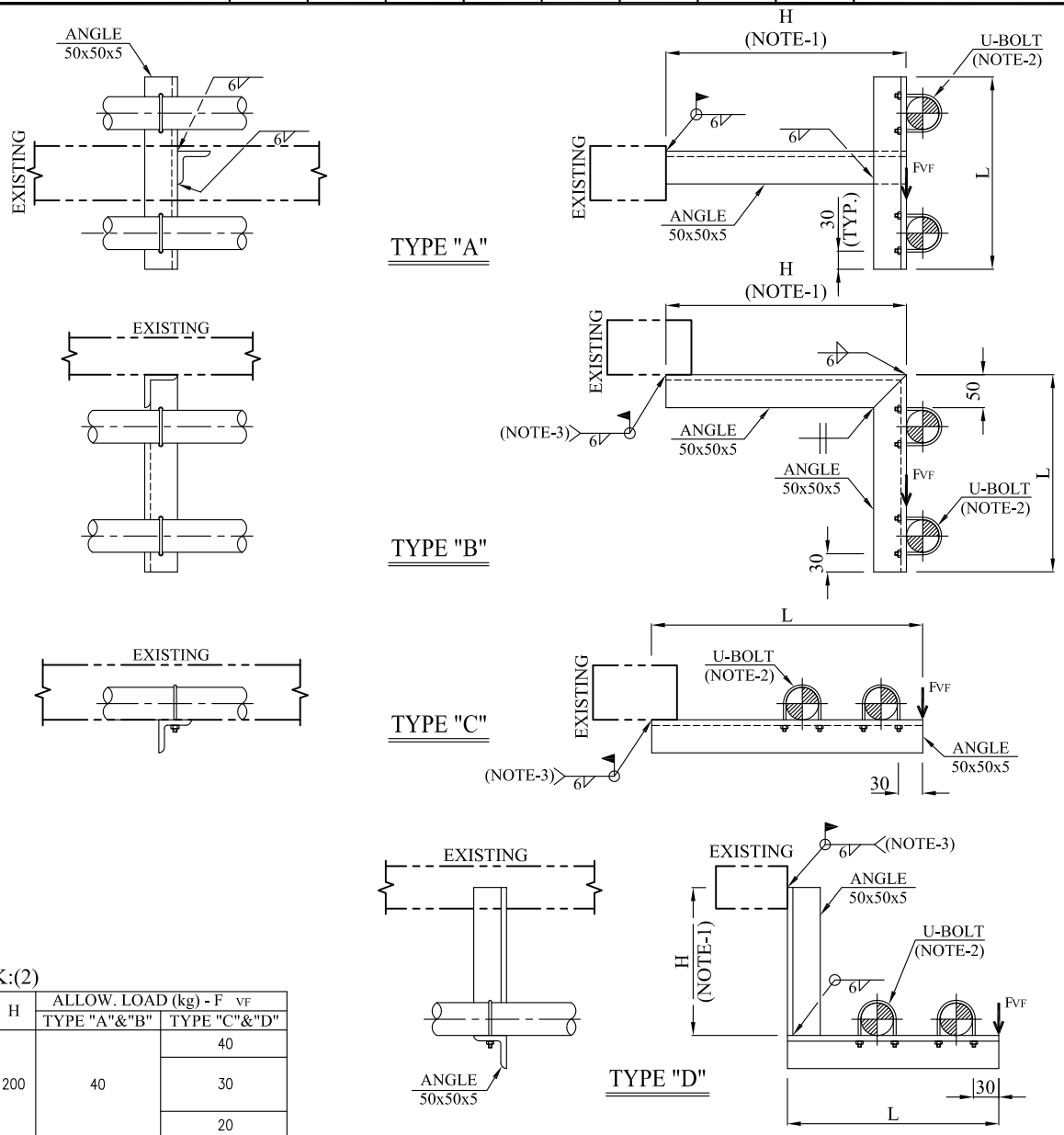
SUPPORT DESCRIPTION:

ANGLE SUPPORT
1/2" ~ 2"
SE-02

SHEET	1 OF 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 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



SIZE MARK:(2)

MARK	L	H	ALLOW. LOAD (kg) - F VF	
			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 HOLES SHALL BE ADJUSTED AT FIELD.
3- FOR TYPE "B" , "C" ,AND "D", ALLOW. LOADS HAVE BEEN CALCULATED BASED ON WELDTHICKNESS 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 OR SHOE SHALL BE CHECKED SEPARATELY .

MATERIAL:
STANDARD PROFILE ASTM A36

SUPPORT DESCRIPTION:

ANGLE BRACKET
1/2" ~ 2"
SE-03

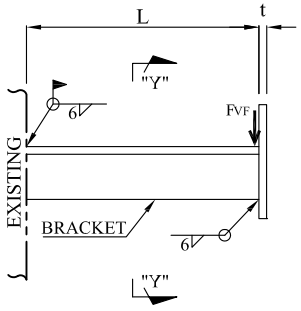
SHEET 1 OF 1

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

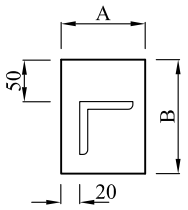
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

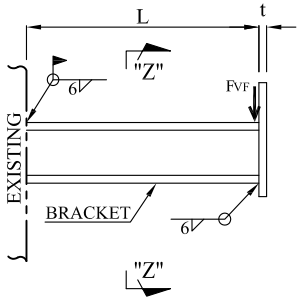
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



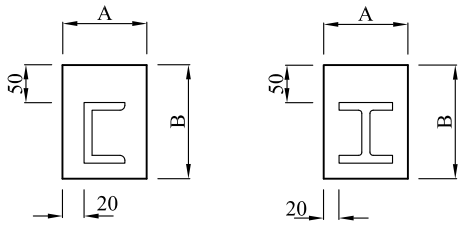
TYPE "A"



VIEW "Y" ~ "Y"



TYPE "B"



VIEW "Z" ~ "Z"

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					

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					

INDICATION:

SE - 04 – [ ] [ ]
(1) (2)

1-TYPE MARK
2-SIZE MARK

NOTE:

MATERIAL:
STANDARD PROFILE ASTM A36, PLATE: A285 Gr.C

SUPPORT DESCRIPTION:

SIMPLE
BRACKET
SE-04

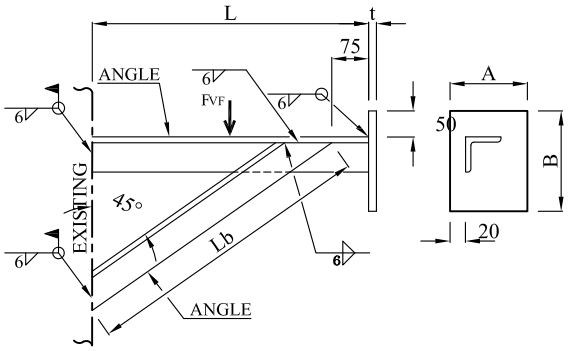
SHEET 1 OF 1

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

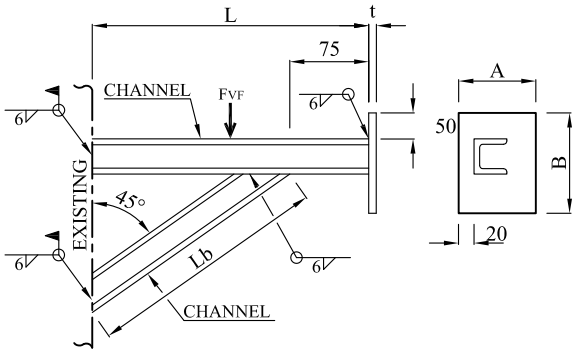
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

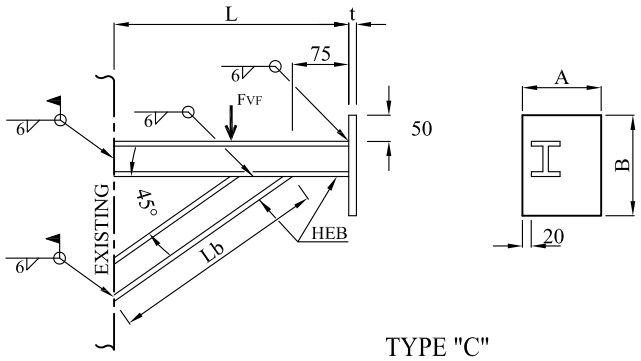
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



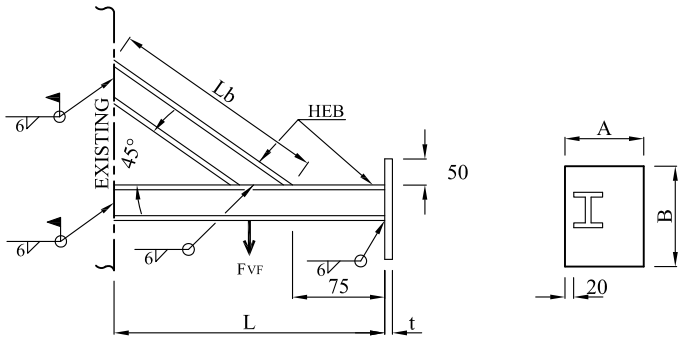
TYPE "A"



TYPE "B"



TYPE "C"



TYPE "D"

INDICATION:

SE - 05 – [ ][ ]
(1) (2)

1-TYPE MARK
2-SIZE MARK

NOTE:
- FOR TYPE "A", "B", AND "C", IMPOSED. LOAD SHALL BE LOCATED ON THE MIDDLE OF BRACKET, FOR "D" LOAD IS BRACKET, FOR "D" LOAD IS LOCATED ON THE INTERSECTION OF BRACKET AND BRACE.

MATERIAL:
STANDARD PROFILE ASTM A36, PLATE: A285 Gr.C

SUPPORT DESCRIPTION:
REINFORCED
BRACKET
SE-05

SHEET 1 OF 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	D00

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		340
08	800	1026					
09	900	1167					
10	1000	1308					470
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					2000
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	1723					

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

NOTE:

SUPPORT DESCRIPTION:

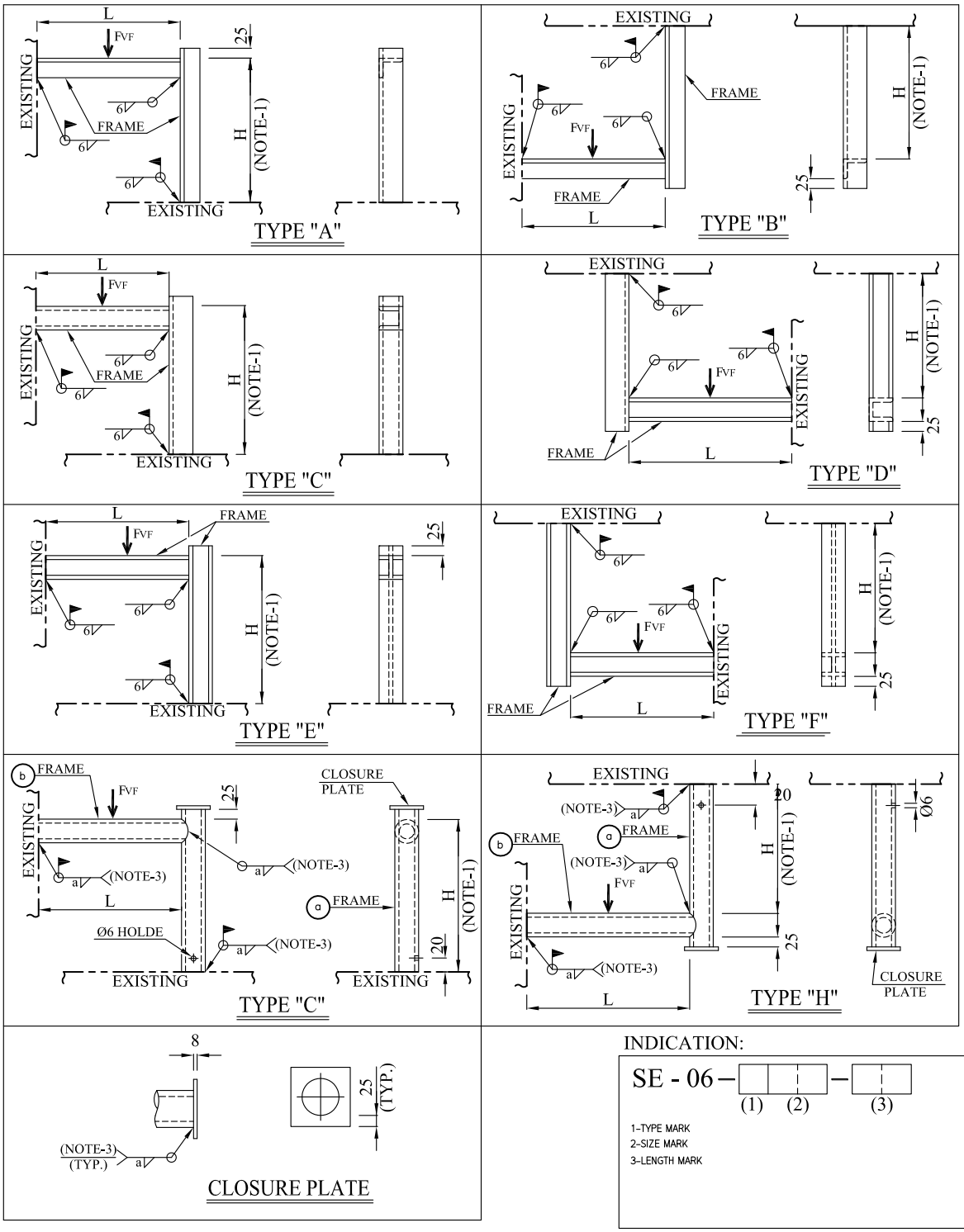
REINFORCED
BRACKET
SE-05

SHEET 2 OF 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							
	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
053-073-9184	BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 166 از 307



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, PLAT: A283 Gr.C

SUPPORT DESCRIPTION:

CHAIR-TYPE SUPPORT
AT STEEL STRUCTURE
SE-06

SHEET 1 OF 6

HEIGHT &LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOW. LOAD (kg) FVF
01	400	01	400	ANGLE 50x50x5	200
02	500				
03	600				
04	700	02	500		
05	800				
06	900				
07	1000	03	600		
08	1100				
09	1200				
10	400	04	700		150
11	500				
12	600				
13	700				
14	800				
15	900	05	800		
16	1000				
17	1100				
18	1200				
19	400	06	900		130
20	500				
21	600				
22	700				
23	800				
24	900	07	1000		
25	1000				
26	1100				
27	1200				
28	400	08	400	ANGLE 70x70x7	470
29	500				
30	600	09	500		
31	700				
32	800				
33	900	10	600		
34	1000				
35	1100	11	700		
36	1200				
37	400	12	800		300
38	500				
39	600				
40	700				
41	800				
42	900	13	900		
43	1000				
44	1100				
45	1200				

HEIGHT &LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOW. LOAD (kg) FVF
46	400	14	1000	ANGLE 70x70x7	330
47	500				
48	600				
49	700				
50	800				
51	900	15	1100		
52	1000				
53	1100				
54	1200				
55	400	16	400	ANGLE 100x100x10	1100
56	500				
57	600	17	500		
58	700				
59	800	18	600		
60	900	19	700		
61	1000				
62	1100	20	800		
63	1200				
64	400	21	900		980
65	500				
66	600				
67	700				
68	800				
69	900	22	1000		
70	1000				
71	1100				
72	1200				
73	400	23	1000		840
74	500				
75	600				
76	700				
77	800				
78	900	24	1100		
79	1000				
80	1100				
81	1200				

INDICATION:

SE - 06 – [ ][ ][ ] – [ ][ ]
(1) (2) (3)

1-TYPE MARK
2-SIZE MARK
3-LENGTH MARK

NOTE:

SUPPORT DESCRIPTION:
CHAIR-TYPE SUPPORT
AT STEEL STRUCTURE
SE-06

HEIGHT &LENGHT MARK: (2)&(3)

HEIGHT MARK	H	LENGHT MARK	L	FRAME	ALLOW. LOAD (kg) Fvf
82	600	25	600	CHANEL 120	980
83	700				
84	800				
85	900				
86	1000	26	700		
87	1100				
88	1200				
89	1300	27	800		
90	1400				
91	1500				
92	1600				
93	600	28	900		900
94	700				
95	800				
96	900				
97	1000				
98	1100				
99	1200	29	1000		
100	1300				
101	1400				
102	1500				
103	1600				
104	600	30	1100		820
105	700				
106	800				
107	900				
108	1000				
109	1100				
110	1200	31	1200		
111	1300				
112	1400				
113	1500				
114	1600				
115	600	32	600	CHANEL 160	1400
116	700				
117	800				
118	900	33	700		
119	1000				
120	1100				
121	1200	34	800		
122	1300				
123	1400	35	900		
124	1500				
125	1600				

HEIGHT &LENGHT MARK: (2)&(3)

HEIGHT MARK	H	LENGHT MARK	L	FRAME	ALLOW. LOAD (kg) Fvf
126	600	36	1000	CHANEL 160	1400
127	700				
128	800				
129	900	37	1100		
130	1000				
131	1100				
132	1200	38	1200		
133	1300				
134	1400	39	1300		
135	1500				
136	1600				
137	600	40	600	CHANEL 200	1800
138	700	41	700		
139	800	42	800		
140	900				
141	1000	43	900		
142	1100	44	1000		
143	1200	45	1100		
144	1300	46	1200		
145	1400				
146	1500	47	1300		
147	1600	48	1400		

INDICATION:

SE - 06 – [ ][ ][ ] – [ ][ ]
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

SUPPORT DESCRIPTION:
CHAIR-TYPE SUPPORT
AT STEEL STRUCTURE
SE-06

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: 169 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	

HEIGHT &LENGHT MARK: (2)&(3)

HEIGHT MARK	H	LENGHT MARK	L	FRAME a	FRAME b	ALLOW. LOAD (kg) FVF
148	700	49	700	PIPE 4" ,STD	PIPE 3" ,STD	1500
149	800					
150	900					
151	1000	50	800			
152	1100					
153	1200					
154	1300	51	900			
155	1400					
156	1500					
157	700	52	1000			1300
158	800					
159	900					
160	1000					
161	1100	53	1100			
162	1200					
163	1300					
164	1400					
165	1500					
166	700	54	1200			1100
167	800					
168	900					
169	1000					
170	1100	55	1300			
171	1200					
172	1300					
173	1400					
174	1500					
175	700	56	700	PIPE 6" ,STD	PIPE 4" ,STD	2400
176	800					
177	900	57	800			
178	1000					
179	1100					
180	1200	58	900			
181	1300					
182	1400	59	1000			
183	1500					

HEIGHT &LENGHT MARK: (2)&(3)

HEIGHT MARK	H	LENGHT MARK	L	FRAME a	FRAME b	ALLOW. LOAD (kg) FVF
184	700	60	1100	PIPE 6" ,STD	PIPE 4" ,STD	2100
185	800					
186	900					
187	1000					
188	1100	61	1200			
189	1200					
190	1300					
191	1400					
192	1500					
193	700	62	1300			1800
194	800					
195	900					
196	1000					
197	1100	63	1400			
198	1200					
199	1300					
200	1400					
201	1500					
202	700	64	700	PIPE 8" ,STD	PIPE 6" ,STD	4600
203	800					
204	900	65	800			
205	1000					
206	1100	66	900			
207	1200					
208	1300	67	1000			
209	1400	68	1100			
210	1500					
211	700	69	1200			4000
212	800					
213	900					
214	1000					
215	1100	70	1300			
216	1200					
217	1300					
218	1400					
219	1500					

INDICATION:

SE - 06- [ ][ ][ ] - [ ][ ]
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

SUPPORT DESCRIPTION:

CHAIR-TYPE SUPPORT
AT STEEL STRUCTURE
SE-06

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	D00

HEIGHT &LENGHT MARK: (2)&(3)

HEIGHT MARK	H	LENGHT MARK	L	FRAME a	FRAME b	ALLOW. LOAD (kg) FVF
220	700	71	1400	PIPE 8", STD	PIPE 6", STD	3600
221	800					
222	900					
223	1000					
224	1100	72	1500			
225	1200					
226	1300					
227	1400					
228	1500					

HEIGHT &LENGHT MARK: (2)&(3)

HEIGHT MARK	H	LENGHT MARK	L	FRAME	ALLOW. LOAD (kg) FVF
229	800	73	800	HEB120	2700
230	900				
231	1000				
232	1100				
233	1200				
234	1300				
235	1400				
236	1500	74	900		
237	1600				
238	1700				
239	1800				
240	1900				
241	2000				
242	800	75	1000		2100
243	900				
244	1000				
245	1100				
246	1200	76	1100		
247	1300				
248	1400				
249	1500				
250	1600				
251	1700	77	1200		
252	1800				
253	1900				
254	2000				
255	800	78	1300		1900
256	900				
257	1000				
258	1100				
259	1200				
260	1300				
261	1400				
262	1500	79	1400		
263	1600				
264	1700				
265	1800				
266	1900				
267	2000				

INDICATION:

SE - 06 – [ ][ ][ ] – [ ][ ]
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

SUPPORT DESCRIPTION:

CHAIR-TYPE SUPPORT
AT STEEL STRUCTURE
SE-06

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: 171 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	

HEIGHT &LENGHT MARK: (2)&(3)

HEIGHT MARK	H	LENGHT MARK	L	FRAME	ALLOW. LOAD (kg) FVF
268	800	80	800	HEB160	4000
269	900				
270	1000				
271	1100				
272	1200	81	900		
273	1300				
274	1400				
275	1500				
276	1600				
277	1700	82	1000		
278	1800				
279	1900				
280	2000				
281	800	83	1100		3500
282	900				
283	1000				
284	1100				
285	1200				
286	1300				
287	1400				
288	1500	84	1200		
289	1600				
290	1700				
291	1800				
292	1900				
293	2000				
294	800	85	1300		3100
295	900				
296	1000				
297	1100				
298	1200	86	1400		
299	1300				
300	1400				
301	1500				
302	1600				
303	1700	87	1500		
304	1800				
305	1900				
306	2000				

HEIGHT &LENGHT MARK: (2)&(3)

HEIGHT MARK	H	LENGHT MARK	L	FRAME	ALLOW. LOAD (kg) FVF
307	800	88	800	HEB200	6000
308	900				
309	1000				
310	1100	89	900		
311	1200				
312	1300				
313	1400	90	1000		
314	1500				
315	1600				
316	1700				
317	1800	91	1100		
318	1900				
319	2000				
320	800	92	1200		5200
321	900				
322	1000				
323	1100				
324	1200	93	1300		
325	1300				
326	1400				
327	1500				
328	1600				
329	1700	94	1400		
330	1800				
331	1900				
332	2000				
333	800	95	1500		4700
334	900				
335	1000				
336	1100				
337	1200				
338	1300				
339	1400				
340	1500	96	1600		
341	1600				
342	1700				
343	1800				
344	1900				
345	2000				

INDICATION:

SE - 06 – [ ][ ][ ] – [ ][ ]
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

SUPPORT DESCRIPTION:

CHAIR-TYPE SUPPORT
AT STEEL STRUCTURE
SE-06

SHEET 6 OF 6

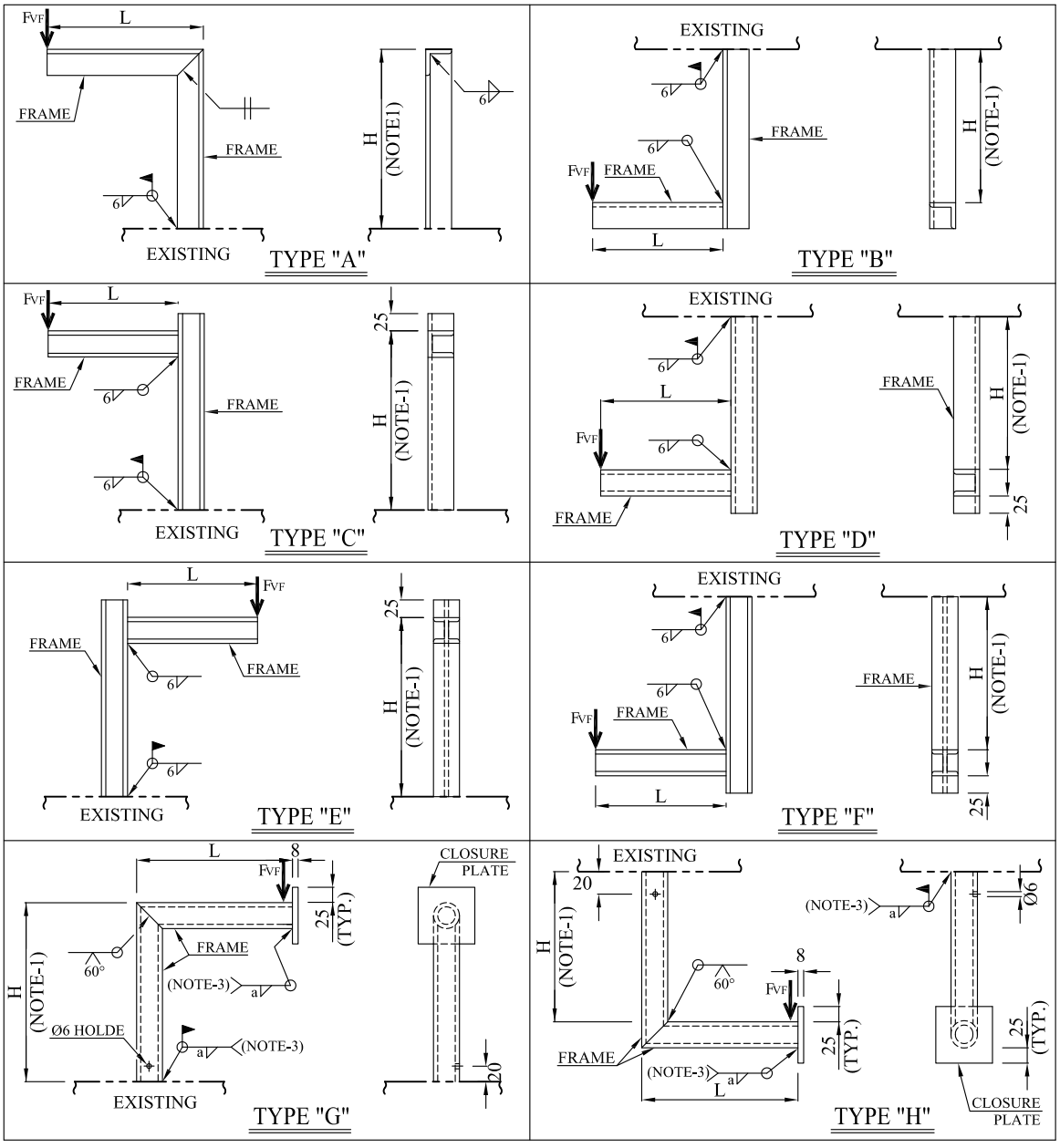
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00

شماره صفحه: 172 از 307



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, PLAT: A283 Gr.C

SUPPORT DESCRIPTION:
L-TYPE SUPPORT
AT STEEL STRUCTURE
SE-07

SHEET 1 OF 4

HEIGHT &LENGHT MARK: (2)&(3) TYPE (A)&(B)

HEIGHT MARK	H	LENGHT MARK	L	FRAME	ALLOW. 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 &LENGHT MARK: (2)&(3)- TYPE (C)&(D)

HEIGHT MARK	H	LENGHT MARK	L	FRAME	ALLOW. 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

NOTE:

SUPPORT DESCRIPTION:

L-TYPE SUPPORT
AT STEEL STRUCTURE
SE-07

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	D00

HEIGHT &LENGHT MARK: (2)&(3)-TYPE (C)&(D)

HEIGHT MARK	H	LENGHT MARK	L	FRAME	ALLOW. 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 &LENGHT MARK: (2)&(3)-TYPE (E)&(F)

HEIGHT MARK	H	LENGHT MARK	L	FRAME	ALLOW. 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

NOTE:

SUPPORT DESCRIPTION:

L-TYPE SUPPORT
AT STEEL STRUCTURE
SE-07

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: 175 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00

HEIGHT &LENGHT MARK: (2)&(3)-TYPE (G)&(H)

HEIGHT MARK	H	LENGHT MARK	L	FRAME	A	ALLOW. 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 &LENGHT MARK: (2)&(3)-TYPE (E)&(F)

HEIGHT MARK	H	LENGHT MARK	L	FRAME	ALLOW. 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

NOTE:

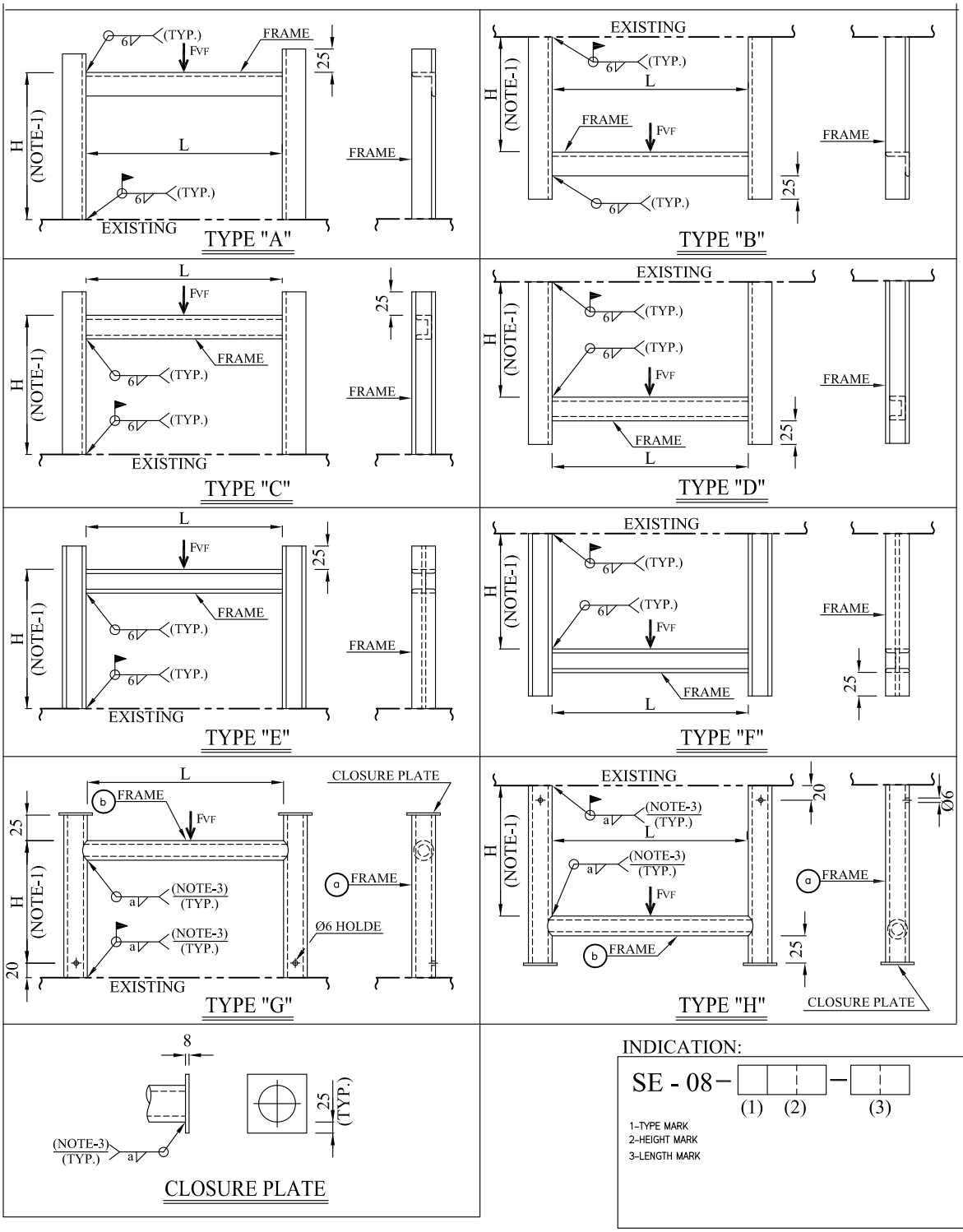
SUPPORT DESCRIPTION:

L-TYPE SUPPORT
AT STEEL STRUCTURE
SE-07

SHEET 4 OF 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: 176 از 307

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



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, PLAT: A283 Gr.C

SUPPORT DESCRIPTION:

U-TYPE SUPPORT
AT STEEL STRUCTURE
SE-08

SHEET 1 OF 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	D00

HEIGHT &LENGHT MARK: (2)&(3)-TYPE (A)&(B)

HEIGHT MARK	H	LENGHT MARK	L	FRAME	ALLOW. 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				
10	800				
11	900	08	1000		
12	1000				
13	1100				
14	1200				
15	600	09	1100		140
16	700				
17	800				
18	900	10	1200		
19	1000				
20	1100				
21	1200				
22	600	11	300	ANGLE 70x70x7	470
23	700	12	400		
24	800				
25	900	13	500		
26	1000	14	600		
27	1100				
28	1200	15	700		
29	600	16	800		440
30	700				
31	800				
32	900	17	900		
33	1000				
34	1100				
35	1200				
36	600	18	1000		400
37	700				
38	800				
39	900	19	1100		
40	1000				
41	1100				
42	1200				

HEIGHT &LENGHT MARK: (2)&(3)-TYPE (A)&(B)

HEIGHT MARK	H	LENGHT MARK	L	FRAME	ALLOW. LOAD (kg) FVF
43	600	20	1200	ANGLE 70x70x7	350
44	700				
45	800				
46	900	21	1300		
47	1000				
48	1100				
49	1200				
50	600	22	300	ANGLE 100x100x10	1100
51	700	23	400		
52	800	24	500		
53	900				
54	1000	25	600		
55	1100	26	700		
54	1200	27	800		
55	600	28	900		1000
56	700				
57	800				
58	900	29	1000		
59	1000				
60	1100				
61	1200				
62	600	30	1100		1000
63	700				
64	800				
65	900	31	1200		
66	1000				
67	1100				
68	1200				
69	600	32	1300		900
70	700				
71	800				
72	900	33	1400		
73	1000				
74	1100				
75	1200				

INDICATION:

SE - 08- [ ][ ][ ] - [ ][ ]

(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

SUPPORT DESCRIPTION:

U-TYPE SUPPORT
AT STEEL STRUCTURE
SE-08

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	D00

HEIGHT &LENGHT MARK: (2)&(3)-TYPE (C)&(D)

HEIGHT MARK	H	LENGHT MARK	L	FRAME	ALLOW. 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 &LENGHT MARK: (2)&(3)-TYPE (C)&(D)

HEIGHT MARK	H	LENGHT MARK	L	FRAME	ALLOW. 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

NOTE:

SUPPORT DESCRIPTION:
U-TYPE SUPPORT
AT STEEL STRUCTURE
SE-08

HEIGHT &LENGHT MARK: (2)&(3)-TYPE (E)&(F)

HEIGHT MARK	H	LENGHT MARK	L	FRAME	ALLOW. 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 &LENGHT MARK: (2)&(3)-TYPE (E)&(F)

HEIGHT MARK	H	LENGHT MARK	L	FRAME	ALLOW. 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

NOTE:

SUPPORT DESCRIPTION:

U-TYPE SUPPORT
AT STEEL STRUCTURE
SE-08

HEIGHT &LENGHT MARK: (2)&(3)-TYPE (E)&(F)

HEIGHT MARK	H	LENGHT MARK	L	FRAME	ALLOW. 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

NOTE:

SUPPORT DESCRIPTION:

U-TYPE SUPPORT
AT STEEL STRUCTURE
SE-08

NISOC

پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض
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	D00

شماره صفحه: 181 از 307

HEIGHT &LENGHT MARK: (2)&(3)-TYPE (G)&(H)

HEIGHT MARK	H	LENGHT MARK	L	FRAME a	FRAME b	A	ALLOW. 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 &LENGHT MARK: (2)&(3)- TYPE (G)&(H)

HEIGHT MARK	H	LENGHT MARK	L	FRAME a	FRAME b	A	ALLOW. 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				
60	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

NOTE:

SUPPORT DESCRIPTION:
U-TYPE SUPPORT (PIPE)
AT STEEL STRUCTURE
SE-08

SHEET 6 OF 6

NISOC

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

PEDCO

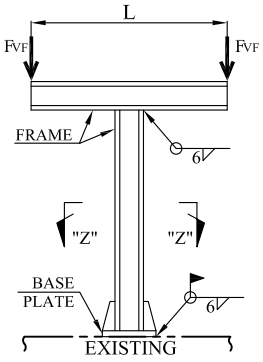
HIRGAN ENERGY

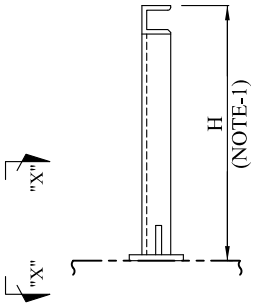
شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

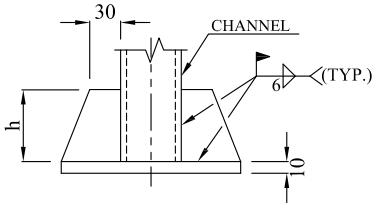




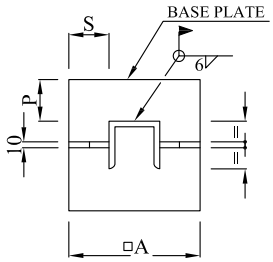
TYPE "A"
CHANNEL

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



VIEW "X" ~ "X"



VIEW "Z" ~ "Z"

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

LENGHT 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-HEIGTH 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 "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-ALLOWABLE LOAD HAS BEEN CALCULATED BASED ON VICE VERSA HORIZONTAL FORCES.

MATERIAL:

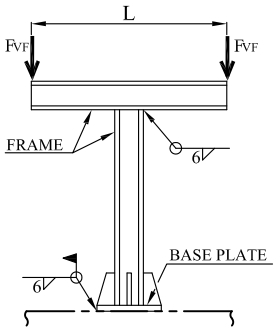
STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

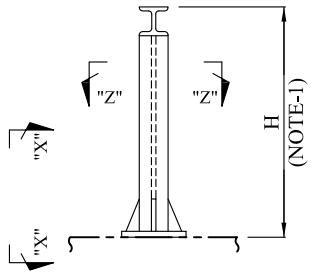
SUPPORT DESCRIPTION:

T-TYPE SUPPORT AT
STEEL STRUCTURE (CHANNEL)
SE-09

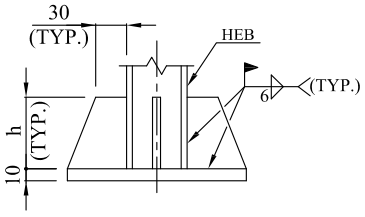
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 183 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00

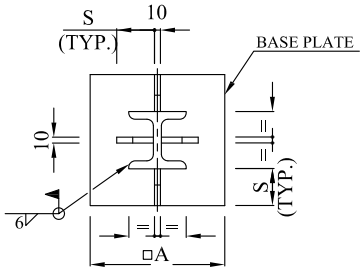




TYPE "B"
HEB



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

LENGHT 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-HEIGTH 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:

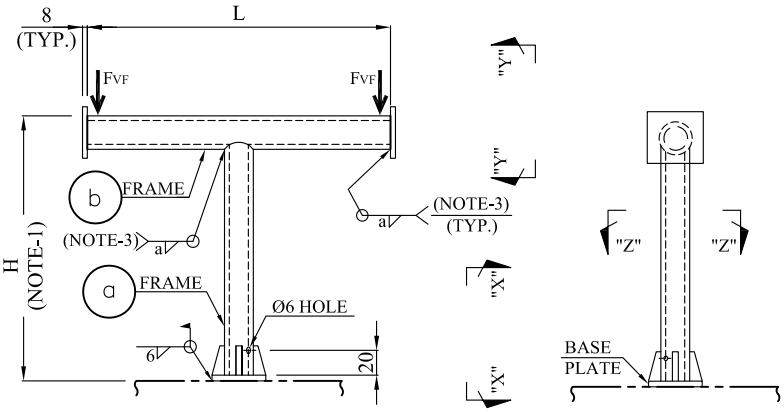
T-TYPE SUPPORT AT
AT STEEL STRUCTURE (HEB)
SE-09

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

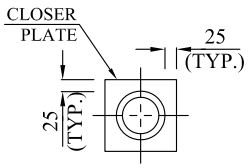
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



TYPE "C"
PIPE



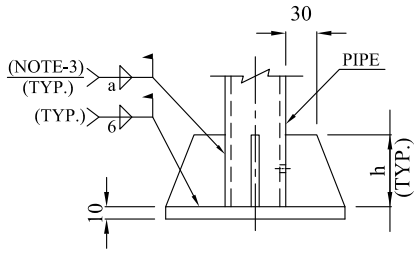
VIEW "Y" ~ "Y"

HEIGHT MARK: (3)

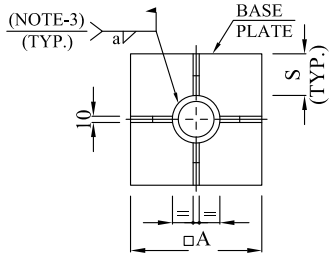
FRAME	H
01	400
02	500
03	600
04	700
05	800
06	900
07	1000
08	1100
09	1200
10	1300
11	1400
12	1500
13	1600
14	1700
15	1800
16	1900
17	2000
18	2100
19	2200
20	2300
21	2400
22	2500
23	2600
24	2700
25	2800
26	2900
27	3000
28	3100
29	3200
30	3300
31	3400
32	3500
33	3600
34	3700
35	3800
36	3900
37	4000

LENGTH MARK: (3)

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



VIEW "X" ~ "X"



VIEW "Z" ~ "Z"

SIZE MARK: (2)

MARK	FRAME ⓐ	FRAME ⓑ	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-HEIGTH 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:
T-TYPE SUPPORT AT
STEEL STRUCTURE (PIPE)
SE-09

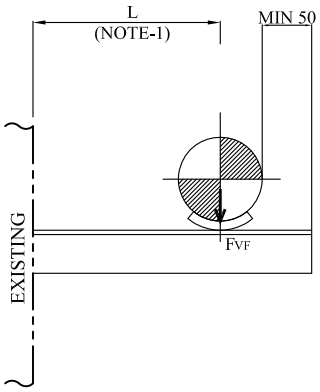
SHEET 3 OF 3

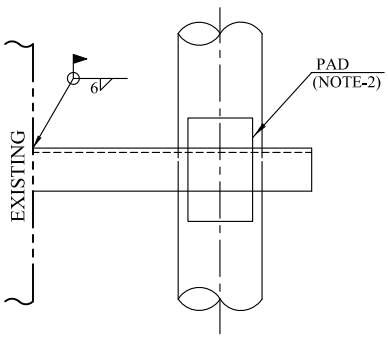
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

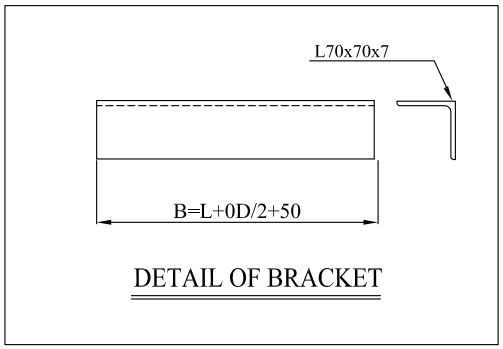
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00





TYPE "A"



LENGTH MARK: (2)

MARK	L	ALLOW.LOAD (kg)-FVF
01	300	150
02	400	
03	500	85
04	600	
05	700	
06	800	60
07	900	
08	1000	

INDICATION:

SE - 10- [ ][ ][ ]
(1) (2)

1-TYPE MARK
2-LENGTH MARK

NOTE:
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- SEPARATED TAG IS REQUIRED FOR PAD (SC-05).

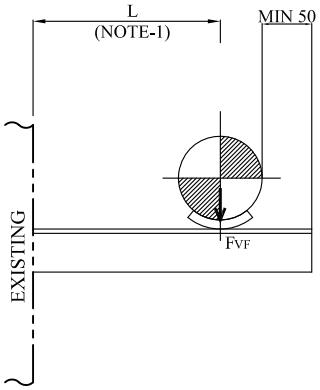
MATERIAL:
STANDARD PROFILE: ASTM A36

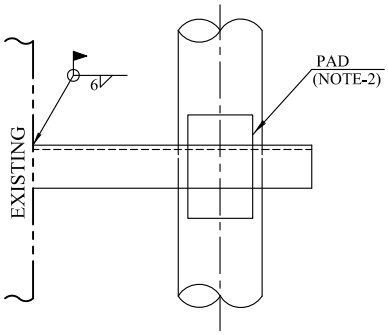
SUPPORT DESCRIPTION:

BRACKET ON STRUCTURE
HORIZONTAL RUN PIPE
(TYPE "A")
SE-10

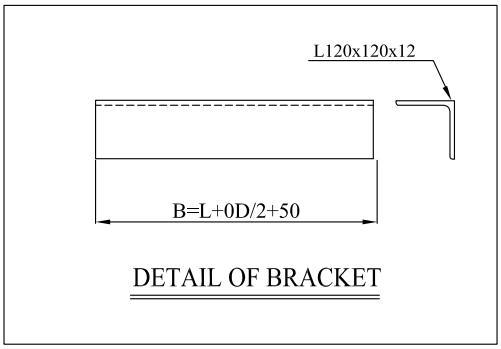
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 186 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	





TYPE "B"



DETAIL OF BRACKET

LENGTH MARK: (2)

MARK	L	ALLOW.LOAD (kg)-FVF
01	300	350
02	400	
03	500	200
04	600	
05	700	
06	800	140
07	900	
08	1000	

INDICATION:

SE - 10- [ ] [ ]
(1) (2)

1-TYPE MARK
2-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:

BRACKET ON STRUCTURE
HORIZONTAL RUN PIPE
(TYPE "B")
SE-10

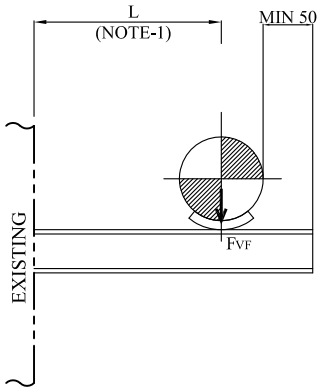
SHEET 2 OF 6

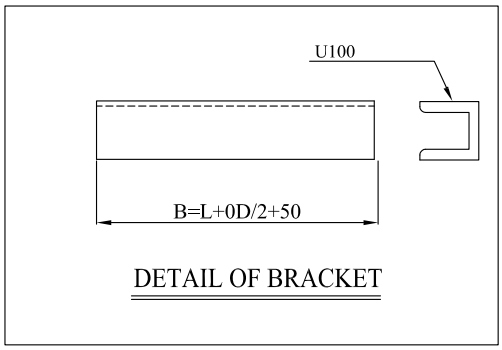
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

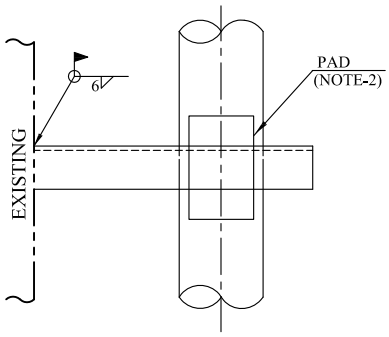
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00





DETAIL OF BRACKET



TYPE "C"

LENGTH MARK: (2)

MARK	L	ALLOW.LOAD (kg)-FVF
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	

INDICATION:

SE - 10- [ ][ ][ ]
(1) (2)

1-TYPE MARK
2-LENGTH MARK

NOTE:
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- SEPARATED TAG IS REQUIRED FOR PAD (SC-05).

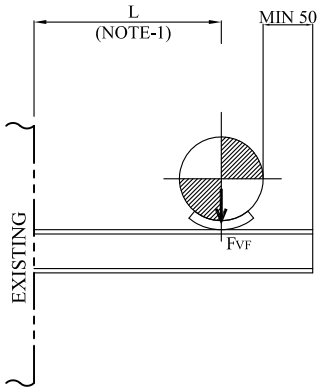
MATERIAL:
STANDARD PROFILE: ASTM A36

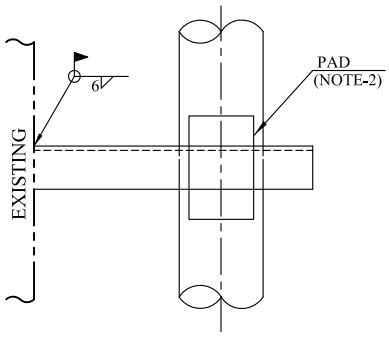
SUPPORT DESCRIPTION:

BRACKET ON STRUCTURE
HORIZONTAL RUN PIPE
(TYPE "C")
SE-10

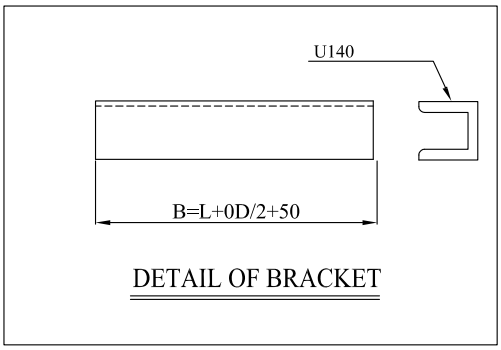
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 188 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	





TYPE "D"



DETAIL OF BRACKET

LENGTH MARK: (2)

MARK	L	ALLOW.LOAD (kg)-FVF
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	

INDICATION:

SE - 10- [ ] [ ]
(1) (2)

1-TYPE MARK
2-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

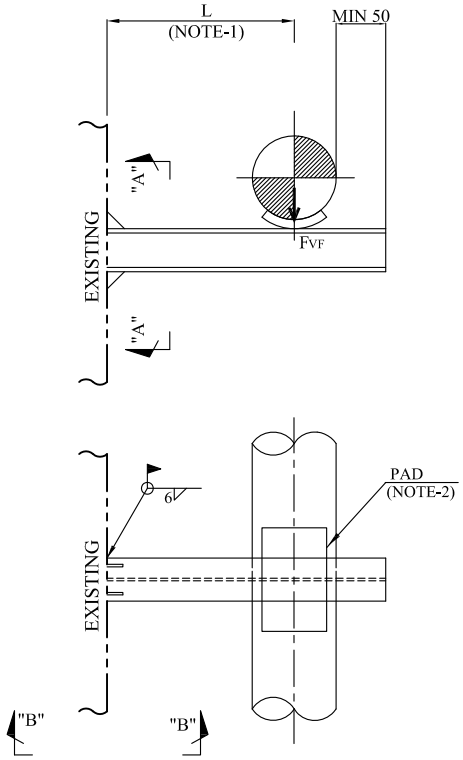
SUPPORT DESCRIPTION:

BRACKET ON STRUCTURE
HORIZONTAL RUN PIPE
(TYPE "D")
SE-10

SHEET 4 OF 6

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

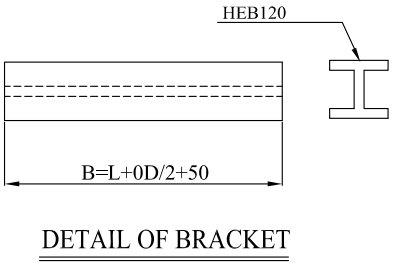
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 189 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



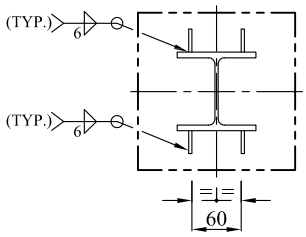
TYPE "E"

LENGTH MARK: (2)

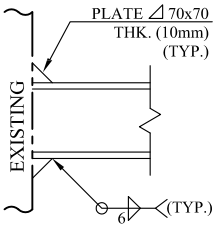
MARK	L	ALLOW.LOAD (kg)-FVF
01	300	1000
02	400	
03	500	
04	600	720
05	700	
06	800	
07	900	560
08	1000	
09	1100	
10	1200	460
11	1300	
12	1400	
13	1500	390
14	1600	
15	1700	
16	1800	330
17	1900	
18	2000	



DETAIL OF BRACKET



VIEW "A" ~ "A"



VIEW "B" ~ "B"

INDICATION:

SE - 10- [ ][ ][ ]
(1) (2)

1-TYPE MARK
2-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

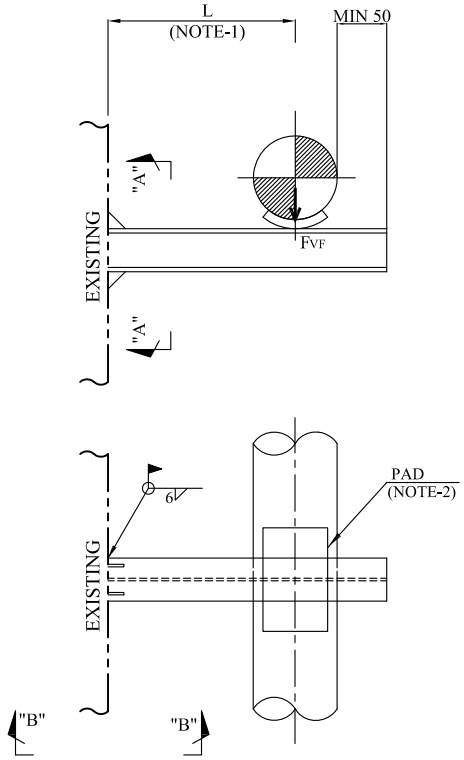
SUPPORT DESCRIPTION:

BRACKET ON STRUCTURE
HORIZONTAL RUN PIPE
(TYPE "E")
SE-10

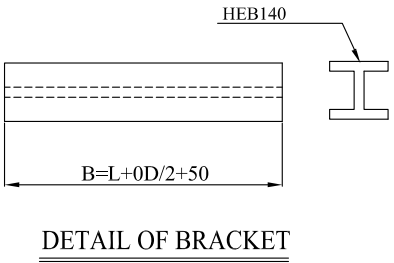
SHEET 5 OF 6

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

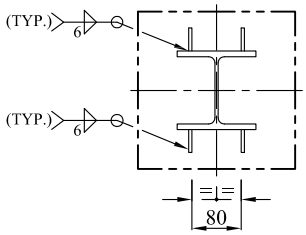
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 190 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	



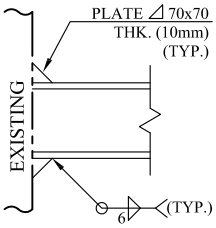
TYPE "F"



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	

INDICATION:

SE - 10- [ ] [ ]
(1) (2)

1-TYPE MARK
2-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:

BRACKET ON STRUCTURE
HORIZONTAL RUN PIPE
(TYPE "F")
SE-10

SHEET 6 OF 6

NISOC

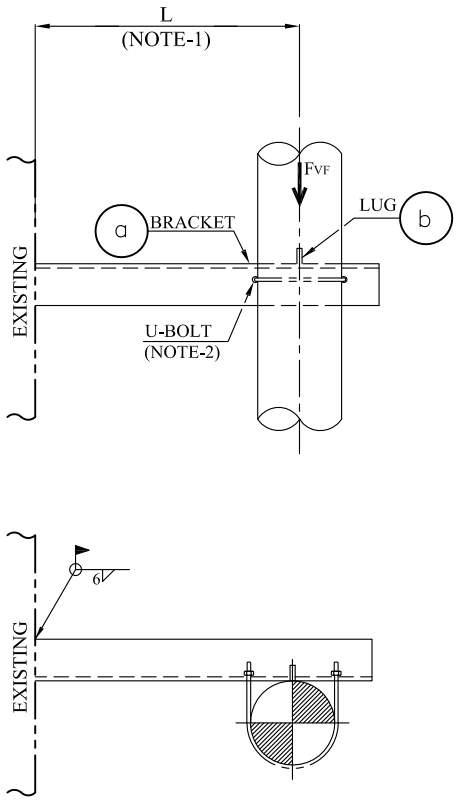
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح‌الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

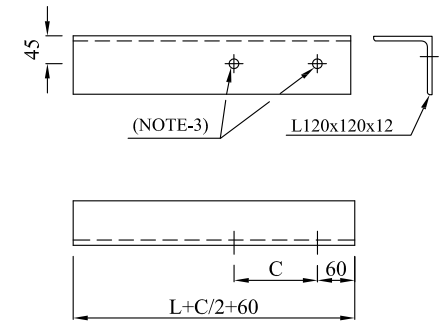
PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

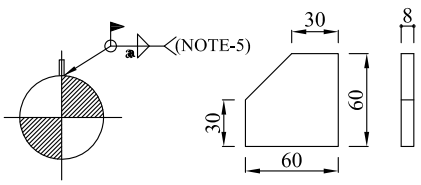
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00





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	G
	ⓐ	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.

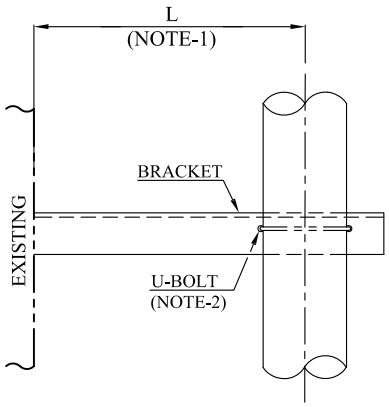
SUPPORT DESCRIPTION:

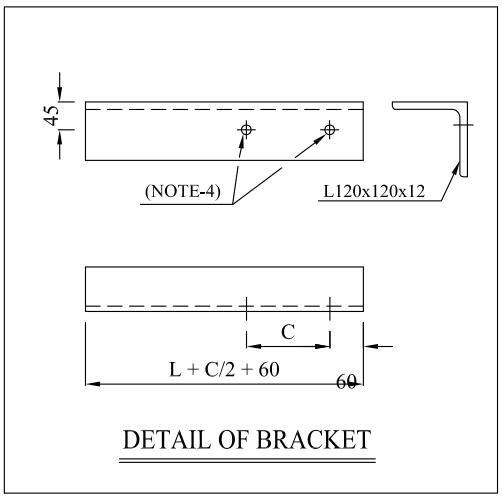
BRACKET ON STRUCTURE
U-BOLT TYPE SEMI ANCHOR 1/2" ~ 2"
SE-11

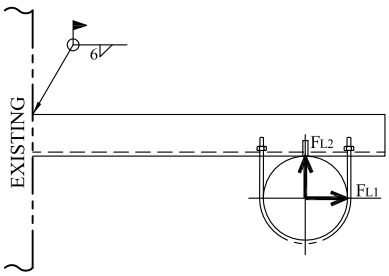
SHEET 1 OF 1

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 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00







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:(2)

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:(1)

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

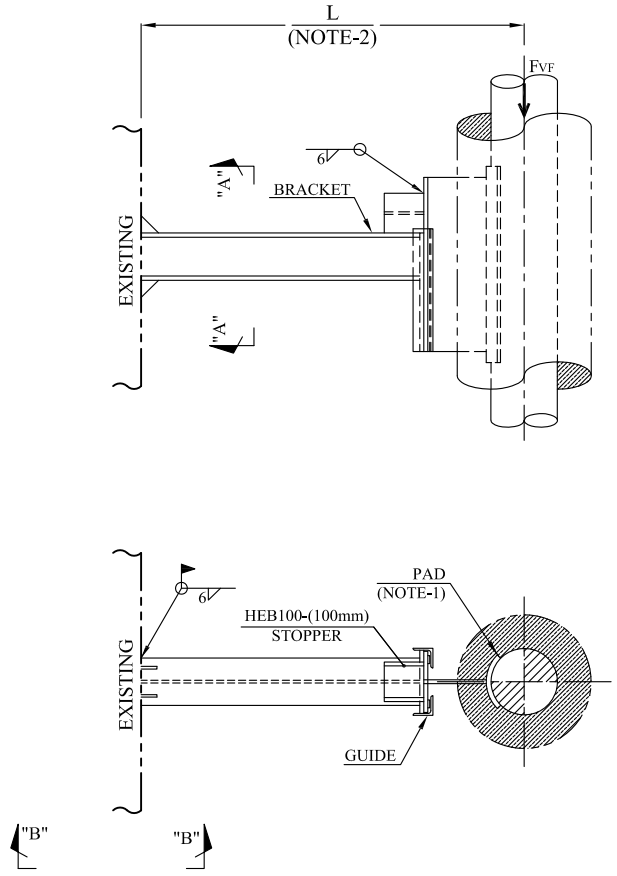
SUPPORT DESCRIPTION:

BRACKET ON STRUCTURE
U-BOLT TYPE DOUBLE GUIDE 1/2" ~ 2"
SE-12

SHEET 1 OF 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: 193 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



INDICATION:

SE - 13 – [ ][ ] – [ ] – [ ]
(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-HEIGHT 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- "H" INDICATES SHOE HEIGHT.

MATERIAL:

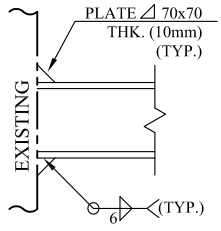
STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.B

SUPPORT DESCRIPTION:

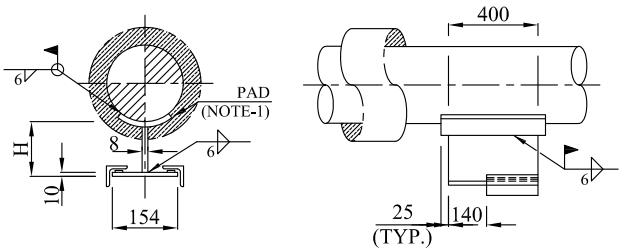
BRACKET ON STRUCTURE
SHOE TYPE SEMI ANCHOR 2" ~ 6"
SE-13

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

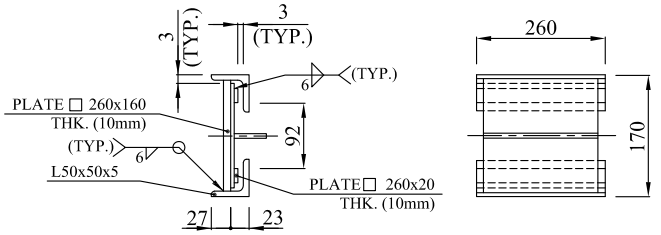
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 194 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



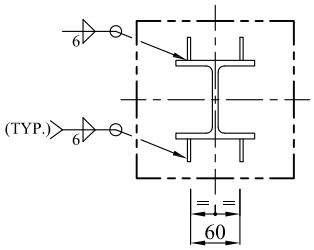
VIEW "B" ~ "B"



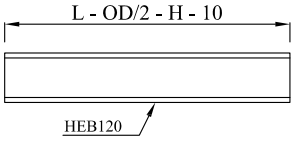
DETAIL OF PIPE SHOE



DETAIL OF GUIDE



VIEW "A" ~ "A"



DETAIL OF BRACKET

LENGTH MARK: (2)

MARK	L	ALLOW.LOAD (kg)-F_{VF}
1	500	700
2	600	
3	700	
4	800	
5	900	550
6	1000	
7	1100	

NPS MARK: (1)

NPS MARK	RUN PIPE SIZE
02	2"
03	3"
04	4"
06	6"

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		

INDICATION:

SE - 13 – □□ – □ – □
(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-HEIGHT 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- "H" INDICATES SHOE HEIGHT.

MATERIAL:

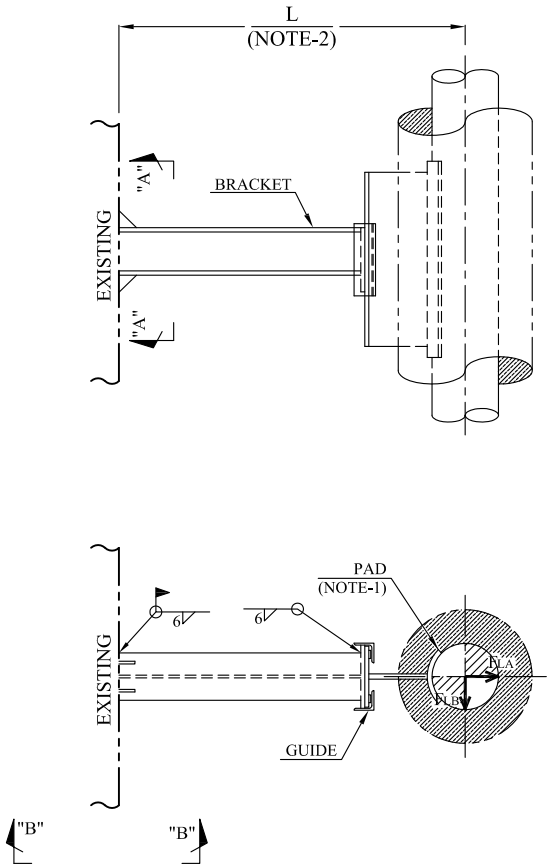
STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.B

SUPPORT DESCRIPTION:

BRACKET ON STRUCTURE
SHOE TYPE SEMI ANCHOR 2" ~ 6"
SE-13

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: 195 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



INDICATION:

SE - 14- □□ - □ - □
(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-HEIGHT 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- "H" INDICATES SHOE HEIGHT.

MATERIAL:

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

SUPPORT DESCRIPTION:

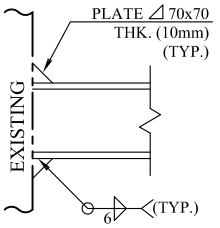
BRACKET ON STRUCTURE
SHOE TYPE DOUBLE GUIDE 2" ~ 6"
SE-14

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

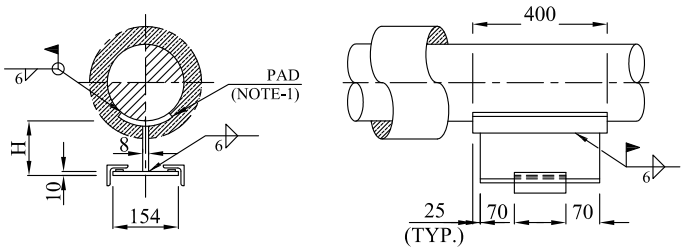
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

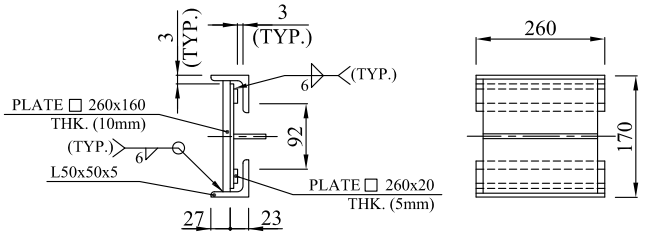
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



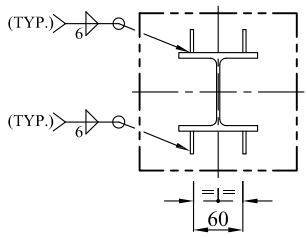
VIEW "B" ~ "B"



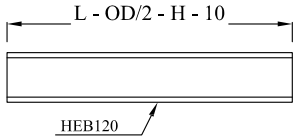
DETAIL OF PIPE SHOE



DETAIL OF GUIDE



VIEW "A" ~ "A"



DETAIL OF BRACKET

LENGTH MARK: (2)

MARK	L	ALLOW.LOAD (kg)-FVF	
		FLA	FLB
1	500	400	500
2	600		
3	700		
4	800		
5	900		
6	1000		
7	1100		

NPS MARK: (1)

NPS MARK	RUN PIPE SIZE
02	2"
03	3"
04	4"
06	6"

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		

INDICATION:

SE - 14 – [ ] – [ ] – [ ]
(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-HEIGHT 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- "H" INDICATES SHOE HEIGHT.

MATERIAL:

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

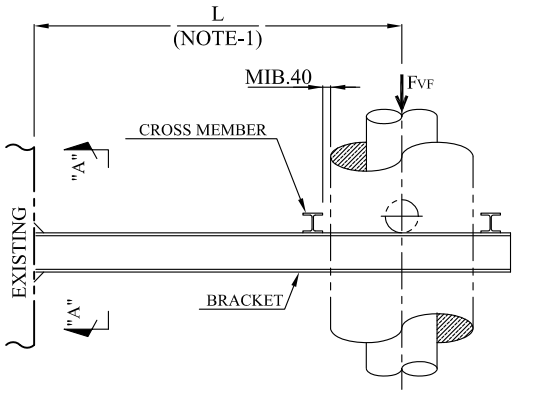
SUPPORT DESCRIPTION:

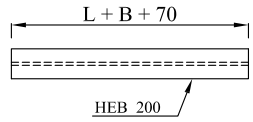
BRACKET ON STRUCTURE
SHOE TYPE DOUBLE GUIDE 2" ~ 6"
SE-14

SHEET 2 OF 2

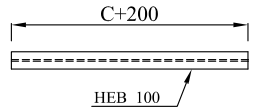
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 197 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00

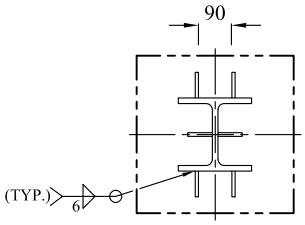




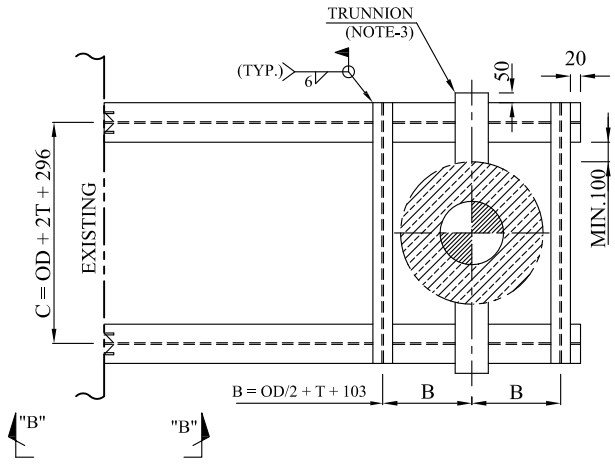
DETAIL OF BRACKET



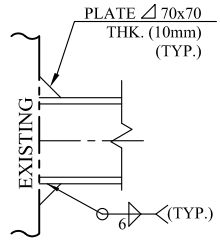
DETAIL OF MEMBER



VIEW "A" ~ "A"



TYPE "A"
CARBON STEEL (BARE)



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=50	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 CONFIGURATIN. ALLOWABLE LOAD OF TRUNNION SHALL BE CHECKED SEPARATELY.

MATERIAL:
STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.B

SUPPORT DESCRIPTION:

BRACKET ON STRUCTURE
SHOE REST 8” ~ 12”
SE-15

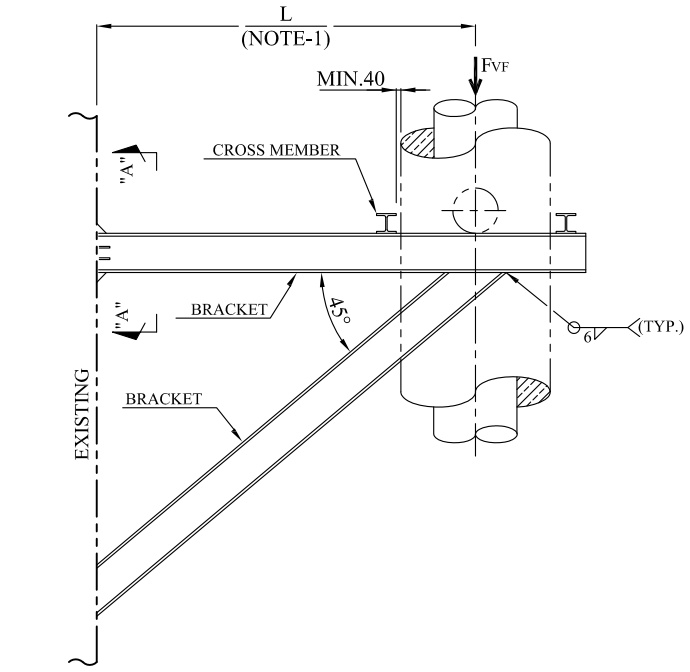
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

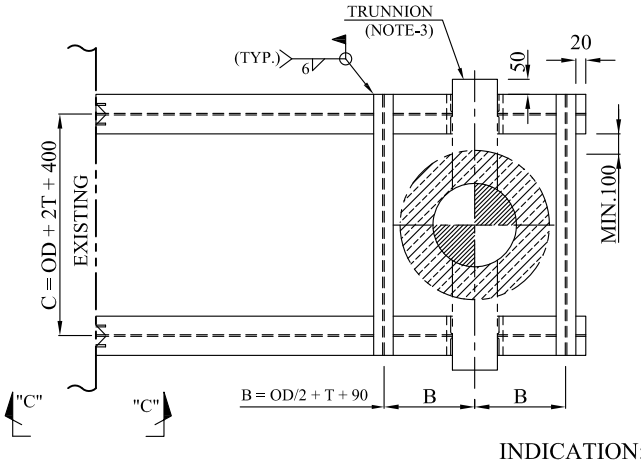
شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00





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 CONFIGURATIN. ALLOWABLE LOAD OF TRUNNION SHALL BE CHECKED SEPARATELY.

MATERIAL:

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

SUPPORT DESCRIPTION:

BRACKET ON STRUCTURE
SHOE REST 14" ~ 24"
SE-15

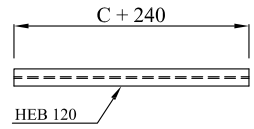
SHEET 2 OF 7

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

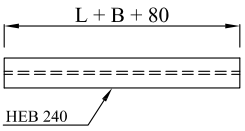
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

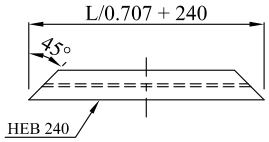
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



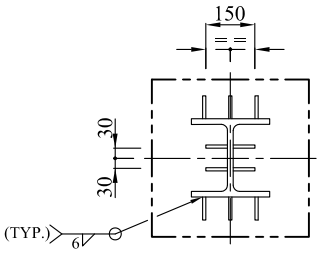
DETAIL OF CROSS MEMBER



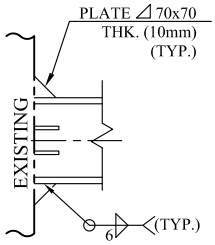
DETAIL OF BRACKET



DETAIL OF BRACKET



VIEW "A" ~ "A"



VIEW "C" ~ "C"

LENGTH MARK: (2)

MARK	L	ALLOW.LOAD (kg) F_{VF}
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=50	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 CONFIGURATIN. ALLOWABLE LOAD OF TRUNNION SHALL BE CHECKED SEPARATELY.

MATERIAL:
STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.B

SUPPORT DESCRIPTION:

BRACKET ON STRUCTURE
SHOE REST 14" ~ 24"
SE-15

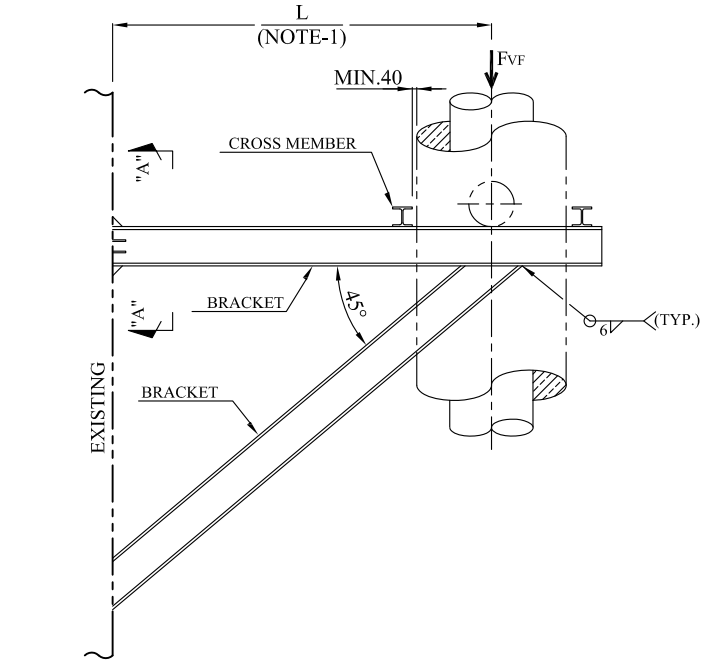
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

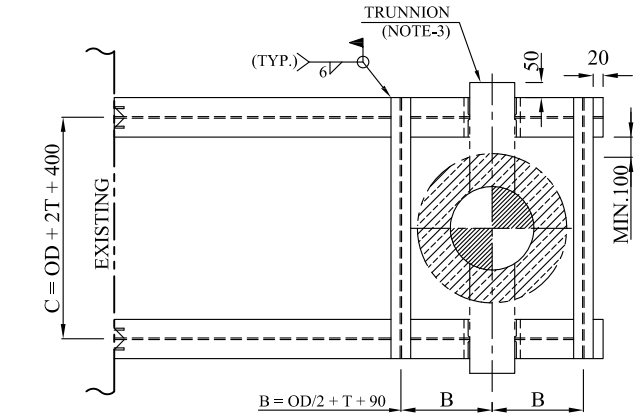
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 200 از 307





"C" "C"

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 CONFIGURATIN. ALLOWABLE LOAD OF TRUNNION SHALL BE CHECKED SEPARATELY.

MATERIAL:
STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.B

SUPPORT DESCRIPTION:

BRACKET ON STRUCTURE
SHOE REST 26" ~ 42"
SE-15

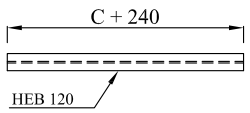
SHEET 4 OF 7

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

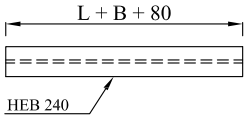
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

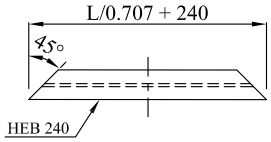
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



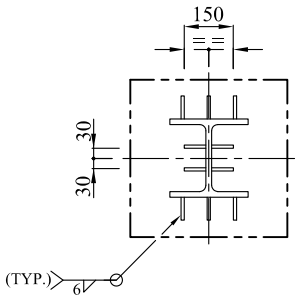
DETAIL OF CROSS MEMBER



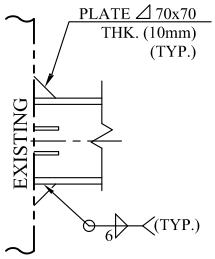
DETAIL OF BRACKET



DETAIL OF BRACKET



VIEW "A" ~ "A"



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=50	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 CONFIGURATIN. ALLOWABLE LOAD OF TRUNNION SHALL BE CHECKED SEPARATELY.

MATERIAL:
STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.B

SUPPORT DESCRIPTION:

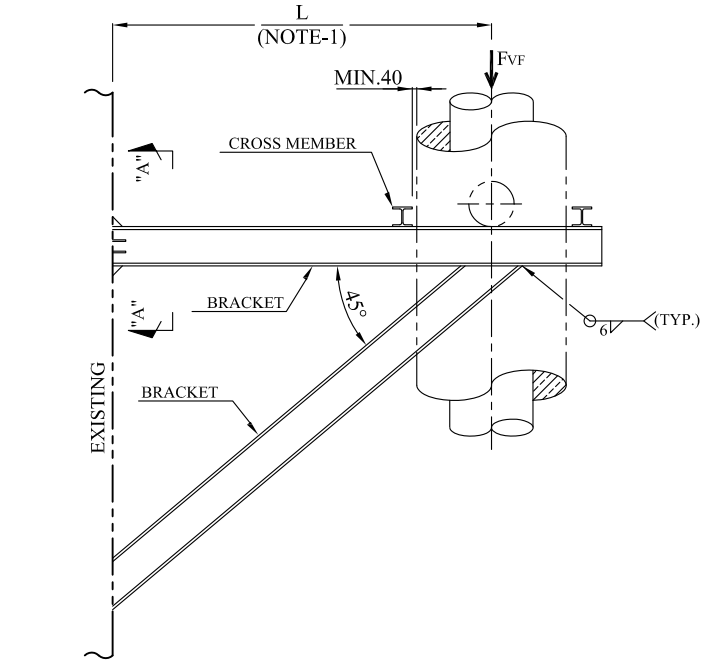
BRACKET ON STRUCTURE
SHOE REST 26" ~ 42"
SE-15

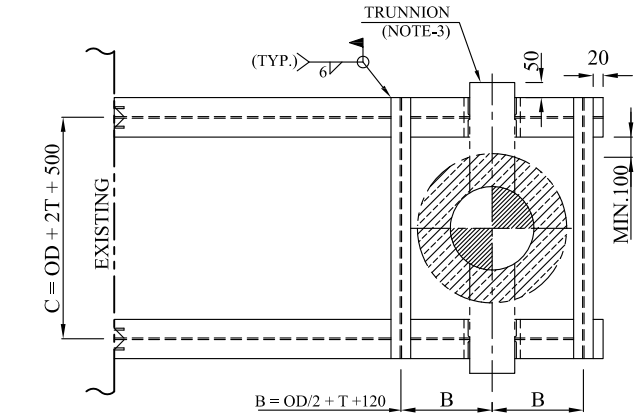
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00





"C" "C"

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 CONFIGURATIN. ALLOWABLE LOAD OF TRUNNION SHALL BE CHECKED SEPARATELY.

MATERIAL:
STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.B

SUPPORT DESCRIPTION:

BRACKET ON STRUCTURE
SHOE REST 44" ~ 56"
SE-15

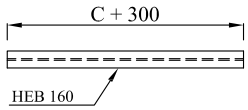
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

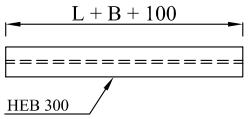
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

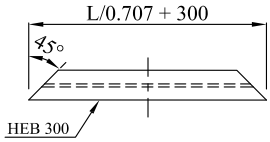
شماره صفحه: 203 از 307



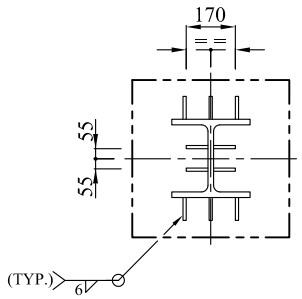
DETAIL OF CROSS MEMBER



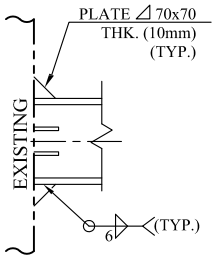
DETAIL OF BRACKET



DETAIL OF BRACKET



VIEW "A" ~ "A"



VIEW "C" ~ "C"

LENGTH MARK:(2)

MARK	L	ALLOW.LOAD (kg) F_{VF}
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"

INSULATION THK. MARK:(3)

HOT INSULATION THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=50	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 CONFIGURATIN. ALLOWABLE LOAD OF TRUNNION SHALL BE CHECKED SEPARATELY.

MATERIAL:
STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.B

SUPPORT DESCRIPTION:

BRACKET ON STRUCTURE
SHOE REST 44" ~ 56"
SE-15

SHEET 7 OF 7

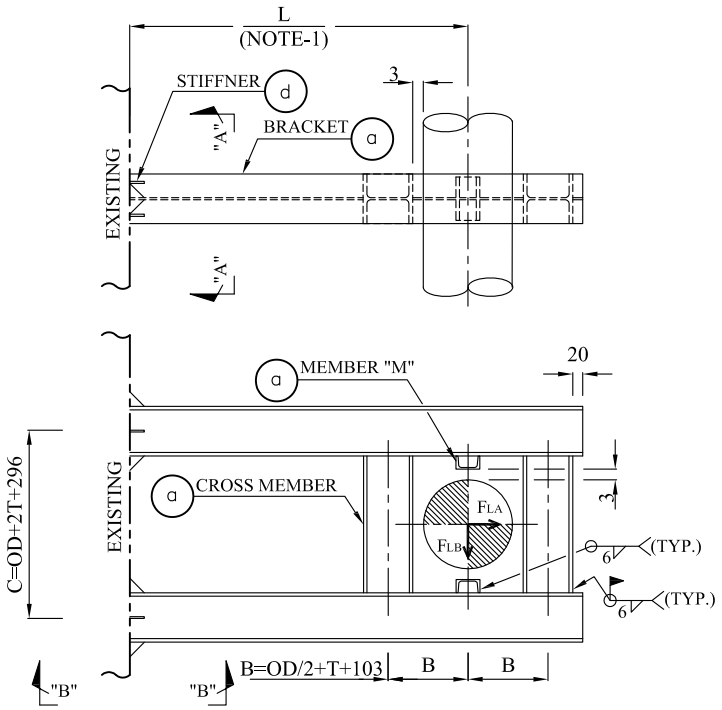
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

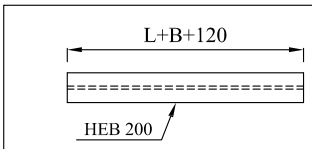
STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D00	0001	DW	PI	120	PEDCO	GCS	BK

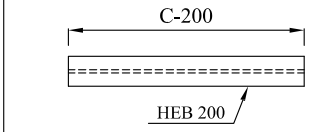
شماره صفحه: 204 از 307



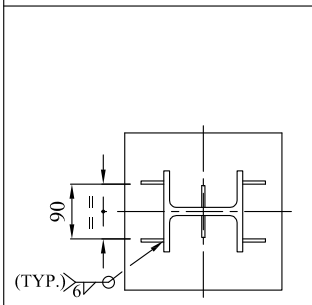
TYPE " A "
CARBON STEEL (BARE)



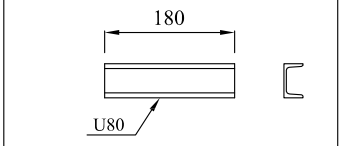
DETAIL OF BRACKET



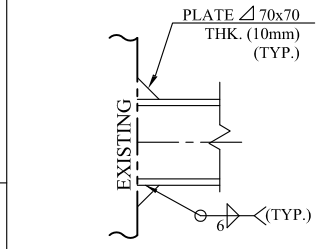
DETAIL OF CROSS MEMBER



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 IULATIONSN 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

NOTE:
1-DIMENSION "L" CAN BE ADJUSTED AT FIELD.

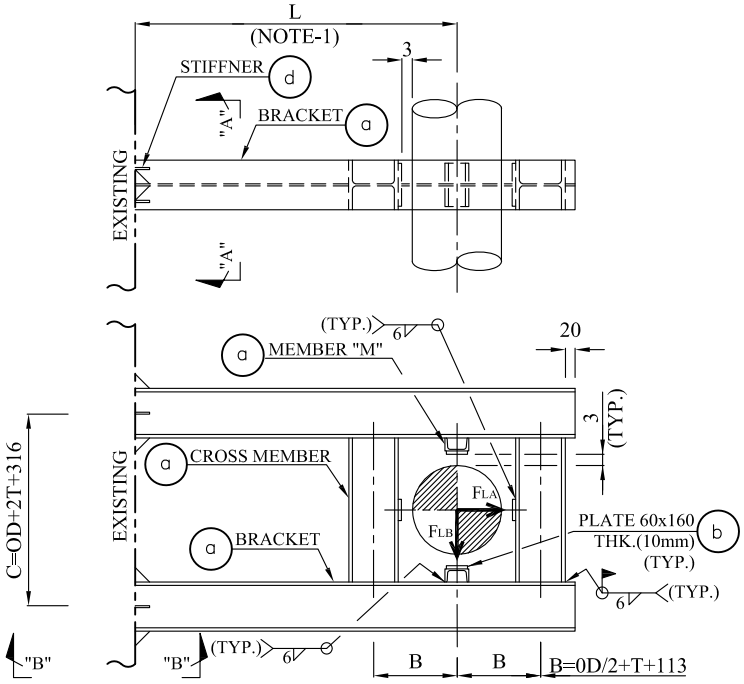
SUPPORT DESCRIPTION:

BRACKET ON STRUCTURE
DOUBLE GUIDE (TYPE A-CS) 8" ~ 12"
SE-16

SHEET 1 OF 10

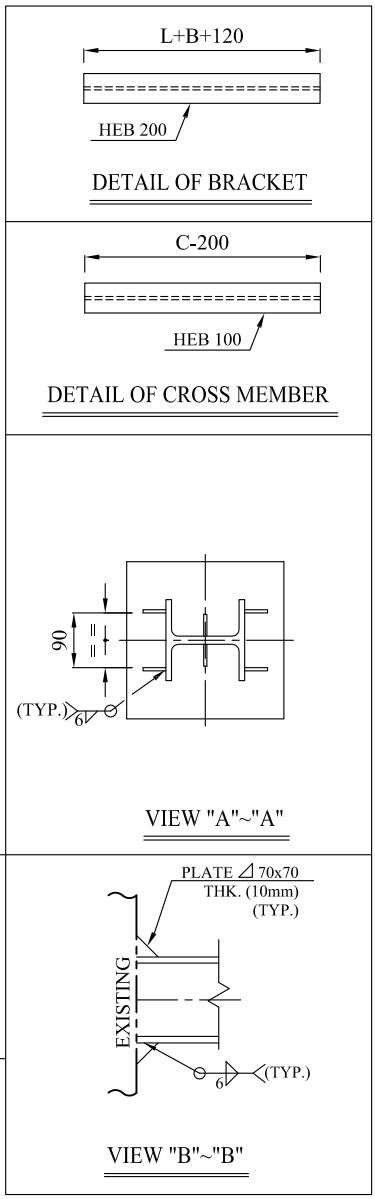
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

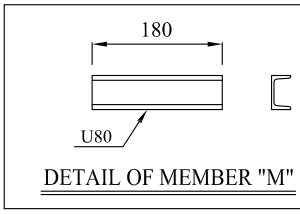
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 205 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



TYPE " B "

ALLOY STEEL OR STAINLESS STEEL (BARE)





DETAIL OF MEMBER "M"

LENGHT MARK: (4)

MARK	H	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

NOTE:

1-DIMENSIONS "L" CAN BE ADJUSTED AT FIELD.

SUPPORT DESCRIPTION:

BRACKET ON STRUCTURE
DOUBLE GUIDE (TYPE B-AS,SS) 8"~12"
SE-16

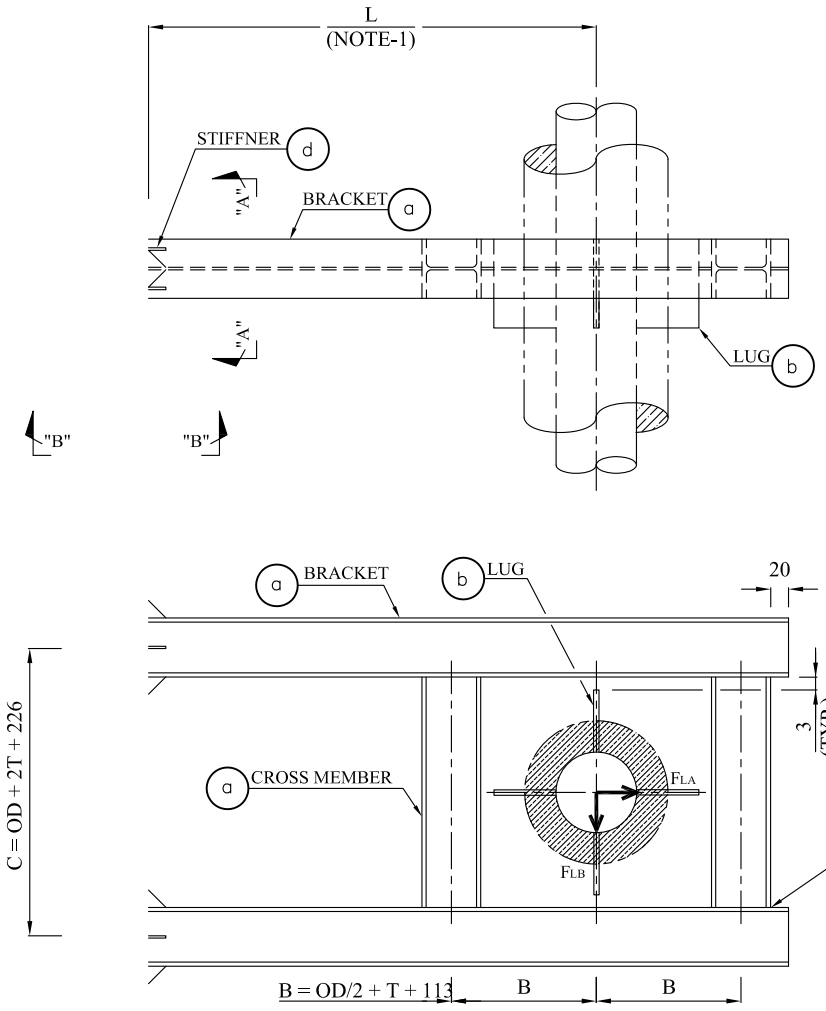
SHEET 2 OF 10

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	D00



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

NOTE:
1-DIMENSION "L" CAN BE ADJUSTED AT FIELD.

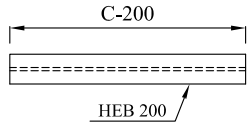
SUPPORT DESCRIPTION:

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

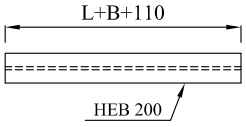
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

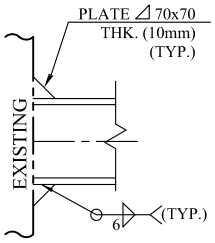
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



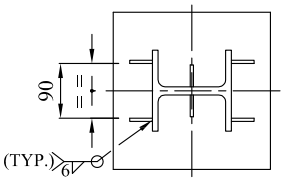
DETAIL OF CROSS MEMBER



DETAIL OF CROSS MEMBER



VIEW " B " ~ " B "



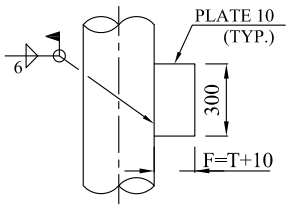
VIEW " A " ~ " A "

LENGHT MARK: (4)

MARK	H	ALLOW. LOAD (kg) FLA	ALLOW. LOAD (kg) FLB
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	G
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.

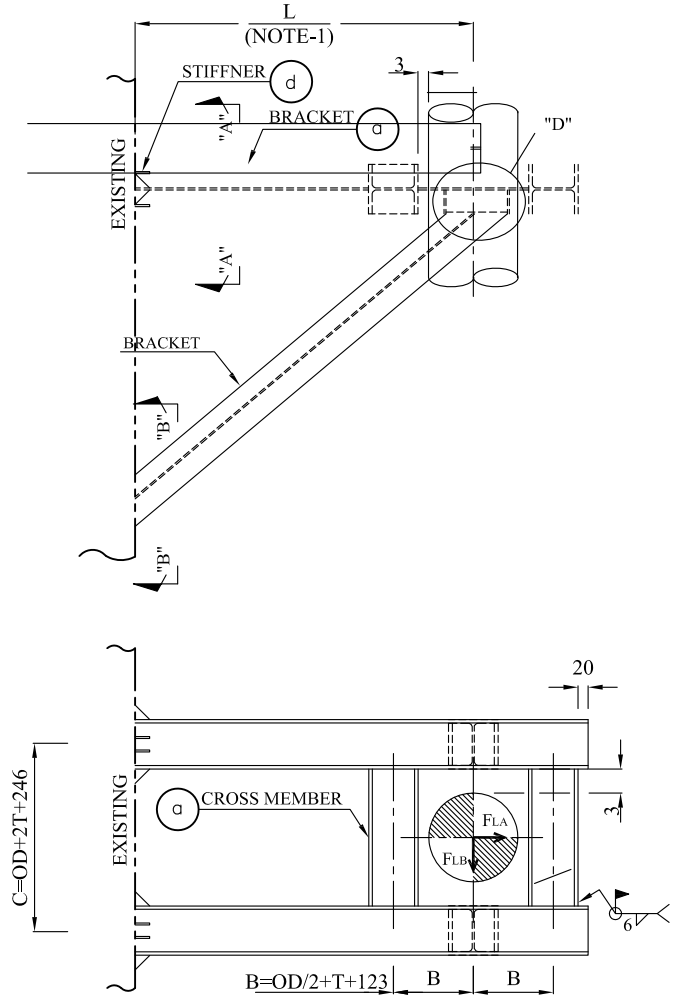
SUPPORT DESCRIPTION:
BRACKET ON STRUCTURE
DOUBLE GUIDE (TYPE CS, AS, OR SS (INSULATED)) 8"~12"
SE-16

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	D00



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

NOTE:
1-DIMENSION "L" CAN BE ADJUSTED AT FIELD.

SUPPORT DESCRIPTION:

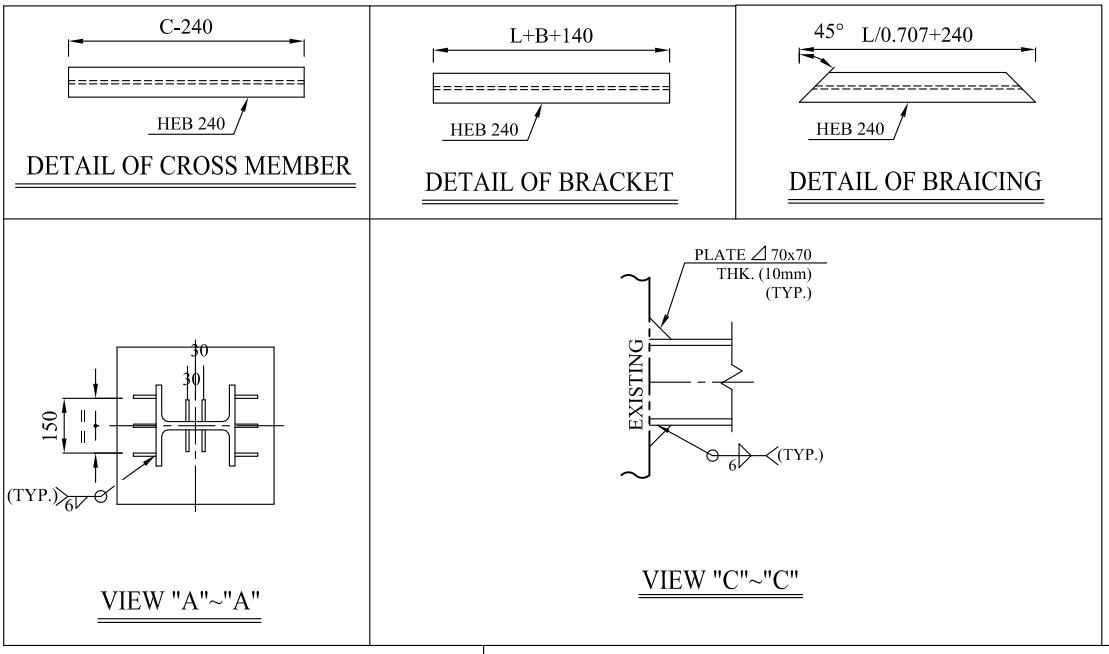
BRACKET ON STRUCTURE
DOUBLE GUIDE (TYPE A-CS) 14" ~ 24"
SE-16

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	D00

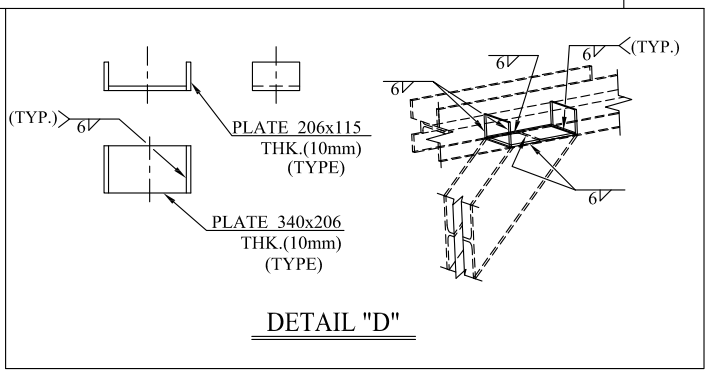


LENGTH MARK: (4)

MARK	L	ALLOW. LOAD (kg) FLA	FLB
01	700	36000	7800
02	800		
03	900		
04	1000		
05	1100		5900
06	1200		
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: (3)

HOT IULATIONSN 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	G
	ⓐ	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.

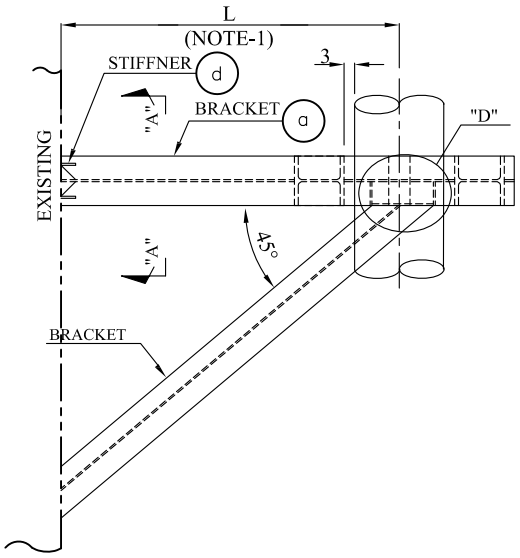
SUPPORT DESCRIPTION:
BRACKET ON STRUCTURE
DOUBLE GUIDE (TYPE A-CS) 14" ~ 24"
SE-16

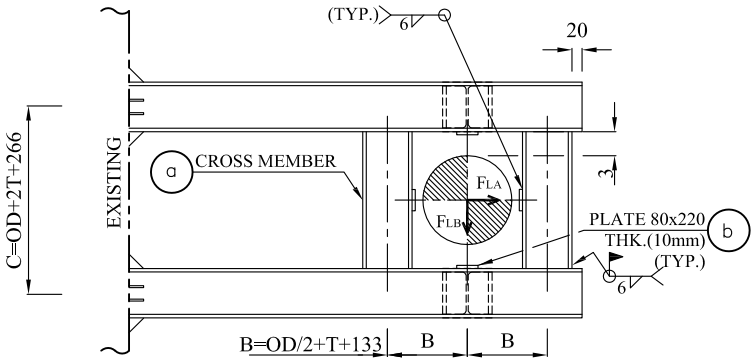
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00





"C" "C"

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

NOTE:
1-DIMENSION "L" CAN BE ADJUSTED AT FIELD.

SUPPORT DESCRIPTION:

BRACKET ON STRUCTURE
DOUBLE GUIDE (TYPE B-AS,SS) 14" ~ 24"
SE-16

SHEET 7 OF 10

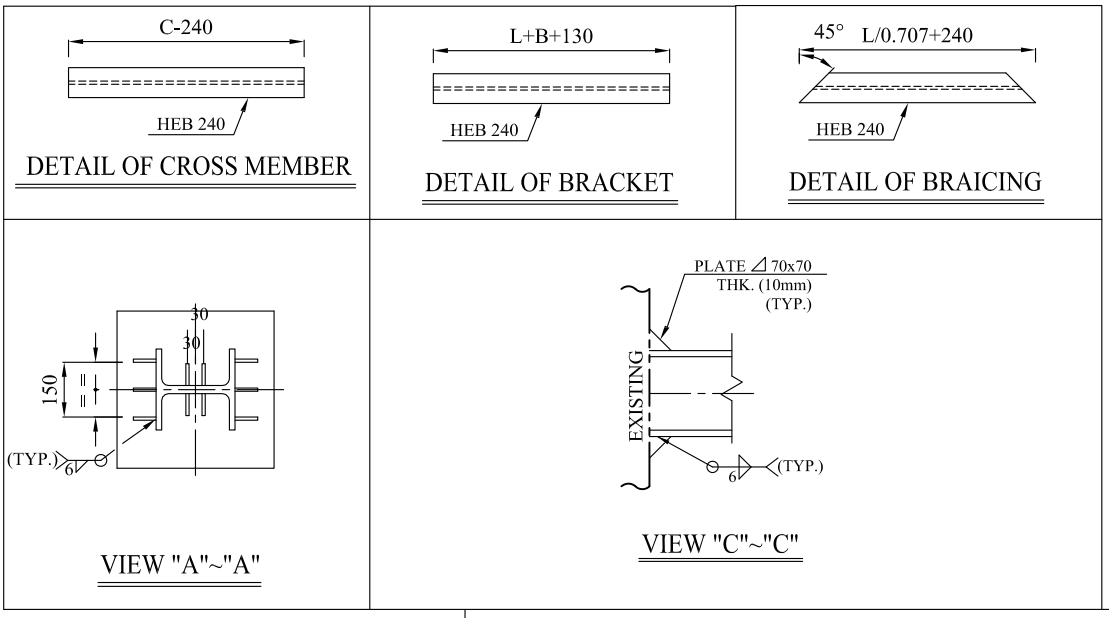
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00

شماره صفحه: 211 از 307

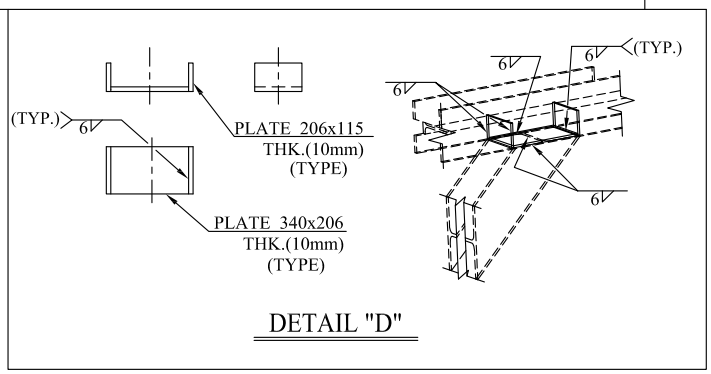


LENGTH MARK: (4)

MARK	L	ALLOW. LOAD (kg) FLA	ALLOW. LOAD (kg) FLB
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 IULATIONSN 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	MARK	A	B	G
	ⓐ	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 B-AS,SS) 14" ~ 24"
SE-16

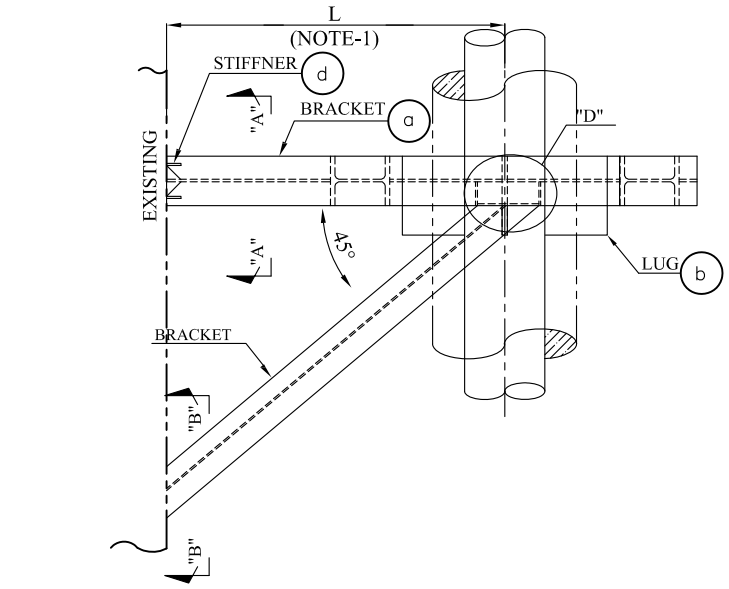
SHEET 8 OF 10

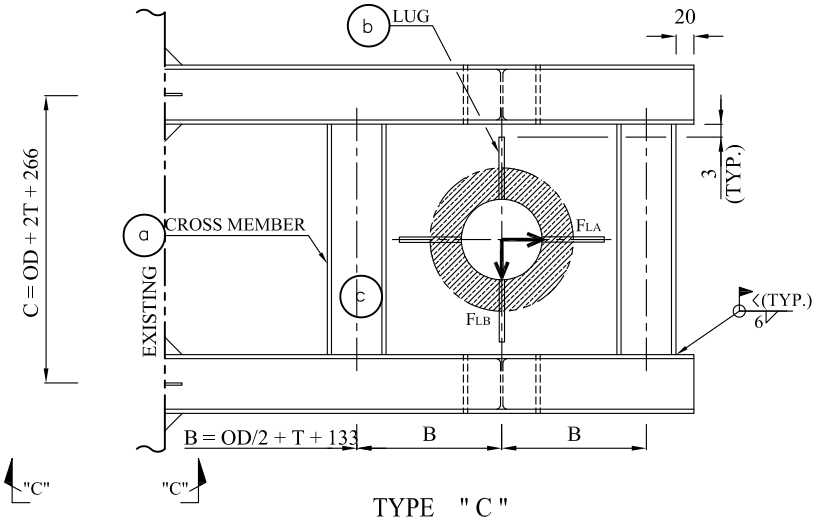
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00





TYPE " C "
CS, AS, OR SS (INSULATED)

INDICATION:

SE -16 – □□ – □□□ – □□□

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

1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:
1-DIMENSION "L" CAN BE ADJUSTED AT FIELD.

SUPPORT DESCRIPTION:

BRACKET ON STRUCTURE
DOUBLE GUIDE (TYPE CS, AS, OR SS (INSULATED)) 14"~24"

NISOC

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

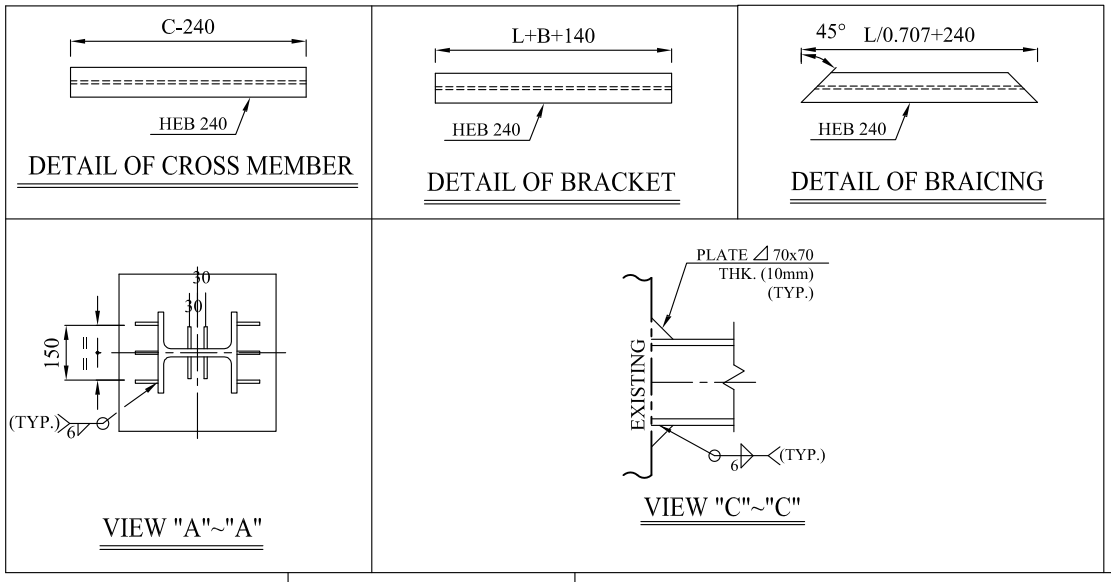
PEDCO
HIRGAN ENERGY

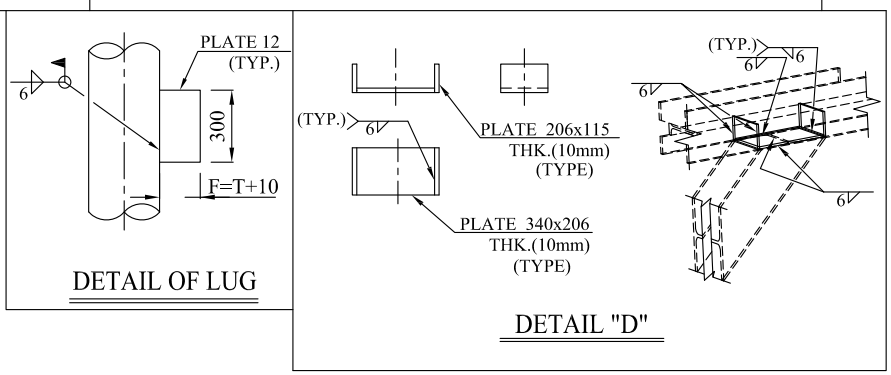
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 213 از 307





TYPE " C "

CS, AS, OR SS (INSULATED)

LENGTH MARK: (4)

MARK	L	ALLOW. LOAD (kg) FLA	FLB
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		

INSULATION THK. MARK: (5)

HOT IULATIONSN THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=50	T=200
INSULATION THK. MARK	1	2	3	4	5

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE
14	14"
16	16"
18	18"
20	20"
22	22"
24	24"

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	G
	ⓐ	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
2-LENGTH MARK
3-INSULATION THK. MARK

NOTE:
1-DIMENSION "L" CAN BE ADJUSTED AT FIELD.

SUPPORT DESCRIPTION:

BRACKET ON STRUCTURE
DOUBLE GUIDE (TYPE CS, AS, OR SS (INSULATED)) 14"~24"
SE-16

SHEET 10 OF 10

NISOC

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

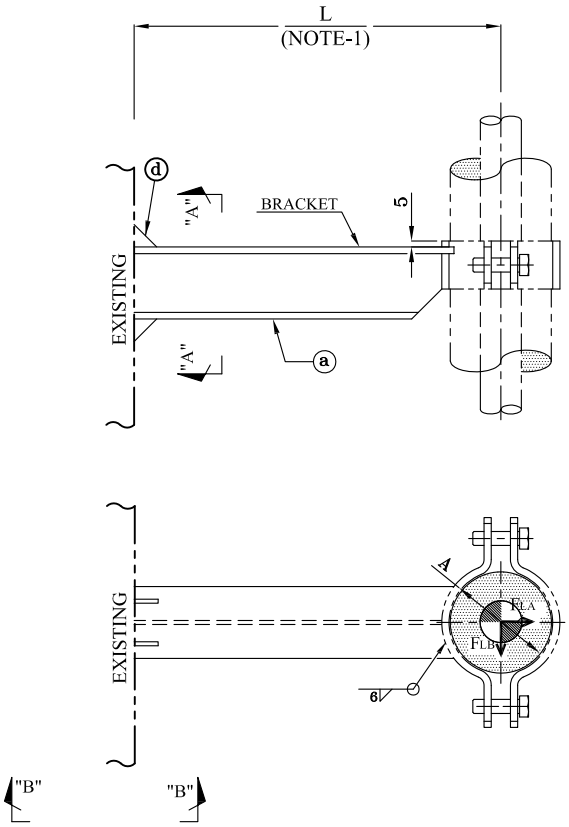
PEDCO

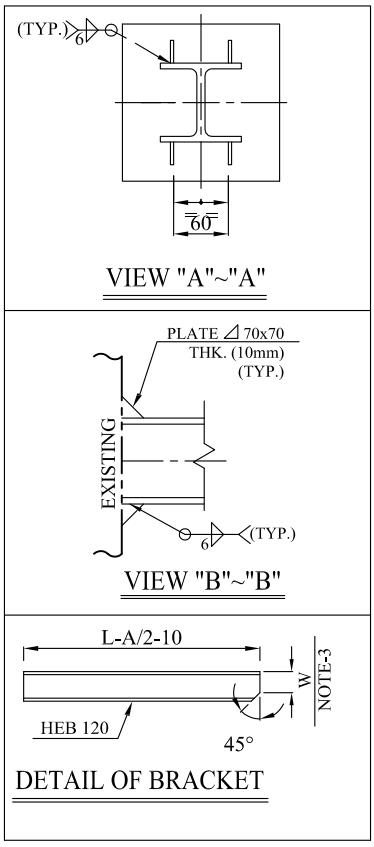
HIRGAN ENERGY

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	D00





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	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 - 17 – [ ][ ][ ] – [ ][ ]
(1) (2) (3) (4)

1–MATERIAL MARK
2–NPS MARK
3–INSULATION THK. 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 OF 1

NISOC

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

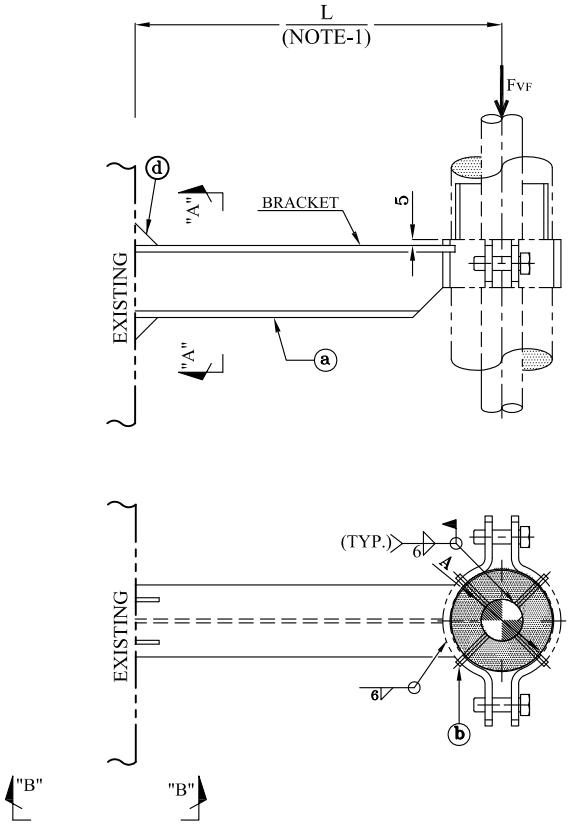
PEDCO
HIRGAN ENERGY

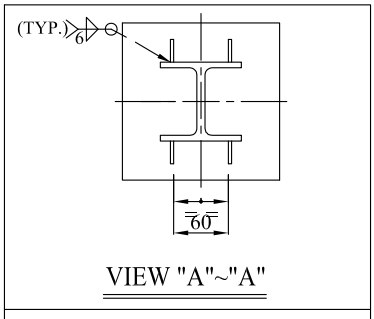
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

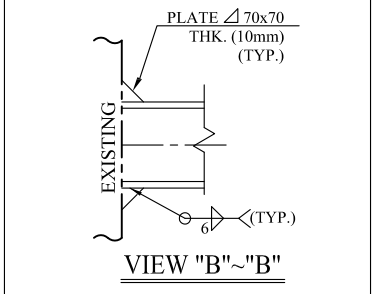
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 215 از 307

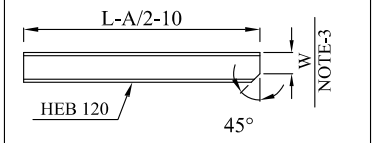




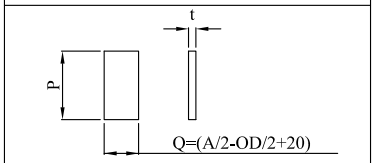
VIEW "A"~"A"



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) FVF
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	MARK	A	B	G
	ⓐ	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 THK. MARK
4-LENGTH MARK

NOTE:
2- 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.

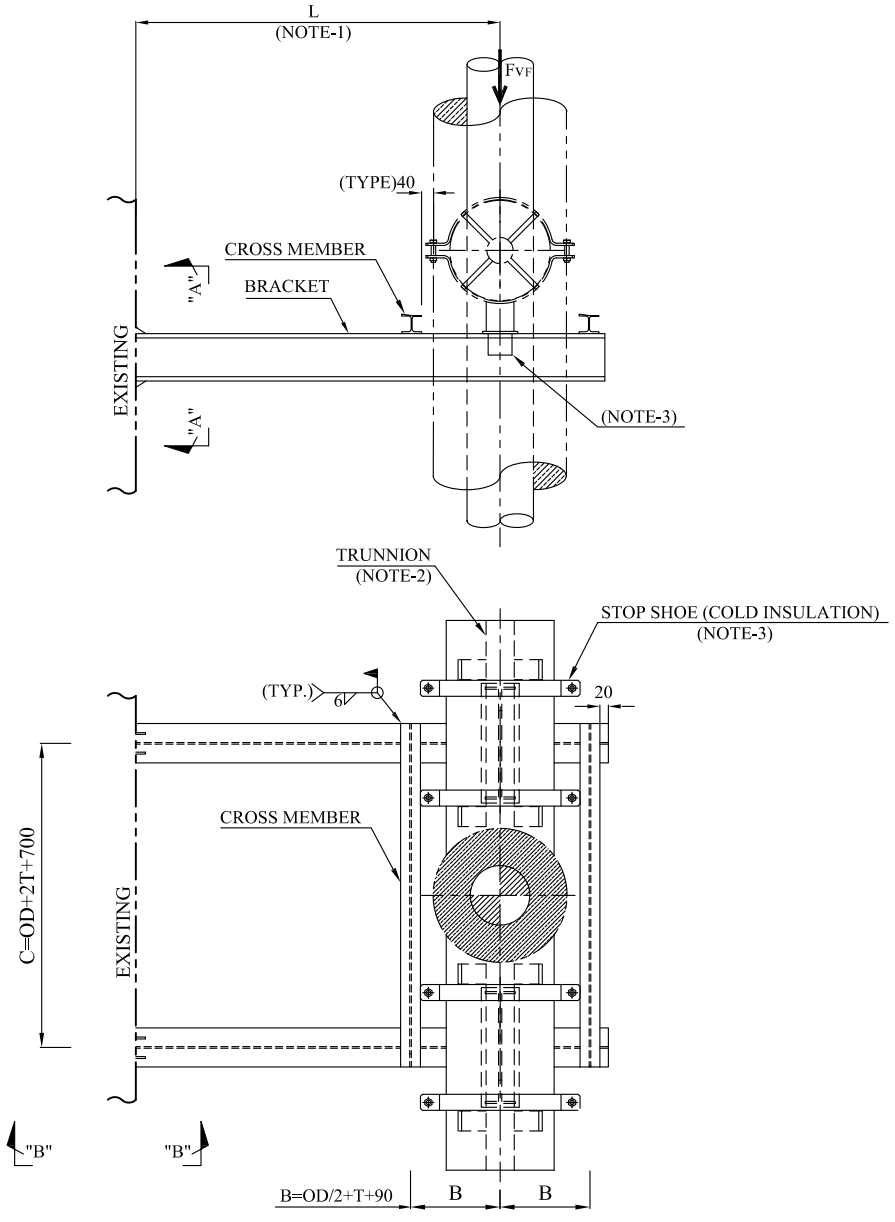
SUPPORT DESCRIPTION:

BRACKET ON STRUCTURE
CLAMP TYPE SEMI ANCHOR
(COLD INSULATION)2" ~ 6"
SE-18

SHEET 1 OF 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: 216 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



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.

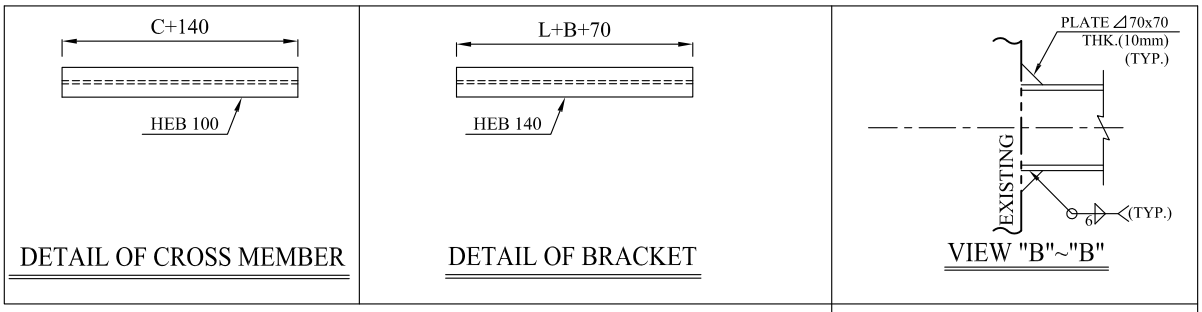
MATERIAL:
STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:
BRACKET ON STRUCTURE
REST (COLD INSULATION) 2" ~ 6"
SE-19

SHEET 1 OF 6

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

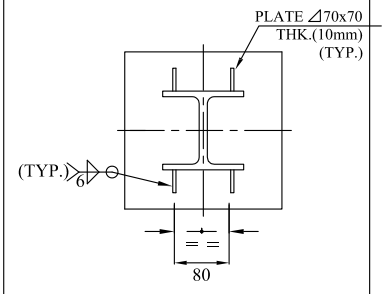
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 217 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



DETAIL OF CROSS MEMBER

DETAIL OF BRACKET

VIEW "B"~"B"



VIEW "A"~"A"

LENGTH MARK: (2)

MARK	L	ALLOW. LOAD (kg) F_{VF}
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 IULATIONSN THK.	25-50	51-100	101-150	151-200
CRADLE THK.	T=50	T=100	T=50	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.

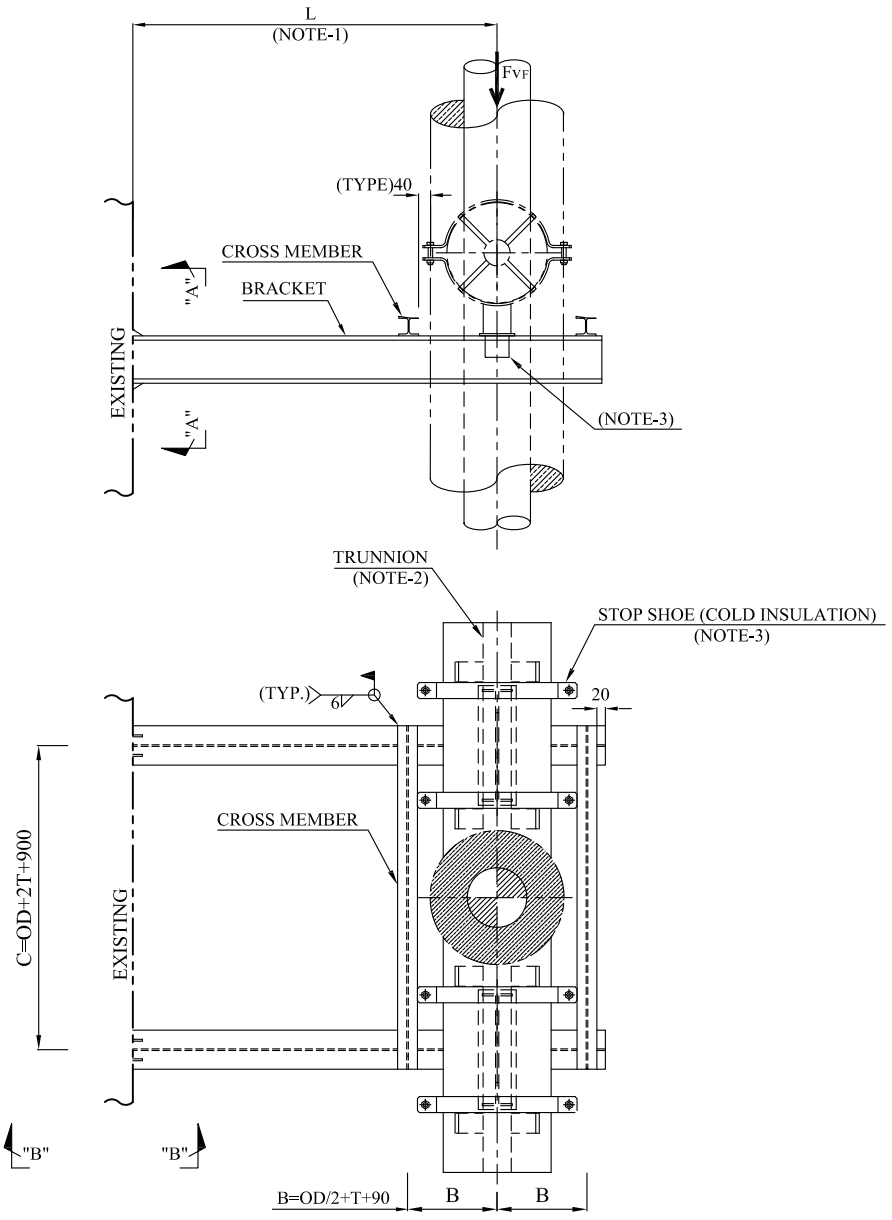
MATERIAL:
STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:

BRACKET ON STRUCTURE
REST (COLD INSULATION) 2" ~ 6"
SE-19

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: 218 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



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

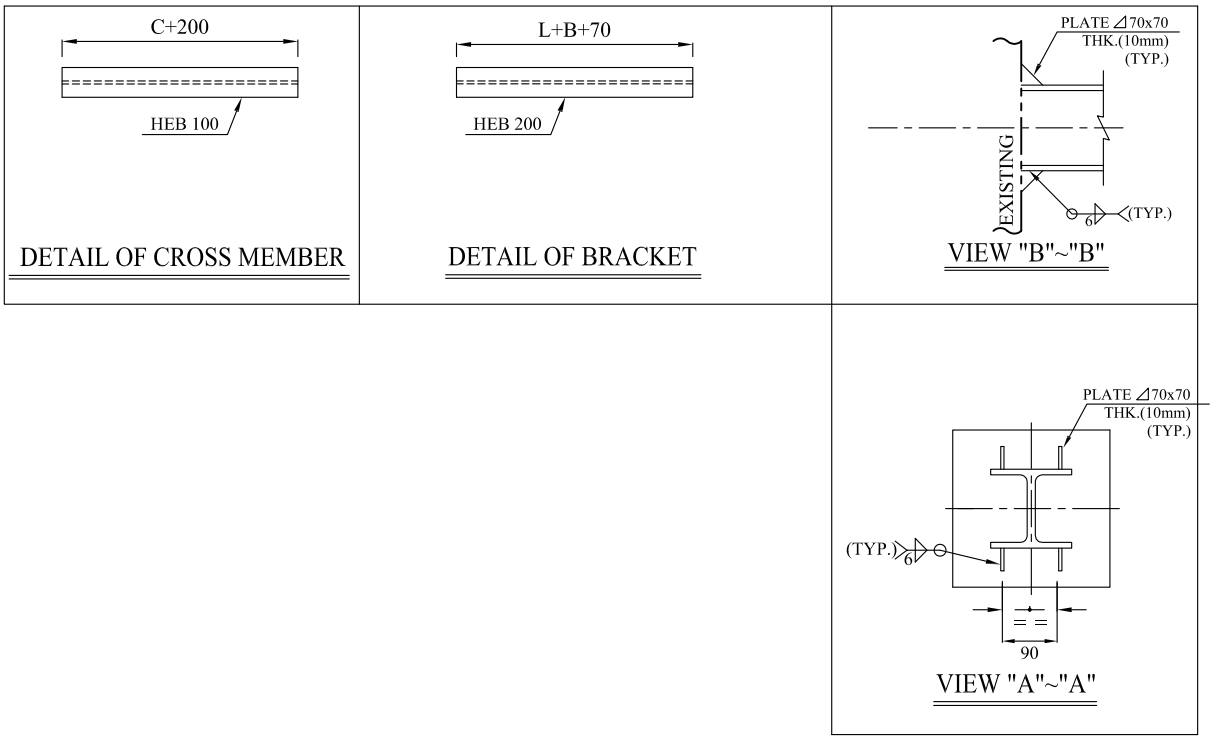
SUPPORT DESCRIPTION:
BRACKET ON STRUCTURE
REST (COLD INSULATION) 8" ~ 12"
SE-19

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	D00



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 IULATIONSN THK.	25-50	51-100	101-150	151-200	201-250
CRADLE THK.	T=50	T=100	T=50	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:

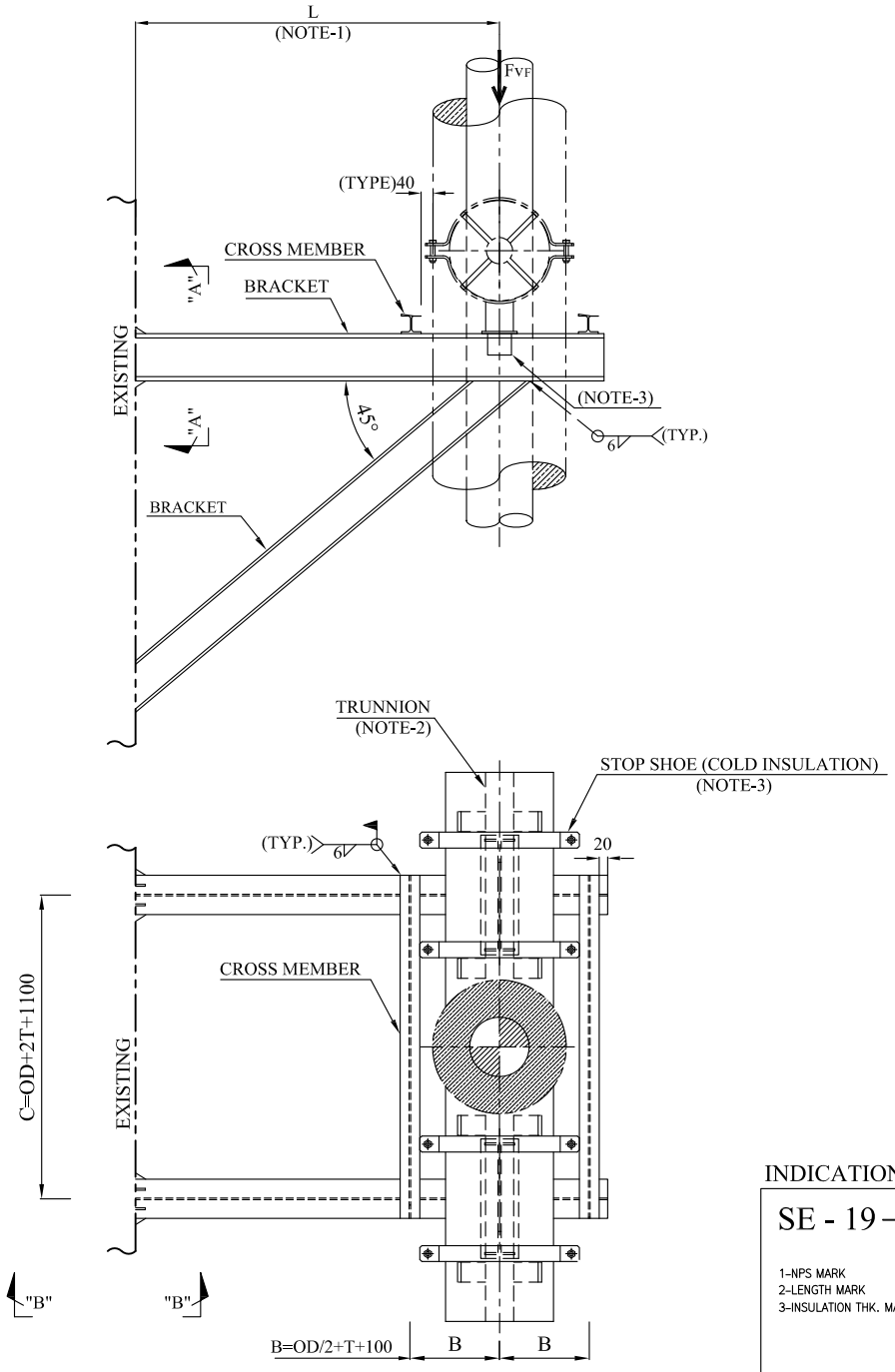
BRACKET ON STRUCTURE
REST (COLD INSULATION) 8" ~ 12"
SE-19

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	D00



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:

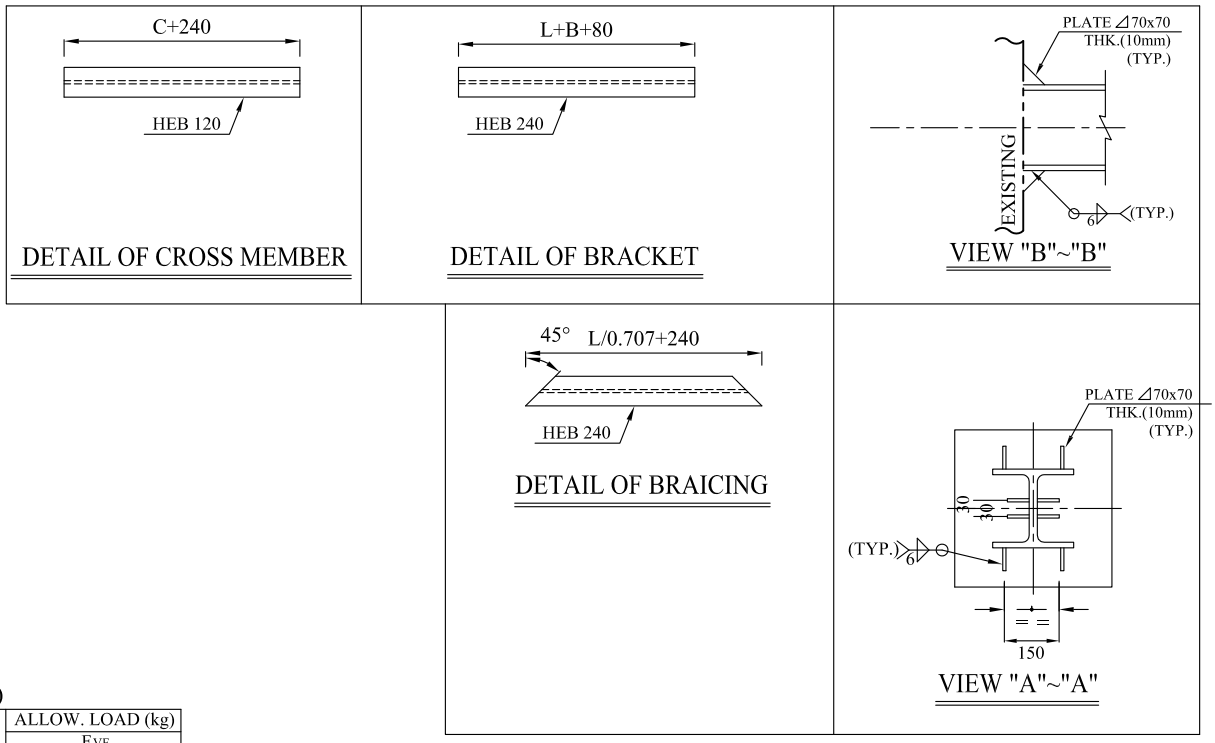
BRACKET ON STRUCTURE
REST (COLD INSULATION) 14" ~ 24"
SE-19

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	D00



LENGTH MARK: (2)

MARK	L	ALLOW. LOAD (kg) F_{VF}
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
08	8"
10	10"
12	12"

INSULATION THK. MARK: (3)

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

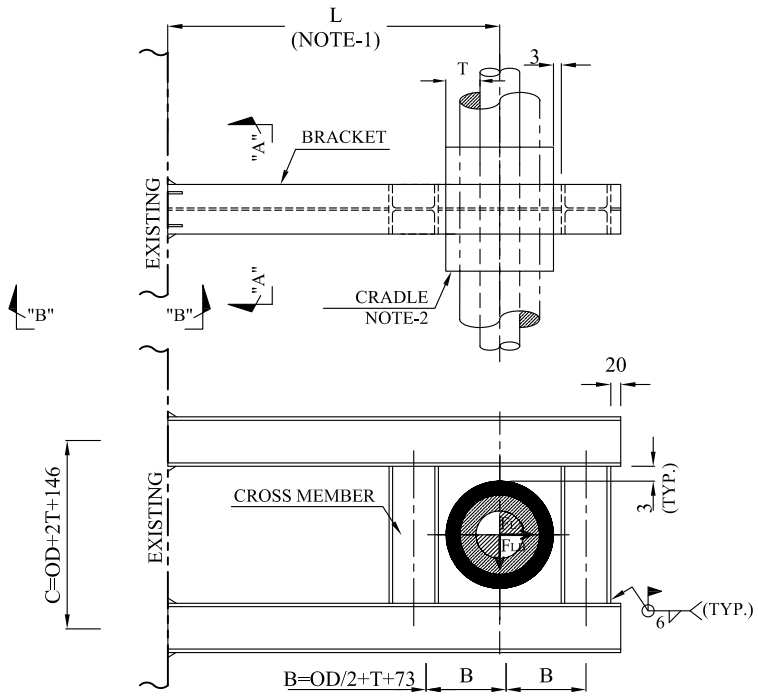
SHEET 6 OF 6

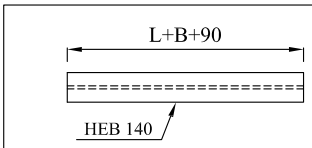
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

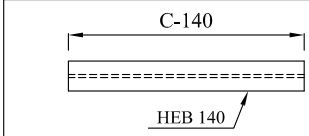
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

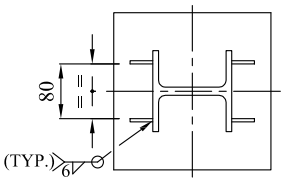




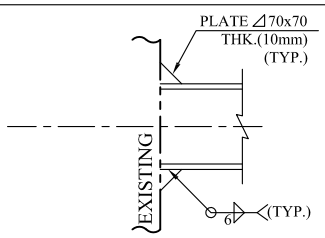
DETAIL OF BRACKET



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 IULATIONSN THK.	25-50	51-100	101-150	151-200
CRADLE THK.	T=50	T=100	T=50	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

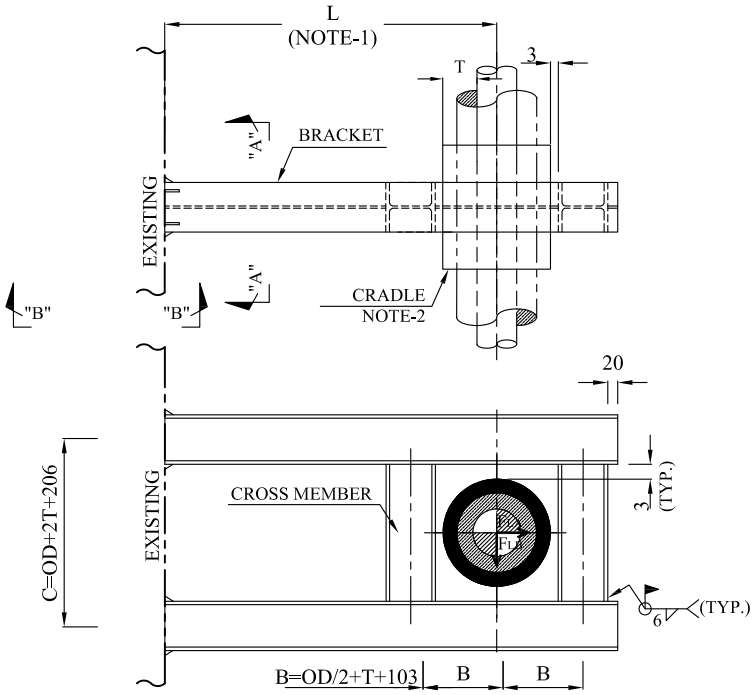
NOTE:
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF CRADLE SEE (G-04).

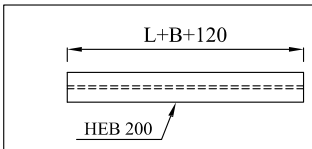
MATERIAL:
STANDARD PROFILE: ASTM A36, PLATE: A283 Gr.B

SUPPORT DESCRIPTION:
BRACKET ON STRUCTURE
DOUBLE GUIDE (COLD INSULATION)
2" ~ 6"
SE-20

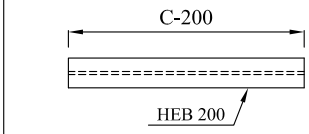
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 223 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00

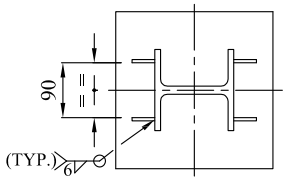




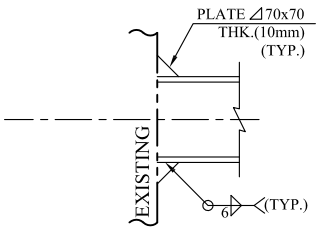
DETAIL OF BRACKET



DETAIL OF CROSS MEMBER



VIEW "A"~"A"



VIEW "B"~"B"

LENGTH
MARK: (2)

MARK	L	ALLOW. LOAD (kg)	
		FLA	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"

INSULATION THK. MARK: (3)

COLD IULATIONSN THK.	25-50	51-100	101-150	151-200	201-250
CRADLE THK.	T=50	T=100	T=50	T=200	T=250
INSULATION THK. MARK	1	2	3	4	5

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

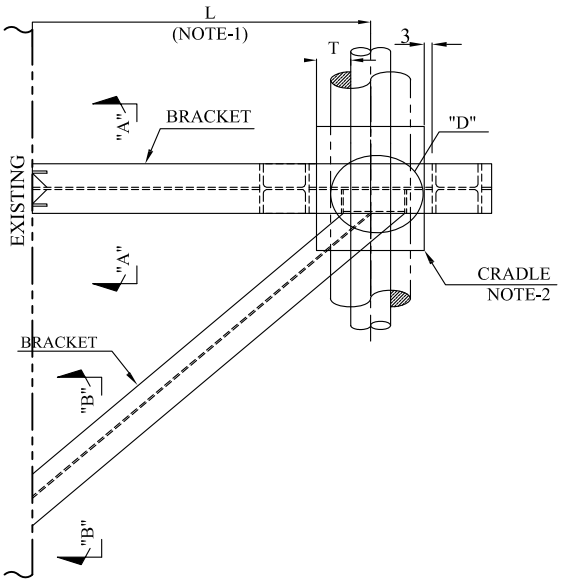
SUPPORT DESCRIPTION:
BRACKET ON STRUCTURE
DOUBLE GUIDE (COLD INSULATION)
8" ~ 12"
SE-20

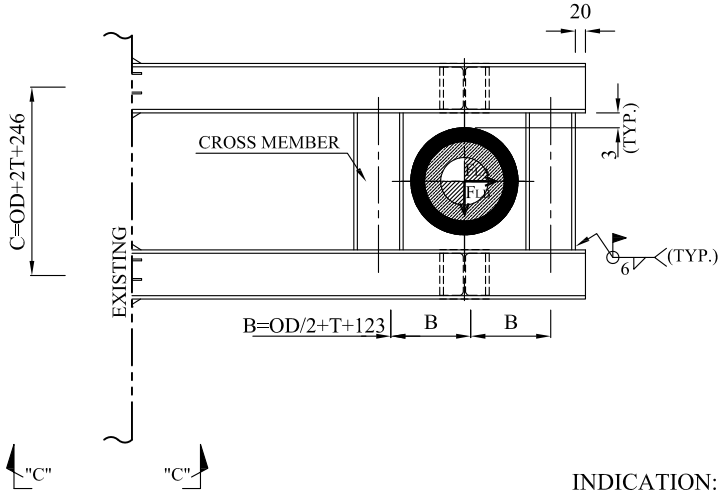
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00





INDICATION:

SE - 20 [ ][ ] – [ ][ ][ ]
(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)
14" ~ 24"
SE-20

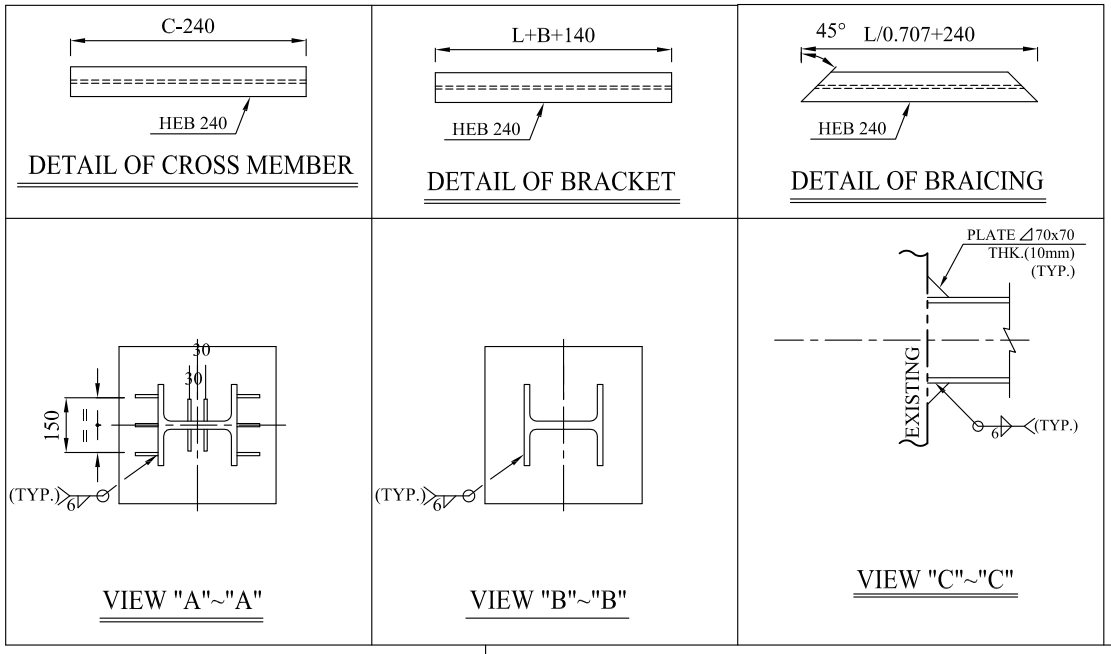
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00

شماره صفحه: 225 از 307

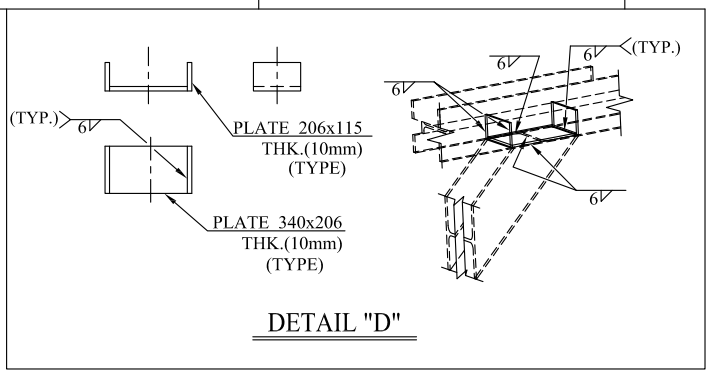


LENGTH MARK: (2)

MARK	L	ALLOW. LOAD (kg) FLA	ALLOW. LOAD (kg) FLB
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"



INDICATION:

SE - 20 [ ][ ] – [ ][ ][ ]
(2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

INSULATION THK. MARK: (3)

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

BRACKET ON STRUCTURE
DOUBLE GUIDE (COLD INSULATION)
14" ~ 24"
SE-20

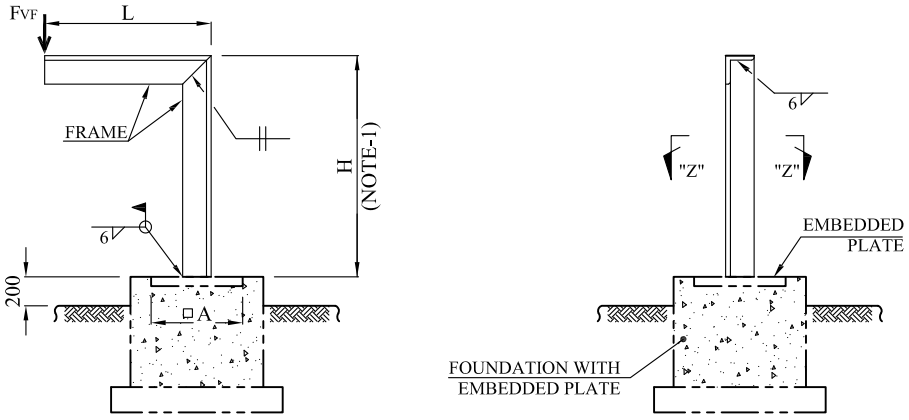
SHEET 4 OF 4

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

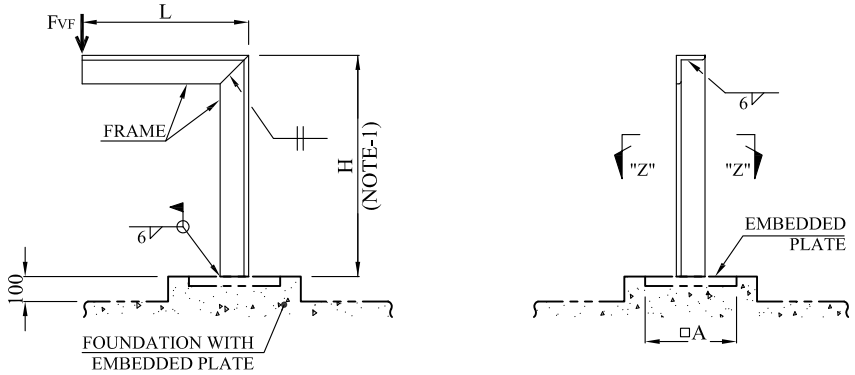
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

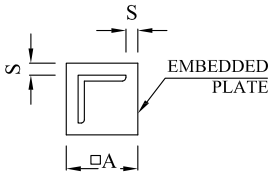
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



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 "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:

L-TYPE SUPPORT
(ANGLE) AT GRADE
SF-01

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: 227 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	

HEIGHT &LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOW. 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 &LENGHT MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOW. LOAD (kg) FVF
22	300	07	200	ANGLE 70x70x7	110
23	400				
24	500	08	200		
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	13	800		
40	700				
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:

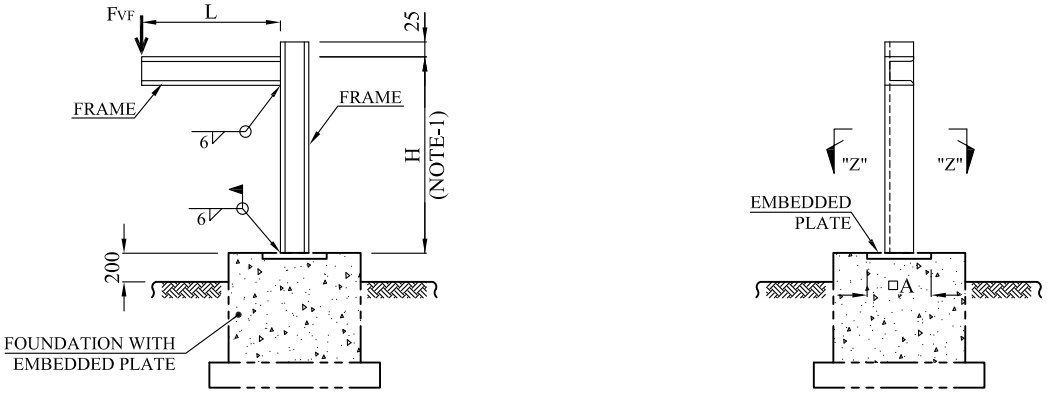
L-TYPE SUPPORT
(ANGLE) AT GRADE
SF-01

SHEET 2 OF 2

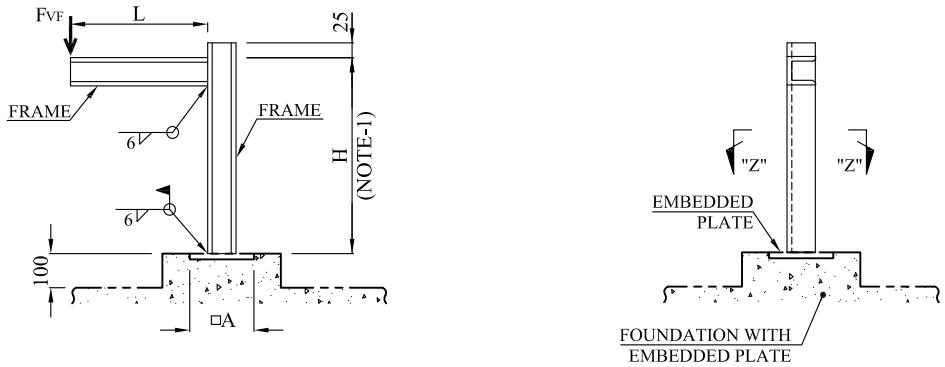
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00

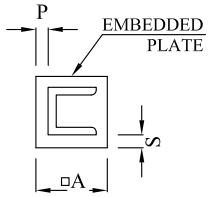
شماره صفحه: 228 از 307



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:

L-TYPE SUPPORT
(CHANNEL) AT GRADE
SF-02

SHEET	1 OF 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	D00

HEIGHT &LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOW. LOAD (kg) F_{VF}
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	ALLOW. LOAD (kg) F_{VF}
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				
33	900	12	700		
34	1000				
35	1100				
36	500	13	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 "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:

L-TYPE SUPPORT
(CHANNEL) AT GRADE
SF-02

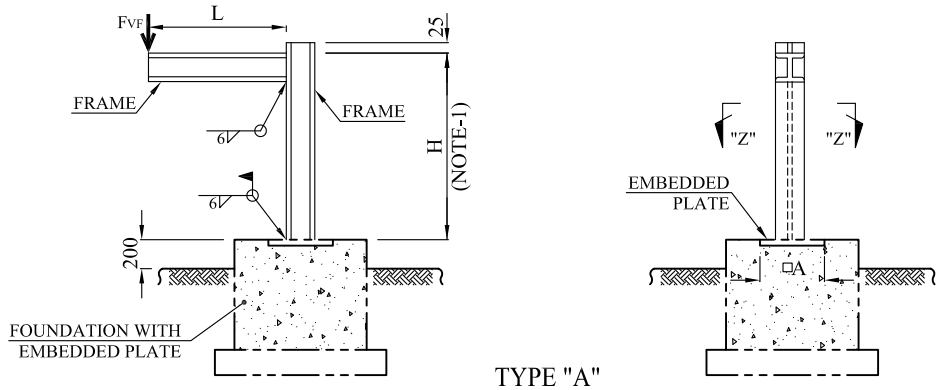
SHEET 2 OF 2

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

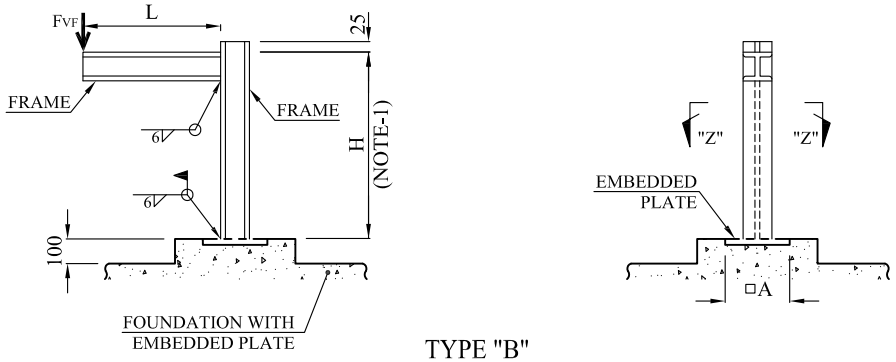
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

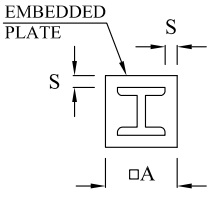
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



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:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:

L-TYPE SUPPORT
(HEB) AT GRADE
SF-03

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	D00

HEIGHT &LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOW. 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	ALLOW. 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 "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

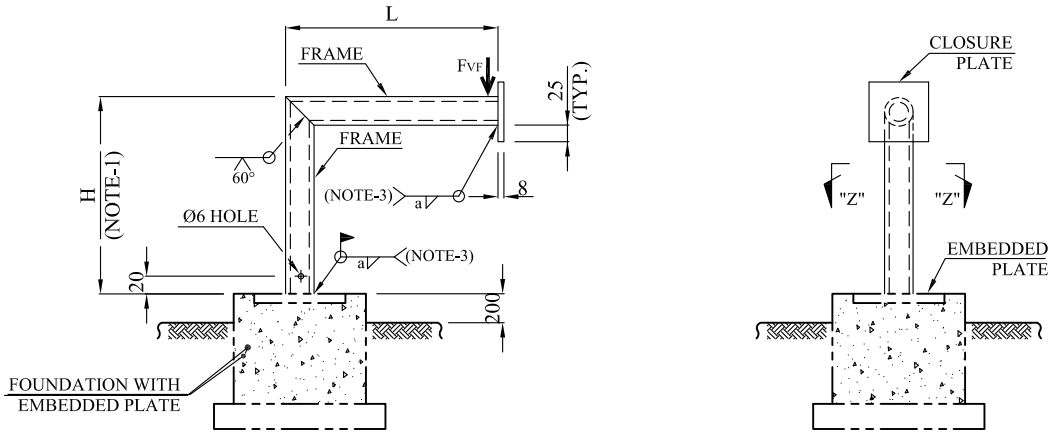
SUPPORT DESCRIPTION:

L-TYPE SUPPORT
(HEB) AT GRADE
SF-03

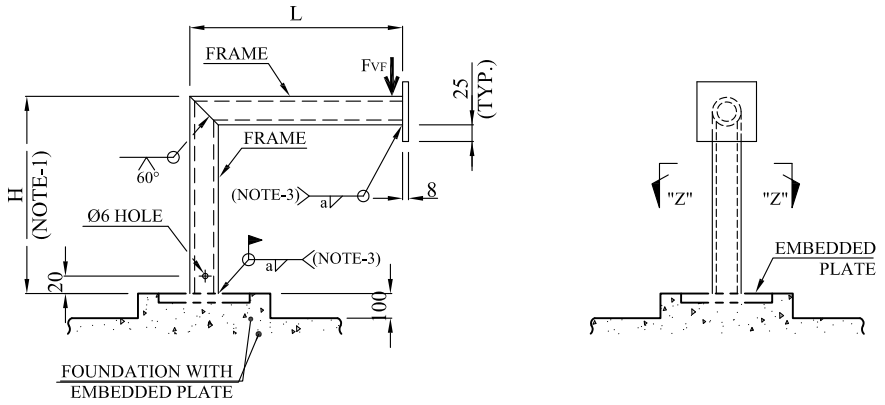
SHEET 2 OF 2

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

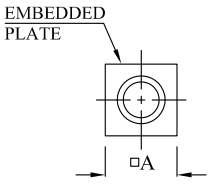
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 232 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



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- 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:

L-TYPE SUPPORT
(PIPE) AT GRADE
SF-04

SHEET 1 OF 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	D00

شماره صفحه: 233 از 307

HEIGHT &LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	A	ALLOW. LOAD (kg) F_{VF}
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	ALLOW. LOAD (kg) F_{VF}
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- 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

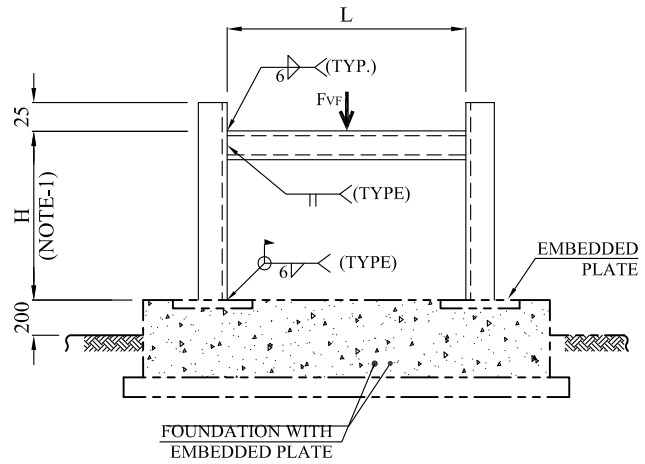
SUPPORT DESCRIPTION:

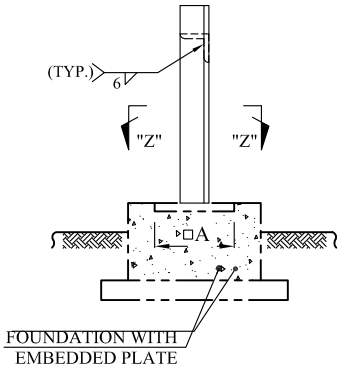
L-TYPE SUPPORT
(PIPE) AT GRADE
SF-04

SHEET 2 OF 2

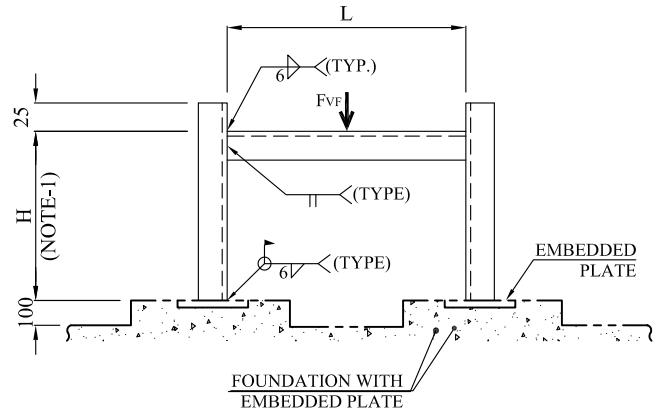
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

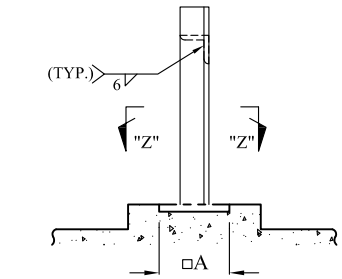
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS								شماره صفحه: 234 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	



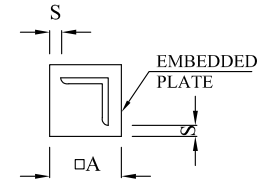


TYPE "A"
UNPAVED AREA





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:

U-TYPE SUPPORT
(ANGLE) AT GRADE
SF-05

SHEET 1 OF 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	D00

HEIGHT &LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOW. 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				
–	–	–	–		
–	–				
–	–				
–	–				

HEIGHT &LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOW. 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

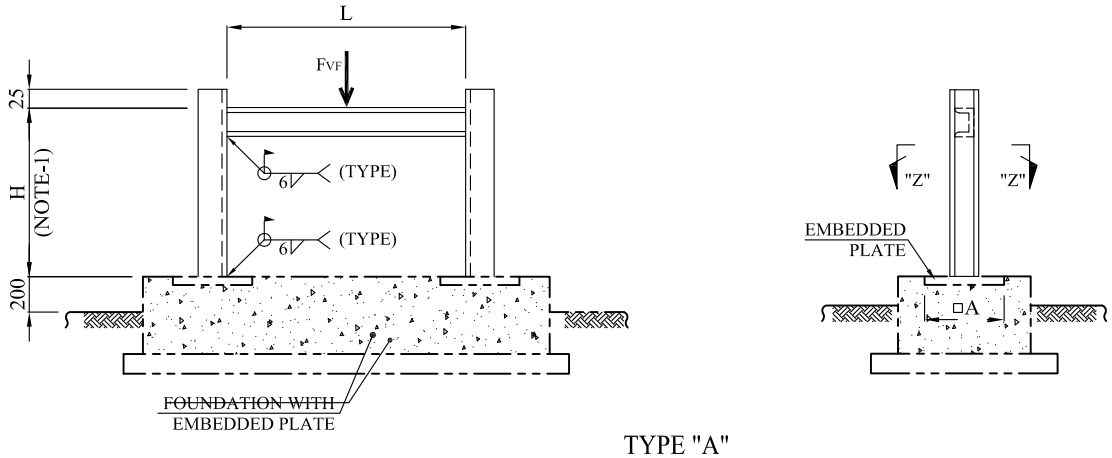
SHEET 2 OF 2

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

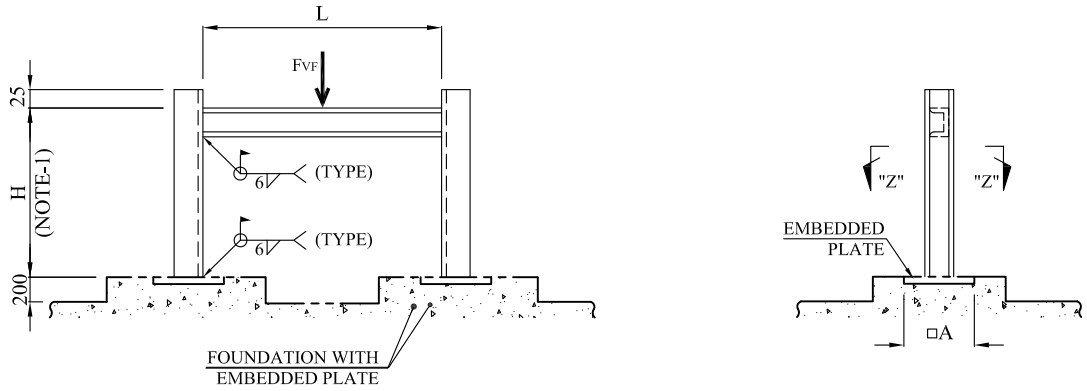
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

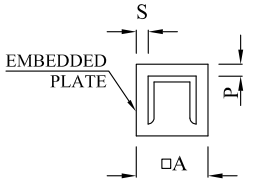
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



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 "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
(CHANNEL) AT GRADE
SF-06

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	D00

HEIGHT & LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOW. 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	ALLOW. 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:

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:

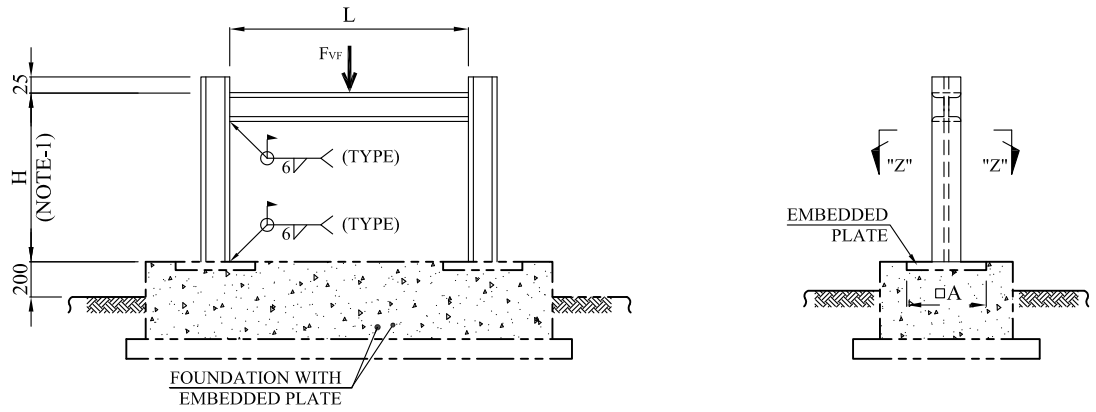
U-TYPE SUPPORT
(CHANNEL) AT GRADE
SF-06

SHEET 2 OF 2

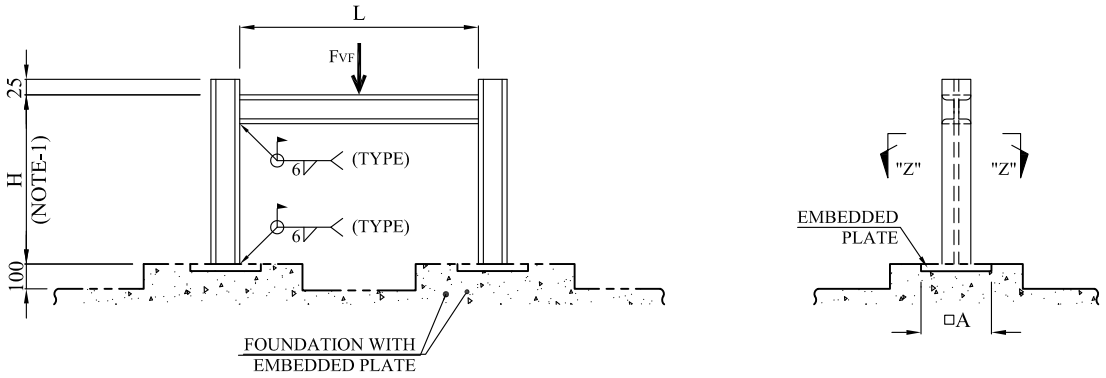
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00

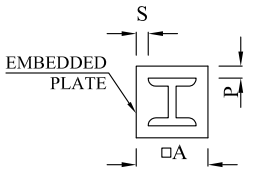
شماره صفحه: 238 از 307



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 "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
(HEB) AT GRADE
SF-07

SHEET 1 OF 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	D00

HEIGHT &LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOW. 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	ALLOW. 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:

U-TYPE SUPPORT
(HEB) AT GRADE
SF-07

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: 240 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	

HEIGHT &LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME	ALLOW. LOAD (kg) FAF
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-NPS 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:

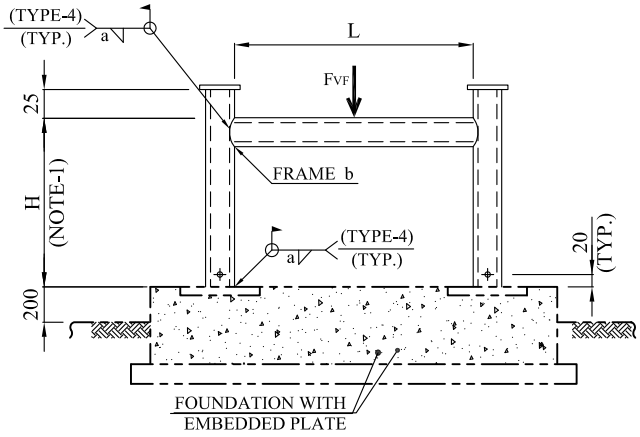
U-TYPE ØSUPPORT
(HEB) AT GRADE
SF-07

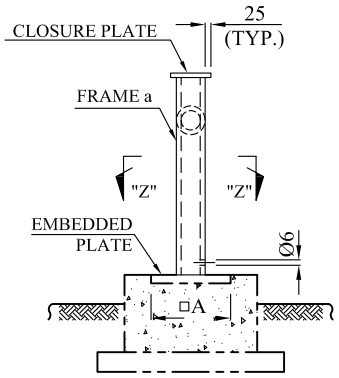
SHEET 3 OF 3

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

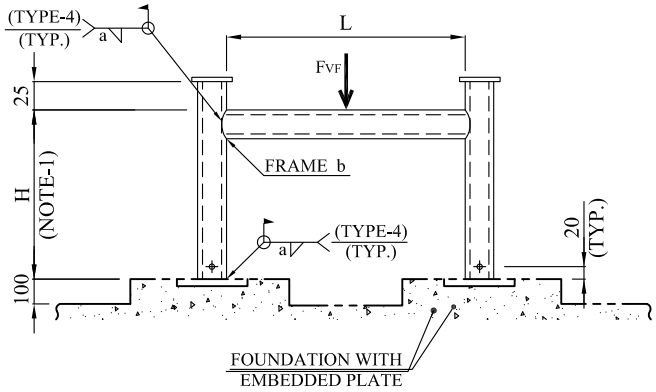
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00

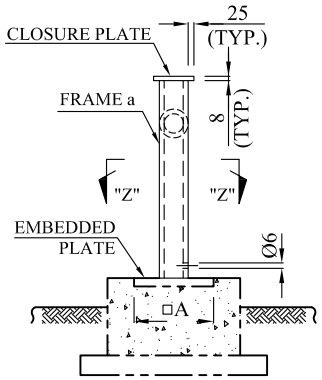
شماره صفحه: 241 از 307



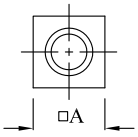


TYPE "A"
UNPAVED AREA





TYPE "B"
PAVED AREA



VIEW "Z" ~ "Z"

INDICATION:

SF- 08 – □□□ – □□
(1) (2) (3)

1-TYPE MARK
2-HEIGHT MARK
3-LENGTH MARK

NOTE:

1- 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:

U-TYPE SUPPORT
(PIPE) AT GRADE
SF-08

SHEET	1 OF 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	D00

HEIGHT &LENGTH MARK: (2)&(3)

HEIGHT MARK	H	LENGTH MARK	L	FRAME a	FRAME b	A	ALLOW. 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	ALLOW. 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				
60	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- 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.

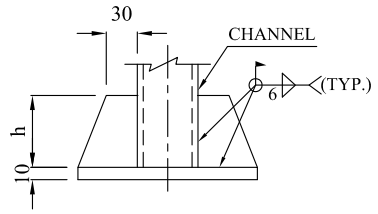
MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:
U-TYPE SUPPORT
(PIPE) AT GRADE
SF-08

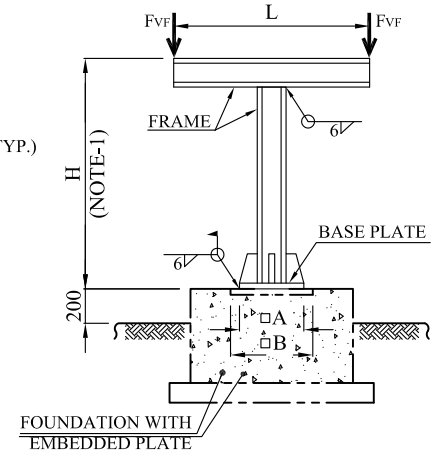
SHEET 2 OF 2

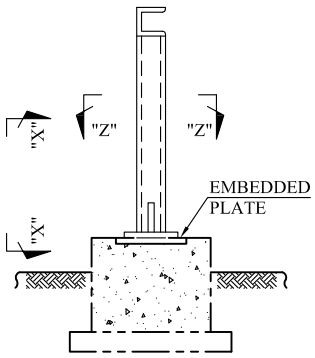
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 243 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00

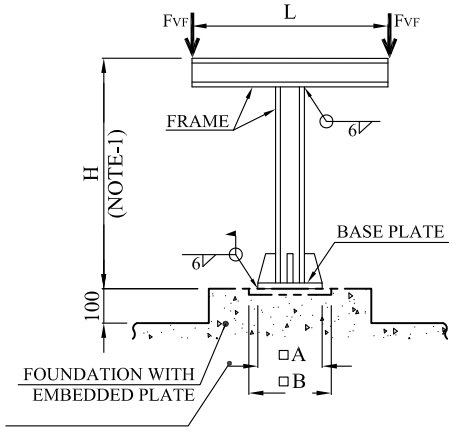


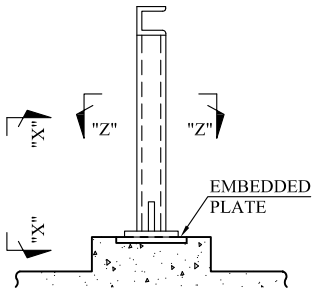
VIEW "X" ~ "X"



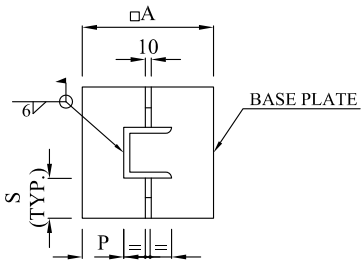


TYPE "A"
UNPAVED AREA





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 "Fvv" 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.
5- ALLOWABLE LOAD HAS BEEN CALCULATED BASED ON VICE VERSA HORIZONTAL FORCES.

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

SUPPORT DESCRIPTION:

T-TYPE SUPPORT
(CHANNEL)
SF-09

SHEET 1 OF 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: 244 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00

SIZE MARK: (2)

MARK	FRAME	A	B	S	P	h	ALLOW.LOAD(kg)-F_{VF} (NOTE-4)			ALLOW.LOAD(kg)-F_{VF} (NOTE-5)		
							H≤1200	1200<H≤2500	2500<H≤4000	L≤600	600<H≤1200	1200<H≤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

HEIGTH MARK: (3)

FRAME	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
3	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 - 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 "F_{vv}" 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.
5- ALLOWABLE LOAD HAS BEEN CALCULATED BASED ON VICE VERSA HORIZONTAL FORCES.

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

SUPPORT DESCRIPTION:

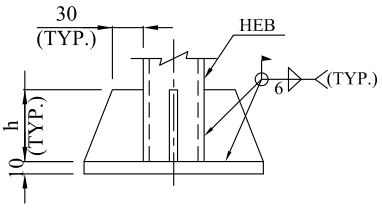
T-TYPE SUPPORT
(CHANNEL)
SF-09

SHEET 2 OF 2

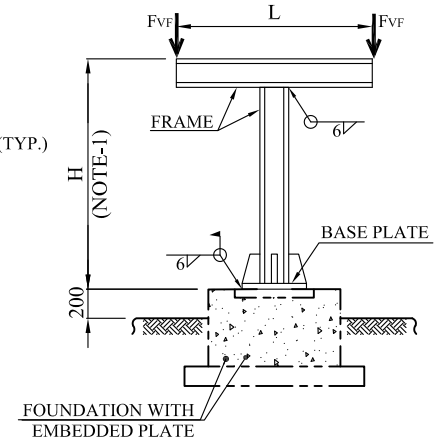
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

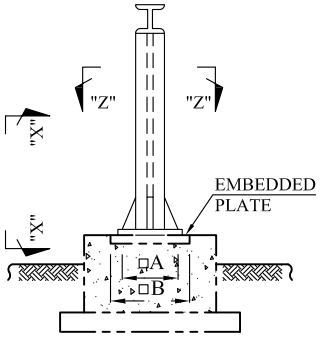
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							
	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
053-073-9184	BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 245 از 307

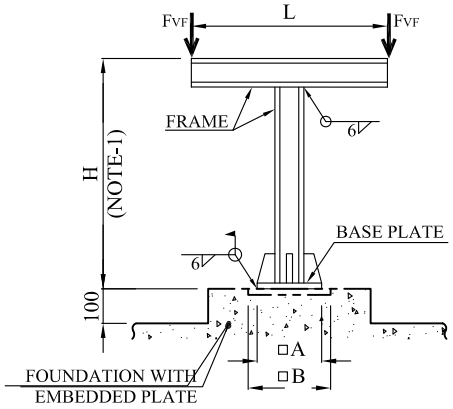


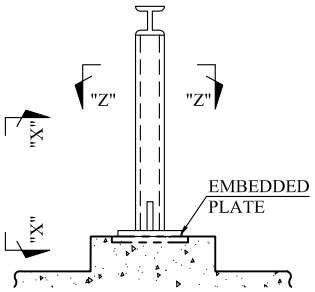
VIEW "X" ~ "X"



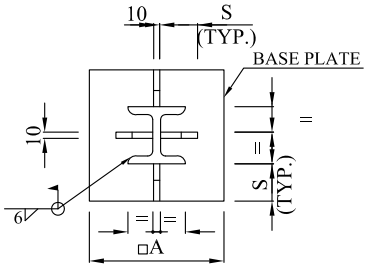


TYPE "A"
UNPAVED AREA





TYPE "B"
PAVED AREA



VIEW "Z" ~ "Z"

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 "Fᵥ" 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.
5- ALLOWABLE LOAD HAS BEEN CALCULATED BASED ON VICE VERSA HORIZONTAL FORCES.

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

SUPPORT DESCRIPTION:

T-TYPE SUPPORT
(HEB)
SF-10

SHEET 1 OF 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: 246 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00

SIZE MARK: (2)

MARK	FRAME	A	B	S	h	ALLOW. LOAD(kg)-F_{VF}(NOTE-4)			ALLOW. LOAD(kg)-F_{VF} (NOTE-5)		
						H≤1200	1200<H≤2500	2500<H≤4000	L≤600	600<H≤1200	1200<H≤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

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)

FRAME	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
3	3700
35	3800
36	3900
37	4000

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 "F_{RV}" 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.
5- ALLOWABLE LOAD HAS BEEN CALCULATED BASED ON VICE VERSA HORIZONTAL FORCES.

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

SUPPORT DESCRIPTION:

T-TYPE SUPPORT
(HEB)
SF-10

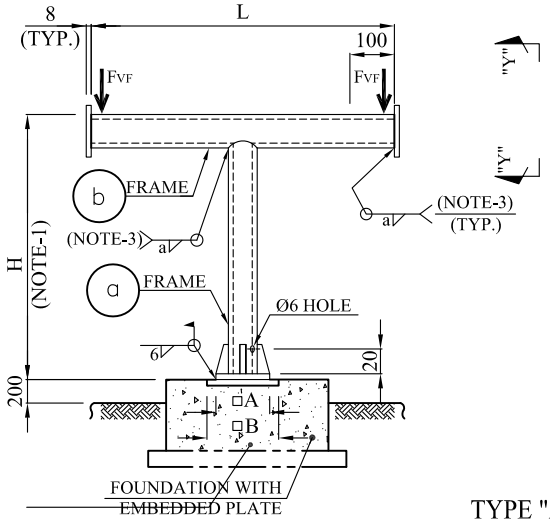
SHEET 2 OF 2

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

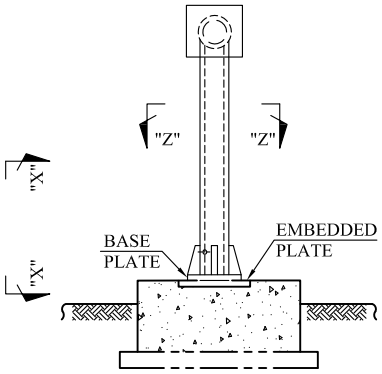
شماره پیمان:
053-073-9184

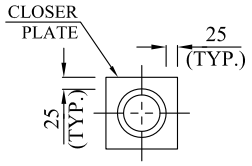
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

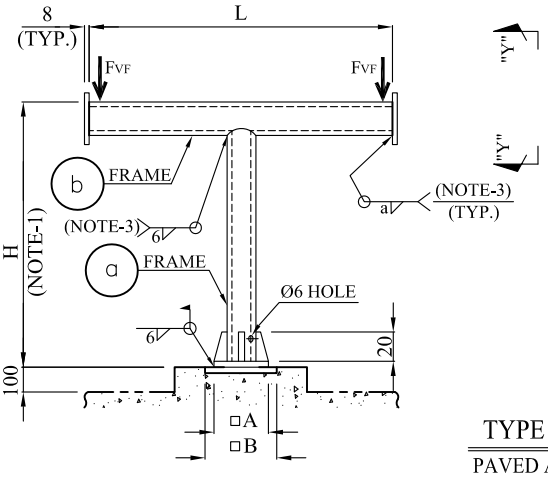


TYPE "A"
UNPAVED AREA

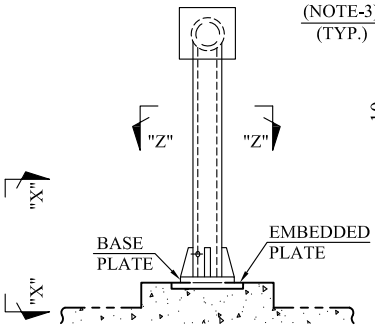


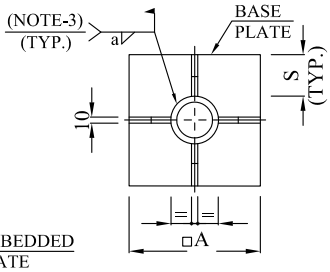


VIEW "Y" ~ "Y"

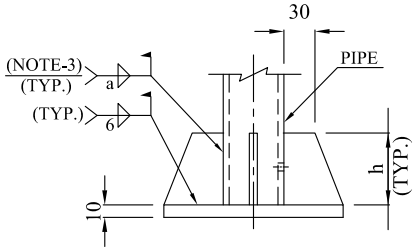


TYPE "B"
PAVED AREA





VIEW "Z" ~ "Z"



VIEW "X" ~ "X"

INDICATION:

SF - 11 – [ ][ ] – [ ][ ][ ]
(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.

MATERIAL:
STANDARD PROFILE: ASTM A36

SUPPORT DESCRIPTION:

T-TYPE SUPPORT
(PIPE)
SF-11

SHEET 1 OF 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	D00

SIZE MARK: (2)

MARK	FRAME ⓐ	FRAME ⓑ	A	B	S	h	ALLOW.LOAD(kg)-F_{VF}		
							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: (3)

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)

FRAME	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 - 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 "Fvv" 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.

MATERIAL:
PIPE: A53 Gr.B, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:

T-TYPE SUPPORT
(PIPE)
SF-11

SHEET 2 OF 2

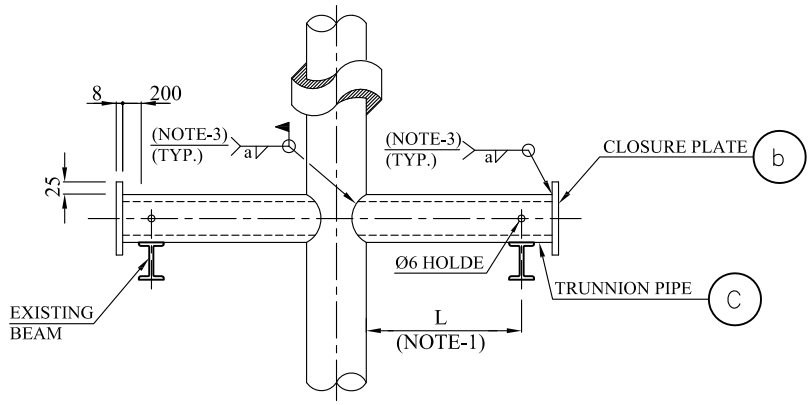
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

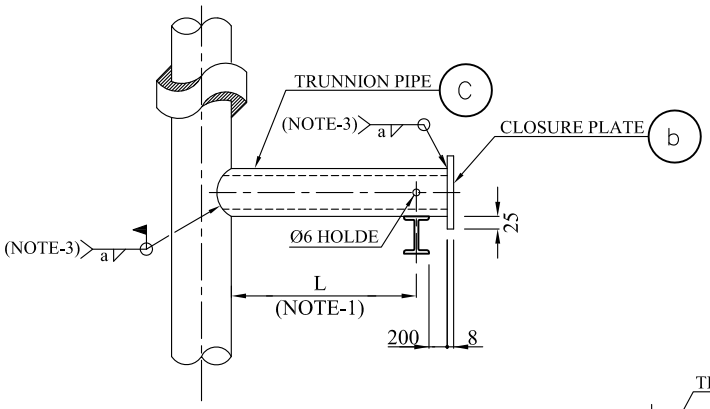
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 249 از 307



TYPE "A"



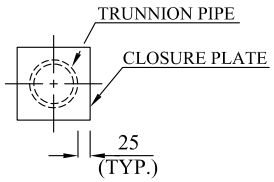
TYPE "B"

LENGTH MARK:(4)

MARK	L
1	500
2	600
3	700
4	800
5	900
6	1000
7	1100
8	1200

NPS MARK: (3)

NPS MARK	RUN PIPE SIZE	TRUNNION	
		PIPE SIZE	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"	



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 (φ=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).

SUPPORT DESCRIPTION:

SINGLE & DOUBLE TRUNNION
(CS-WITHOUT PWHT) 2"~36"
SG-05

SHEET 1 OF 1

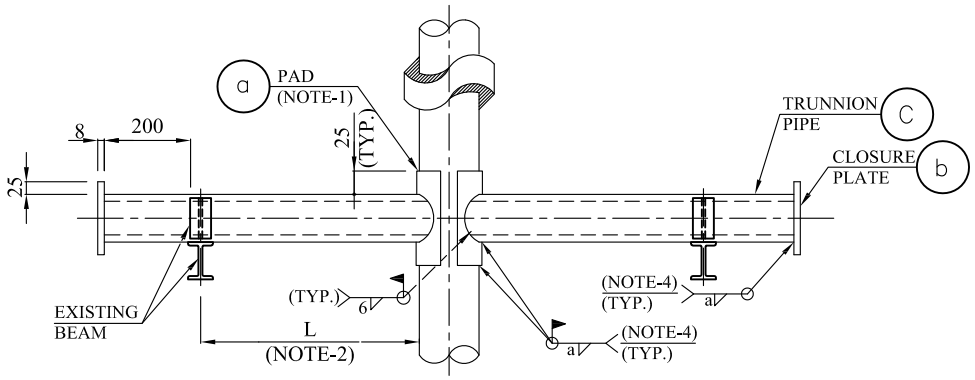
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:

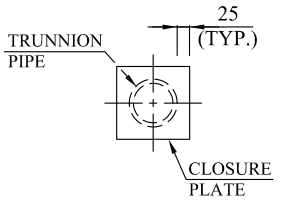
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

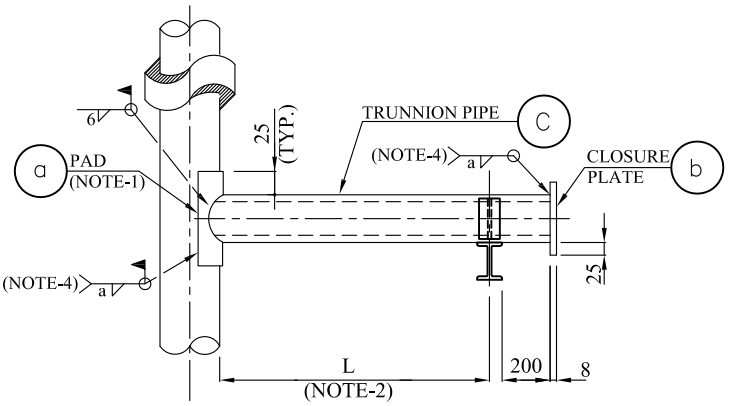
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



TYPE "A"



DETAIL OF CLOSURE PLATE



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"	

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 OF RUN PIPE
2-MATERIAL MARK
3-NPS MARK
3-HEIGHT MARK

NOTE:

1- PAD (MATERIAL@) SHALL BE MADE BY CUTTING THE PIPE, SAME MATERIAL OF RUN AND SHALL BE WELDED BEFORE PWHT.
2- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
3- WEEP HOLE (φ=6mm) SHALL BE PROVIDED FOR TRUNNION.
4- FOR STANCHION SIZE ≤4", a=TRUNNION WALL THICKNESS, FOR TRUNNION SIZE >4", a=6mm.
5- FOR DETAIL OF ALLOWABLE LOAD SEE (G-18).

SUPPORT DESCRIPTION:

SINGLE & DOUBLE TRUNNION
(CS-WITH PWHT, AS ,SS) 2"~36"
SG-06

SHEET	1 OF 1

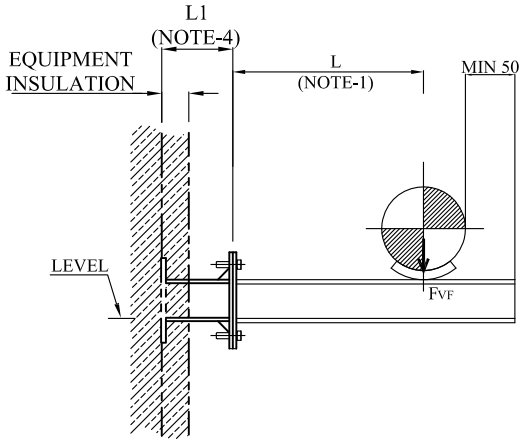
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

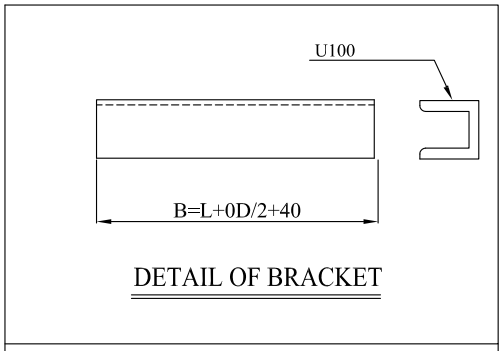
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

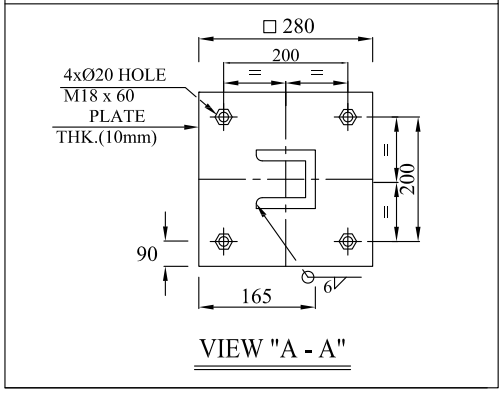
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 251 از 307

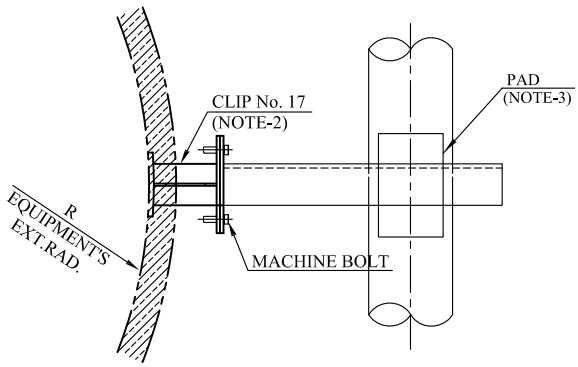




DETAIL OF BRACKET



VIEW "A - A"



TYPE "C"

LENGTH MARK: (2)

MARK	L	ALLOW.LOAD (kg)-FVF
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	

INDICATION:

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

1-TYPE 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 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

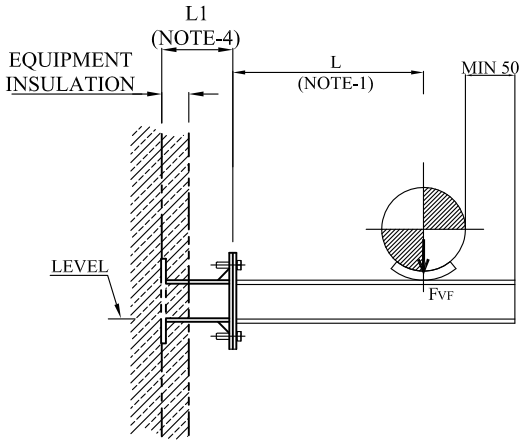
SUPPORT DESCRIPTION:

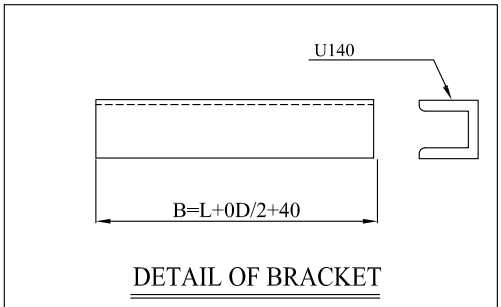
BRACKET ON EQUIPMENT
HORIZONTAL RUN PIPE
(TYPE "C")
SH-01

SHEET 1 OF 4

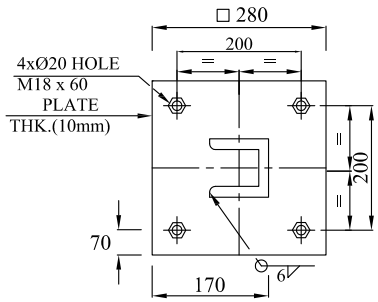
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 252 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00

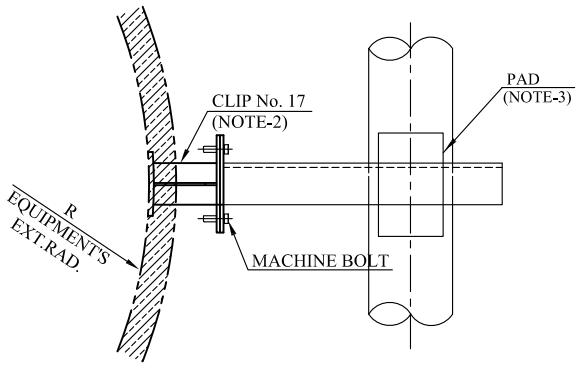




DETAIL OF BRACKET



VIEW "A - A"



TYPE "D"

LENGTH MARK: (2)

MARK	L	ALLOW.LOAD (kg)-FVF
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	

INDICATION:

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

1-TYPE 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 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:

BRACKET ON EQUIPMENT
HORIZONTAL RUN PIPE
(TYPE "D")
SH-01

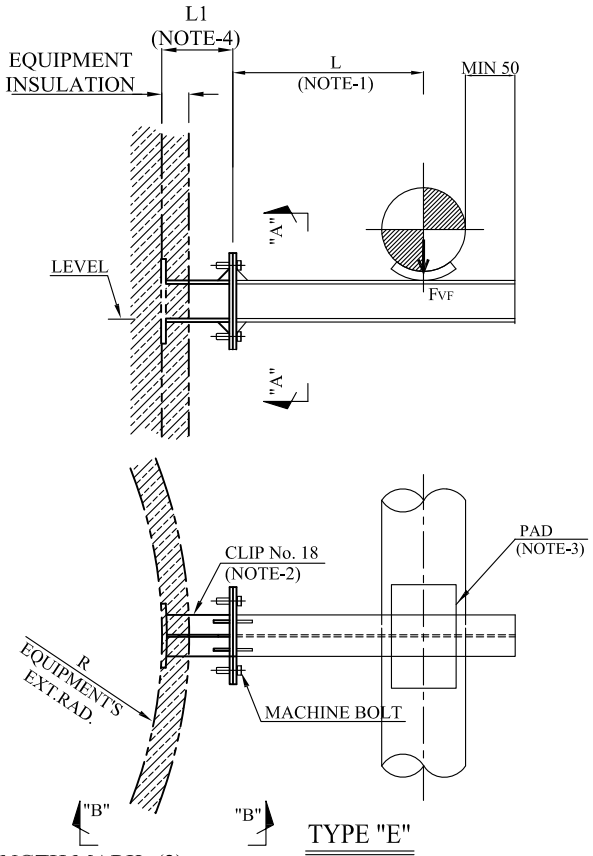
SHEET 2 OF 2

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

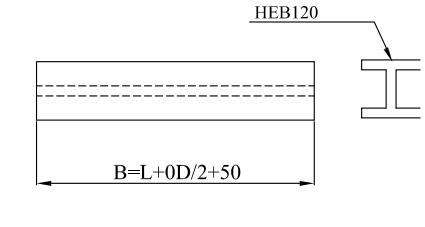
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

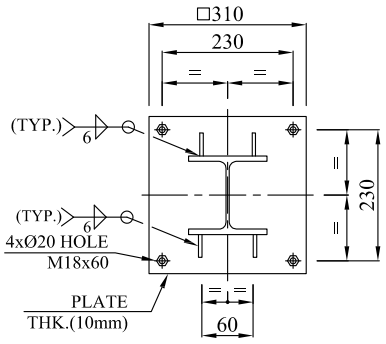
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



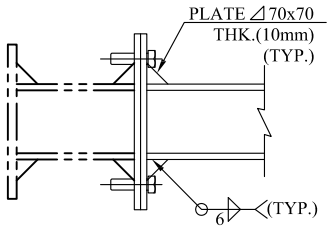
TYPE "E"



DETAIL OF BRACKET



VIEW "A"~"A"



VIEW "B"~"B"

LENGTH MARK: (2)

MARK	L	ALLOW.LOAD (kg)-FVF
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	

INDICATION:

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

1-TYPE MARK
2-LENGTH MARK

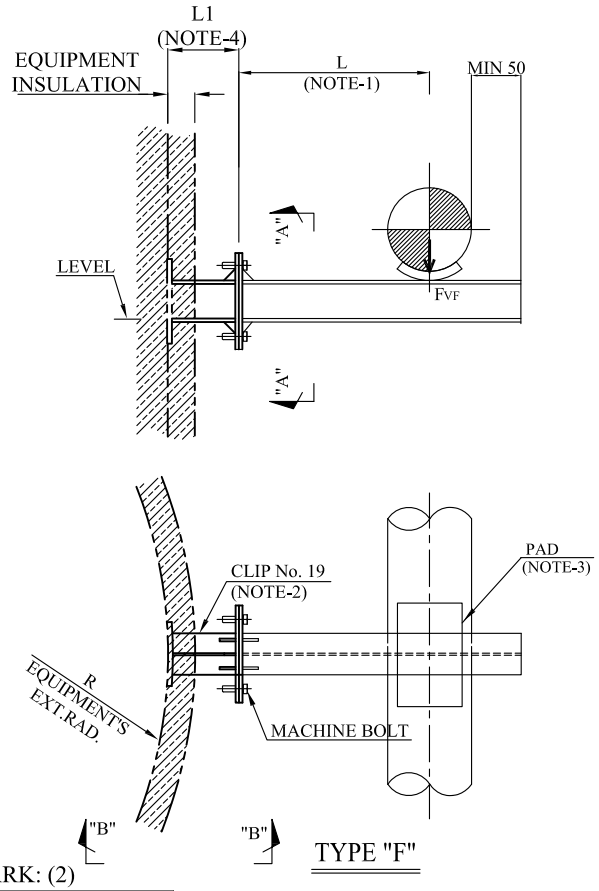
NOTE:
1- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF CLIP SEE (G-03).
3- SEPARATED TAG IS REQUIRED FOR PAD (SC-05).
4-DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

MATERIAL:
STANDARD PROFILE: ASTM A36, BOLT & NUT:A325. PLATE: A283 Gr.C

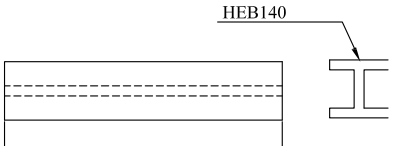
SUPPORT DESCRIPTION:
BRACKET ON EQUIPMENT
HORIZONTAL RUN PIPE
(TYPE "E")
SH-01

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

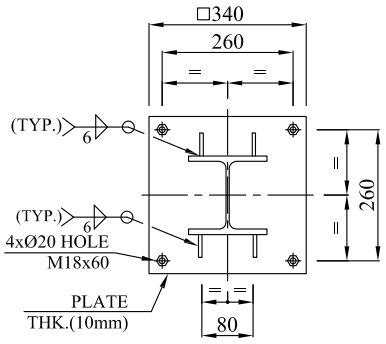
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 254 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



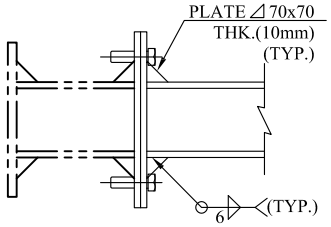
TYPE "F"



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	

INDICATION:

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

1-TYPE 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 PAD (SC-05).
4-DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

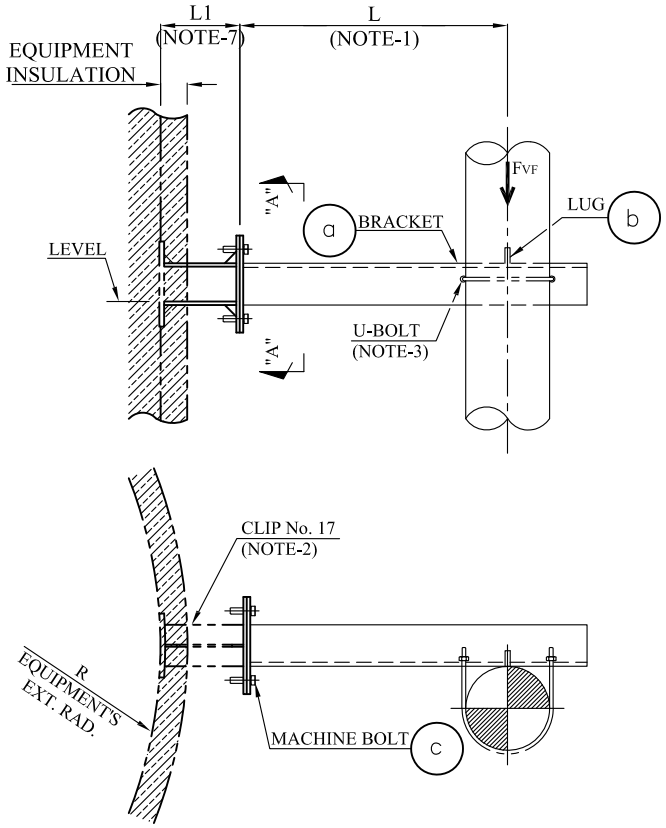
MATERIAL:
STANDARD PROFILE: ASTM A36, BOLT & NUT:A325. PLATE: A283 Gr.C

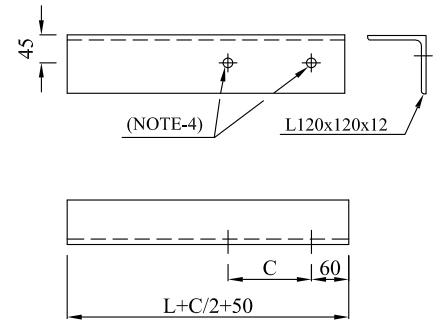
SUPPORT DESCRIPTION:
BRACKET ON EQUIPMENT
HORIZONTAL RUN PIPE
(TYPE "F")
SH-01

SHEET 4 OF 4

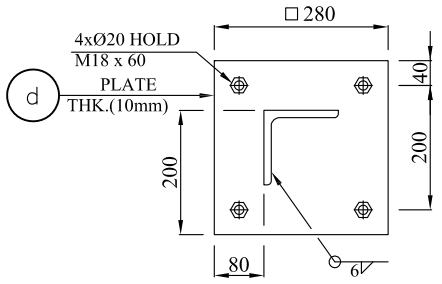
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 255 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00

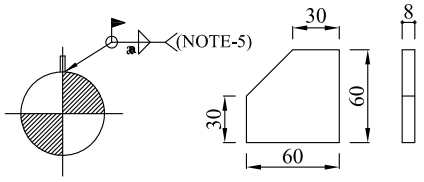




DETAIL OF BRACKET



VIEW "A-A"



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	G
	ⓐ	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 - 02 – [ ][ ][ ] – [ ]
(1) (2) (3)

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

NOTE:

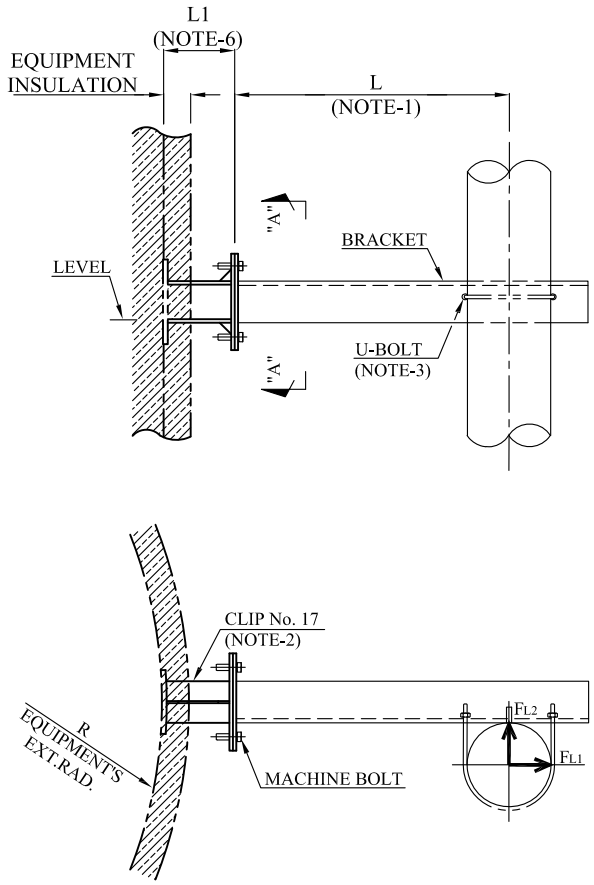
1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF CLIP SEE (G-03).
3- SEPARATED TAG IS REQUIRED FOR U-BOLT (SA-01).
4- U-BOLT HOLES AND THEIR LOCATION SHALL BE SPECIFIED BASED ON U-BOLT DETAIL (SA-01).
7- DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.
5- a=RUN PIPE WALL THICKNESS .
6- ALLOWABLE LOAD HAS BEEN CALCULATED BASED ON VICE VERSA HORIZONTAL FORCES.

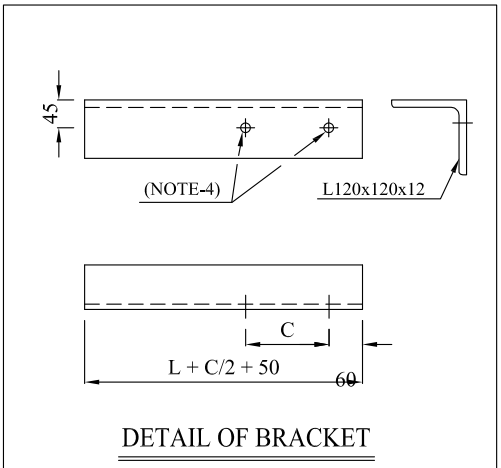
SUPPORT DESCRIPTION:
BRACKET ON VERTICAL VESSEL
U-BOLT TYPE SEMI ANCHOR 1/2" ~ 2"
SH-02

SHEET	1 OF 1

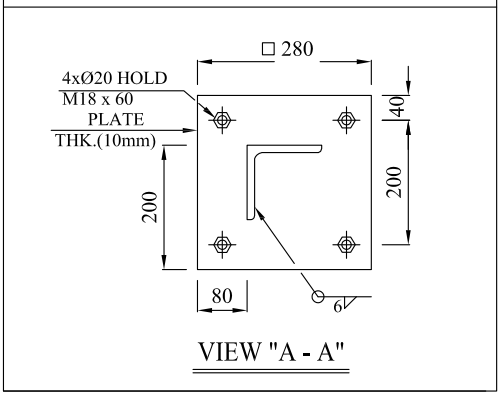
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 256 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00





DETAIL OF BRACKET



VIEW "A - A"

ALLOW. LOAD(kg) FL_2

LENGTH / SIZE	200≤ L ≤400	400≤ L ≤600	600< L ≤800
1/2"	200		
3/4" ~ 1"	500	490	
1/2" ~ 2"	700	490	

NPS MARK:(2)

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:

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

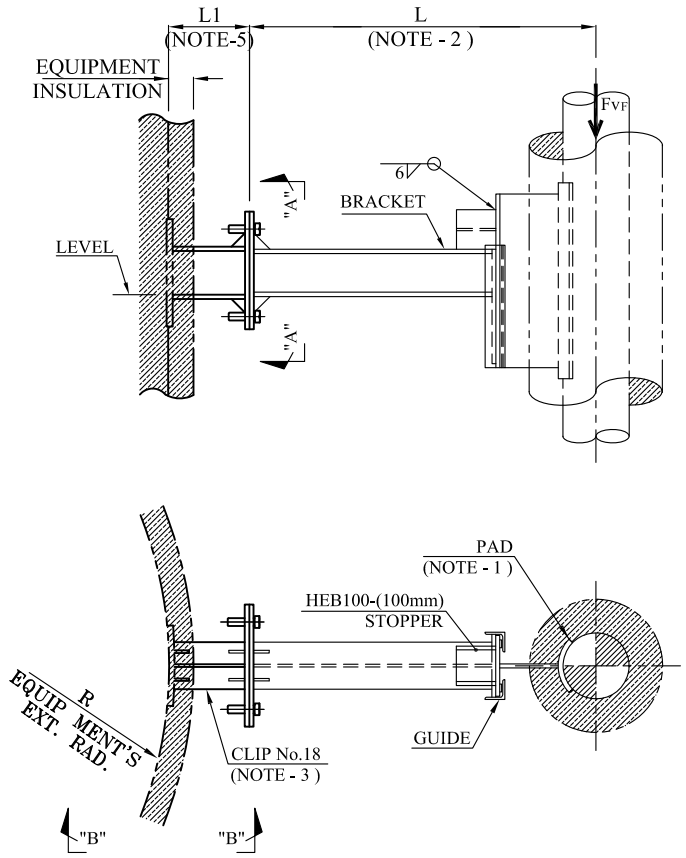
SUPPORT DESCRIPTION:

BRACKET ON VERTICAL VESSEL
U-BOLT TYPE DOUBLE GUIDE 1/2" ~ 2"
SH-03

SHEET	1 OF 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: 257 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



INDICATION:

SH - 04 – [ ][ ] – [ ] – [ ]
(1) (2) (3)

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

NOTE:

1- SAME MATERIAL OF RUN PIPE CAN BE APPLIED FOR MATERRIAL @ AND SHALL BE WELDED BEFORE PWHT.
2- DIMENSION "L" CAN BE ADJUSTED AT FIELD.
3- FOR DETAIL OF ALLOWABLE LOAD SEE (G-17).
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

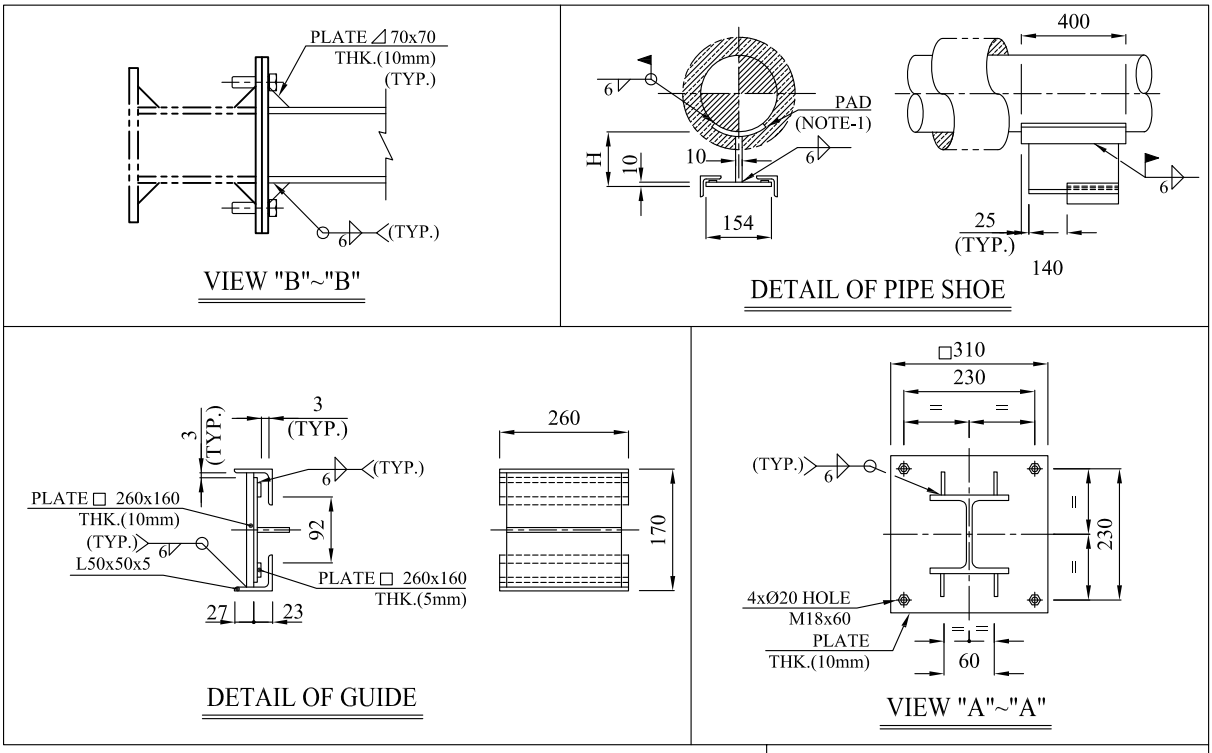
SUPPORT DESCRIPTION:

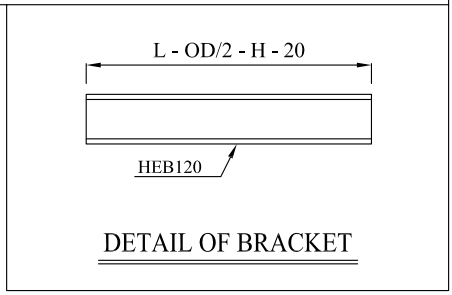
BRACKET ON VERTICAL VESSEL
SHOE TYPE SEMI ANCHOR 2" ~ 6"
SH-04

SHEET 1 OF 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: 258 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00





LENGTH MARK: (2)

MARK	L	ALLOW. LOAD(kg) - F_{VF}
1	500	700
2	600	
3	700	
4	800	
5	900	550
6	1000	
7	1100	

NPS MARK:(1)

NPS MARK	RUN PIPE SIZE
02	2"
03	3"
04	4"
06	6"

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		

INDICATION:

SH - 04 □□ – □ – □
(1) (2) (3)

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

NOTE:

1- SAME MATERIAL OF RUN PIPE CAN BE APPLIED FOR MATERRIAL @ 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 VERTICAL VESSEL
SHOE TYPE SEMI ANCHOR 2" ~ 6"
SH-04

SHEET	2 OF 2

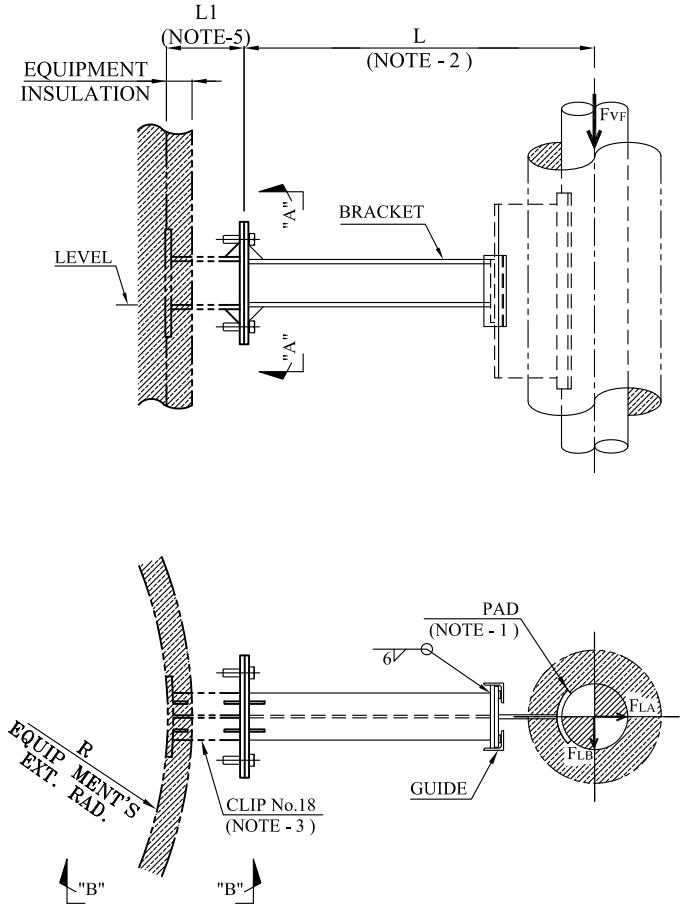
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00



INDICATION:

SH - 05 – [ ][ ] – [ ] – [ ]
(1) (2) (3)

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

NOTE:

1-SAME MATERIAL OF RUN PIPE CAN BE APPLIED FOR MATERRIA @ 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 VERTICAL VESSEL
SHOE TYPE DOUBLE GUIDE 2" ~ 6"
SH-05

NISOC

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

PEDCO

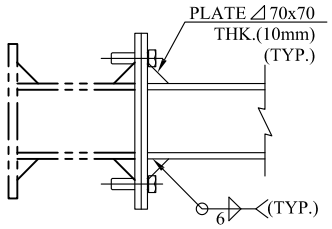
HIRGAN ENERGY

شماره پیمان:
053-073-9184

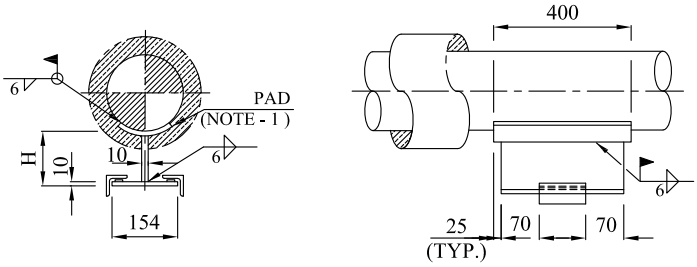
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

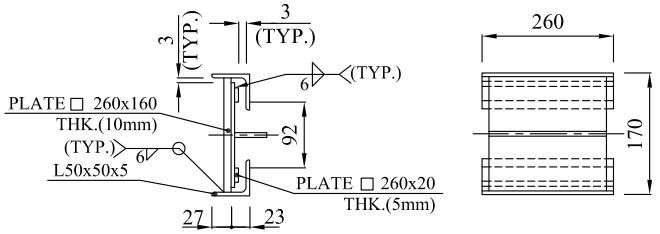
شماره صفحه: 260 از 307



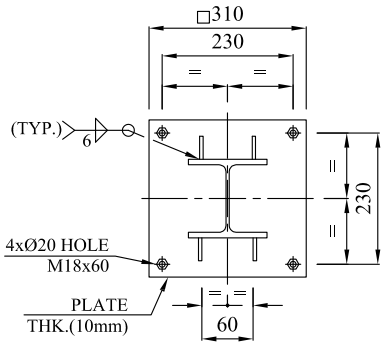
VIEW "B"~"B"



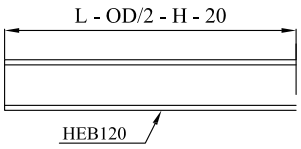
DETAIL OF PIPE SHOE



DETAIL OF GUIDE



VIEW "A"~"A"



DETAIL OF BRACKET

LENGTH MARK: (2)

MARK	L	ALLOW. LOAD (kg)	
		F_{LA}	F_{LB}
1	500	400	500
2	600		
3	700		
4	800		
5	900		
6	1000		
7	1100		

NPS MARK: (1)

RUN MARK	RUN PIPE SIZE
02	2"
03	3"
04	4"
06	6"

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		

INDICATION:

SH - 05 – □□ – □ – □
(1) (2) (3)

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

NOTE:

1- SAME MATERIAL OF RUN PIPE CAN BE APPLIED FOR MATERRIAL @ 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:

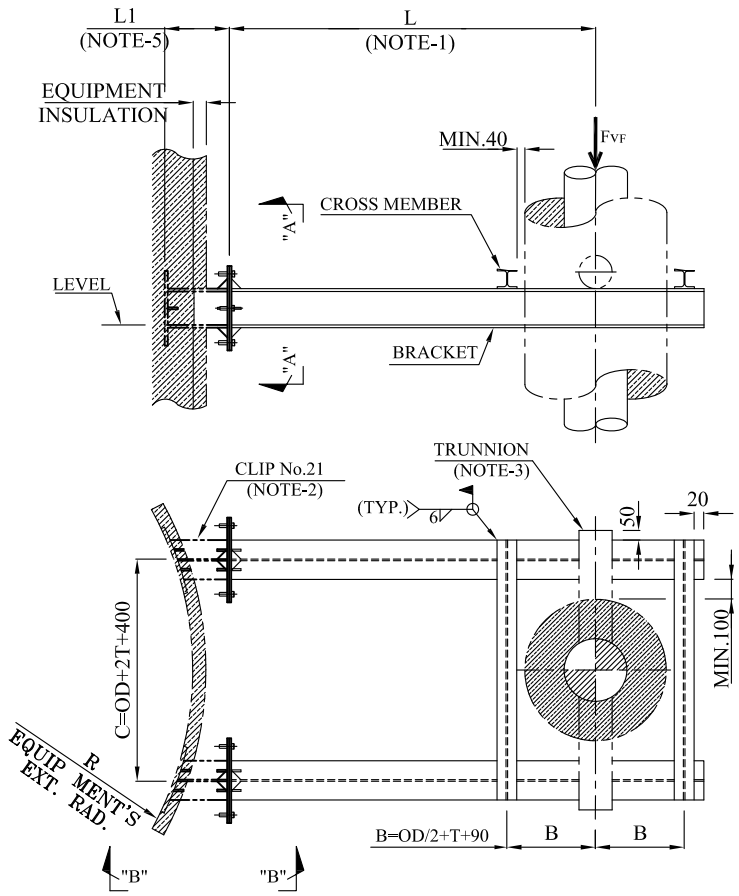
BRACKET ON VERTICAL VESSEL
SHOE TYPE DOUBLE GUIDE 2" ~ 6"
SH-05

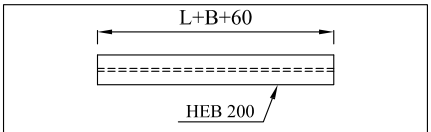
SHEET 2 OF 2

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

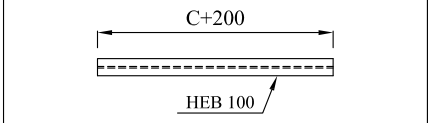
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 261 از 307

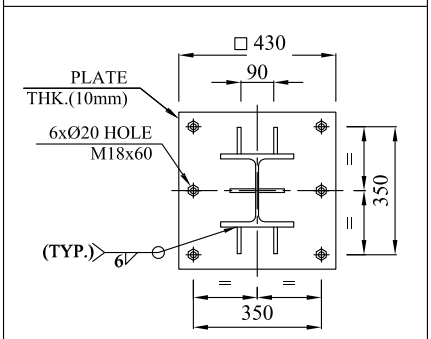




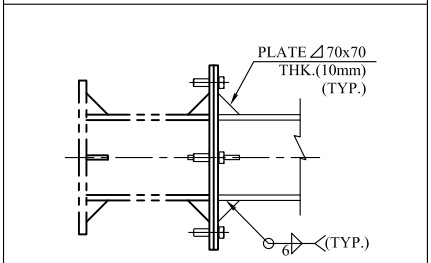
DETAIL OF BRACKET



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 IULATIONSN THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=50	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

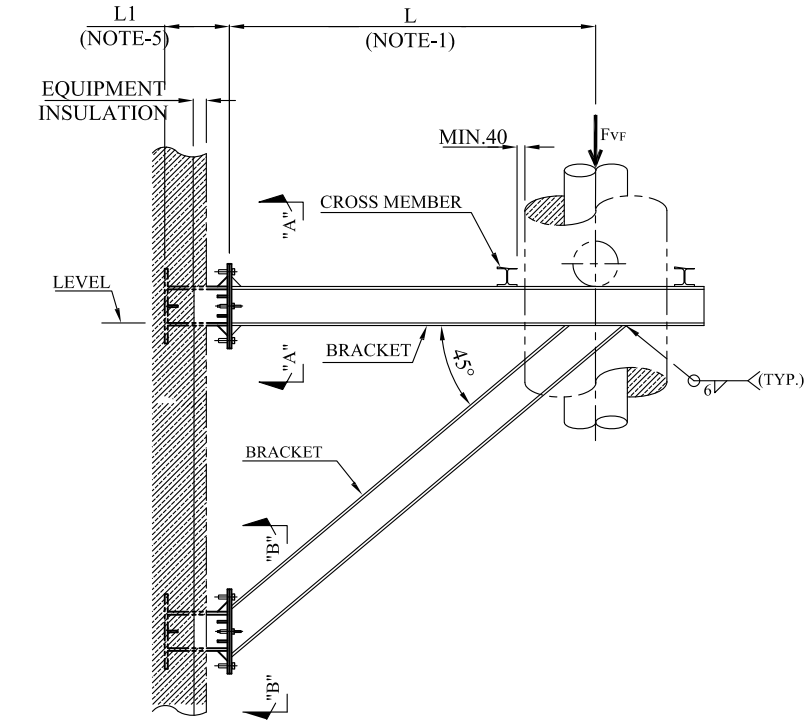
SUPPORT DESCRIPTION:
BRACKET ON VERTICAL VESSEL
REST 8" ~ 12"
SH-06

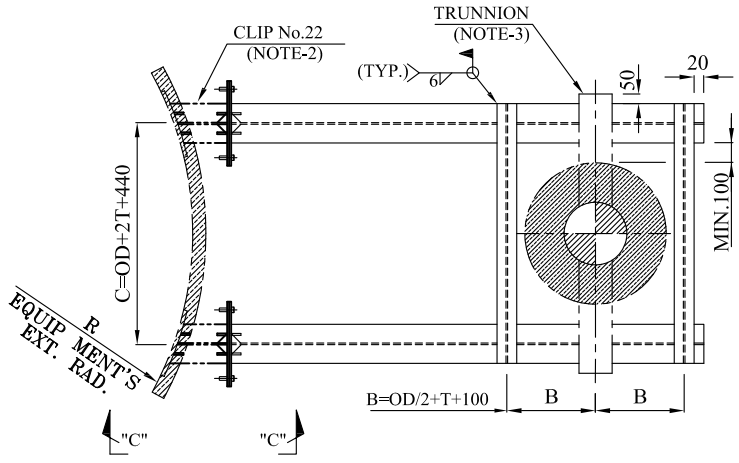
SHEET 1 OF 5

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							
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 262 از 307





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:

BRACKET ON VERTICAL VESSEL
REST 14" ~ 24"
SH-06

SHEET	2 OF 5

NISOC

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

PEDCO

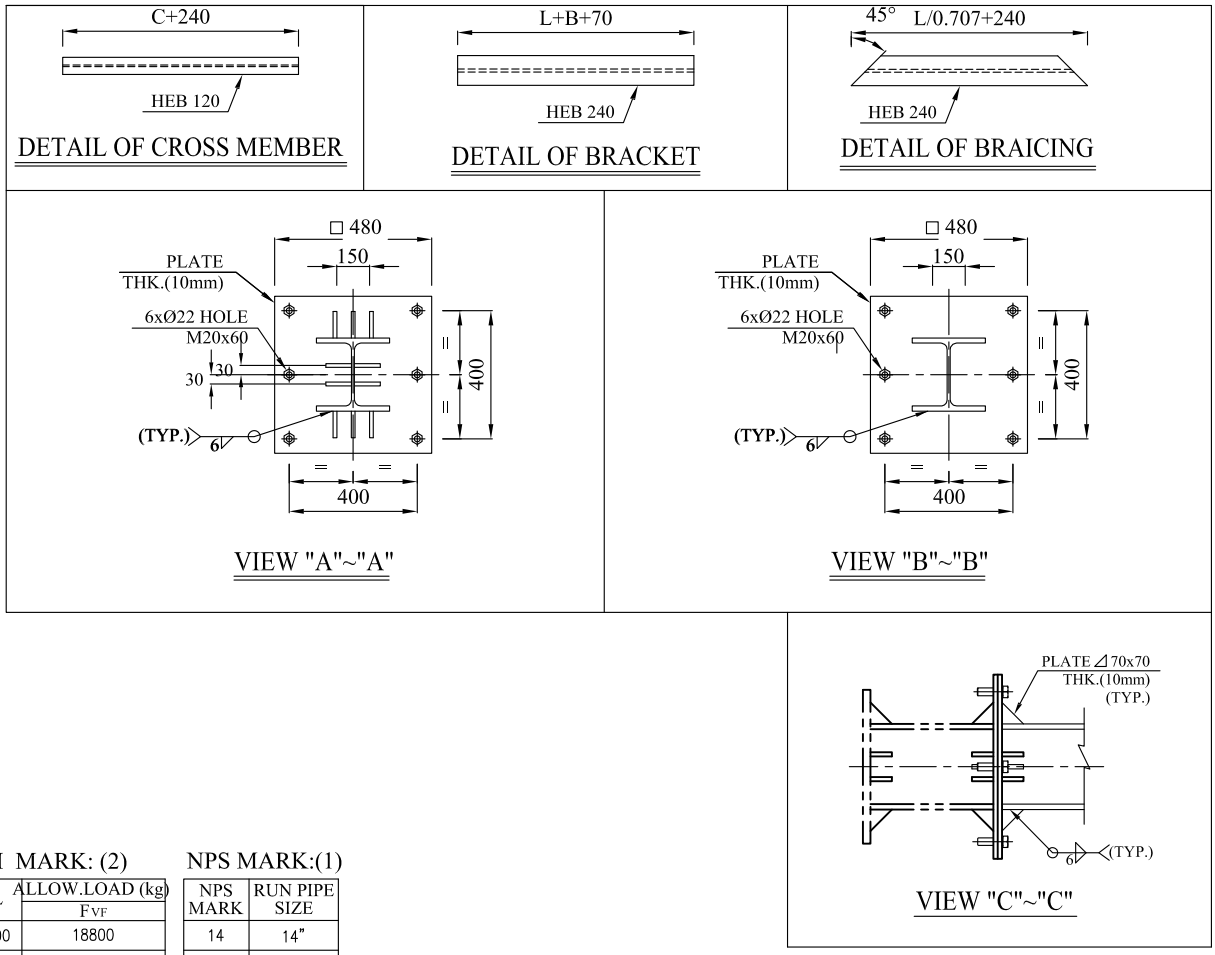
HIRGAN ENERGY

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	D00

شماره صفحه: 263 از 307



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 IULATIONSN THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=50	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

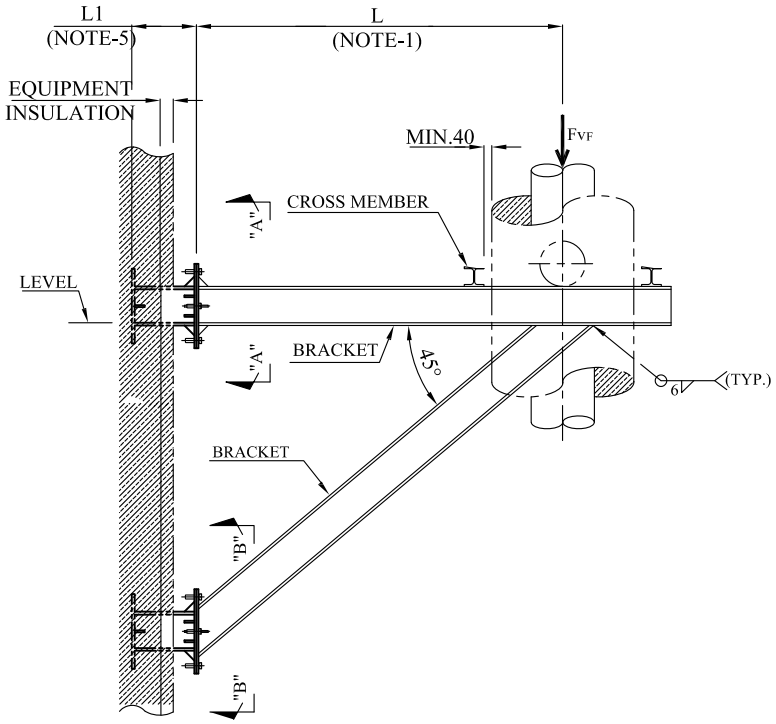
SUPPORT DESCRIPTION:

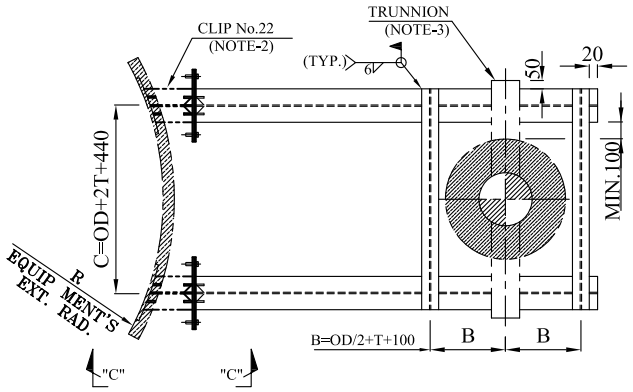
BRACKET ON VERTICAL VESSEL
REST 14" ~ 24"
SH-06

SHEET 3 OF 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: 264 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	





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

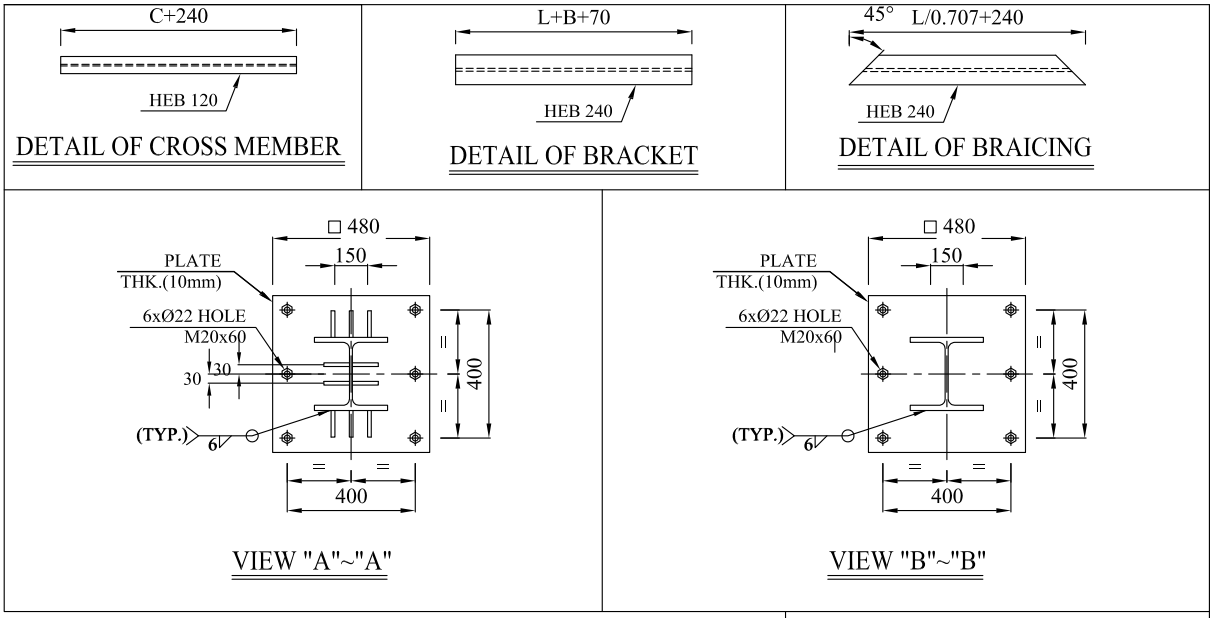
SUPPORT DESCRIPTION:

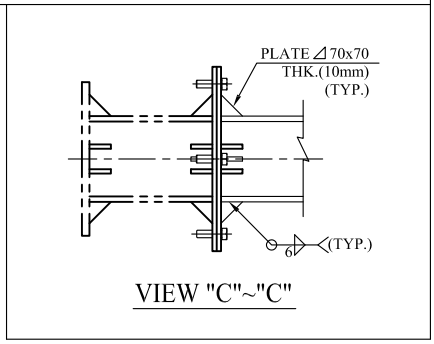
BRACKET ON VERTICAL VESSEL
REST 26" ~ 42"
SH-06

SHEET	4 OF 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: 265 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00





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
14	14"
16	16"
18	18"
20	20"
22	22"
24	24"

INSULATION THK. MARK: (3)

HOT IULATIONSN THK.	BARE	10-50	51-100	101-150	151-200
T	T=0	T=50	T=100	T=50	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:

BRACKET ON VERTICAL VESSEL
REST 26" ~ 42"
SH-06

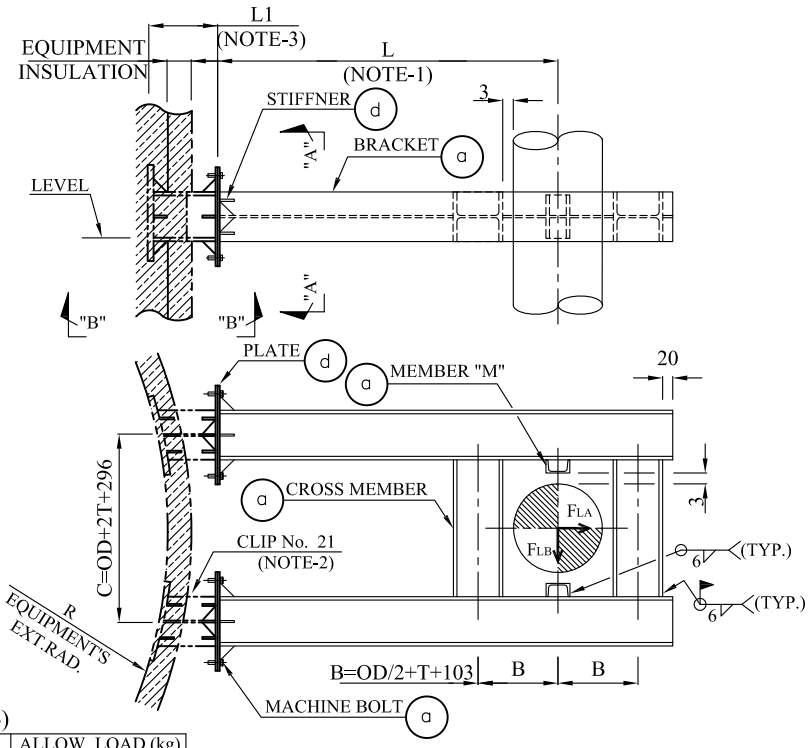
SHEET	5 OF 5

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

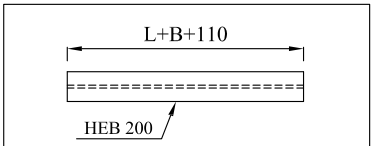
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

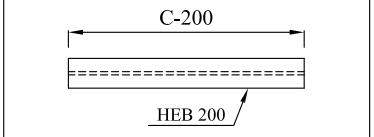
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00



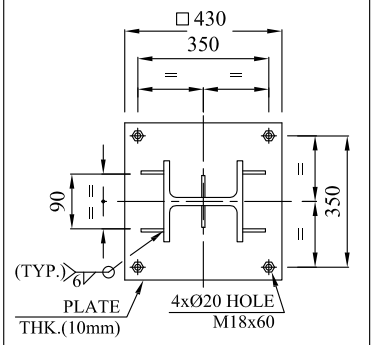
TYPE "A"
CARBON STEEL (BARE)



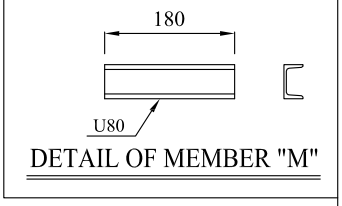
DETAIL OF BRACKET



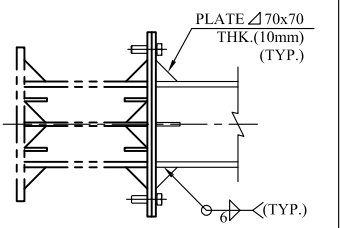
DETAIL OF CROSS MEMBER



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		4900
05	900		
06	1000		
07	1100		3800
08	1200		
09	1300		
10	1400		3000
11	1500		
12	1600		
13	1700		2500
14	1800		
15	1900		
16	2000		

NPS MARK:(3)

NPS MARK	RUN PIPE SIZE
08	8"
10	10"
12	12"

INSULATION THK. MARK: (5)

HOT IULATIONSN 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 VERTICAL VESSEL
DOUBLE GUIDE (TYPE A-CS) 8" ~ 12"
SH-07

NISOC

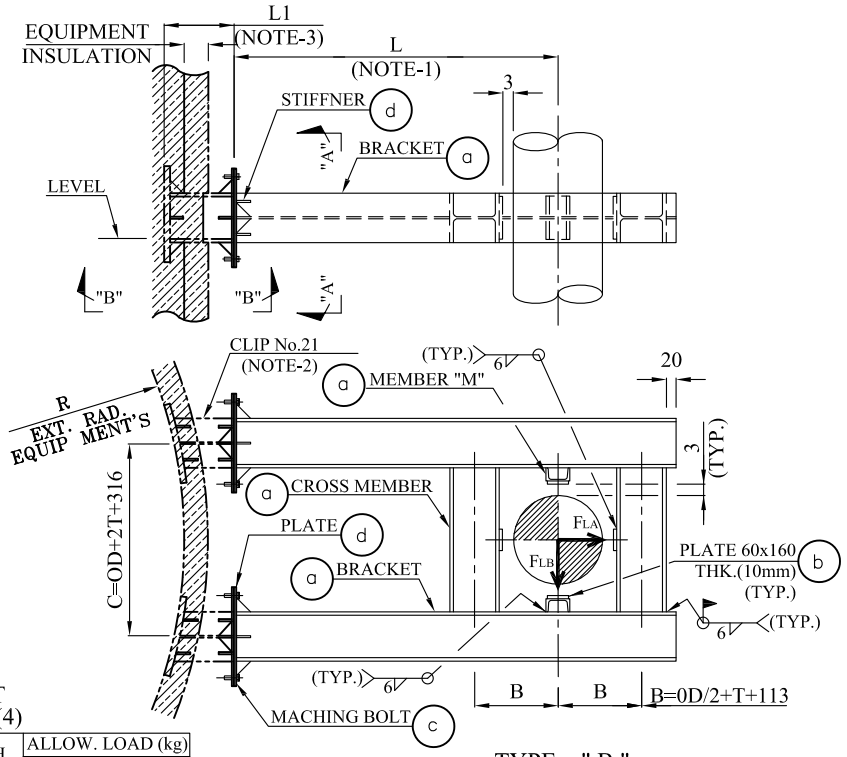
پروژه نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

PEDCO
HIRGAN ENERGY

شماره پیمان:
053-073-9184

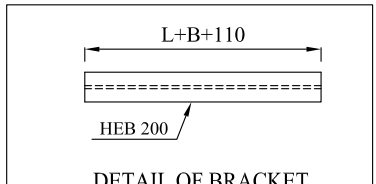
STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D00	0001	DW	PI	120	PEDCO	GCS	BK

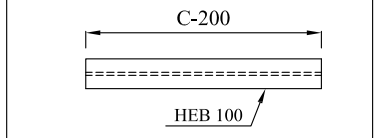


TYPE "B"

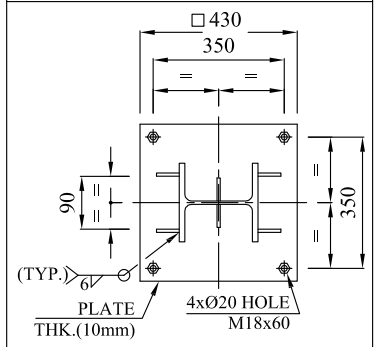
ALLOY STEEL OR STAINLESS STEEL (BARE)



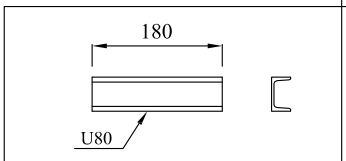
DETAIL OF BRACKET



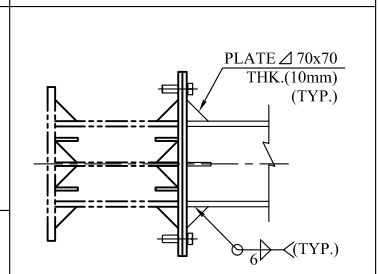
DETAIL OF CROSS MEMBER



VIEW "A"~"A"



DETAIL OF MEMBER "M"



VIEW "B"~"B"

LENGHT MARK: (4)

MARK	H	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	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-DIMENSIONS "L" CAN BE ADJUSTED AT FIELD.
2-FOR DETAIL OF CLIP SEE (G-03).
3-DIMESION "L" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

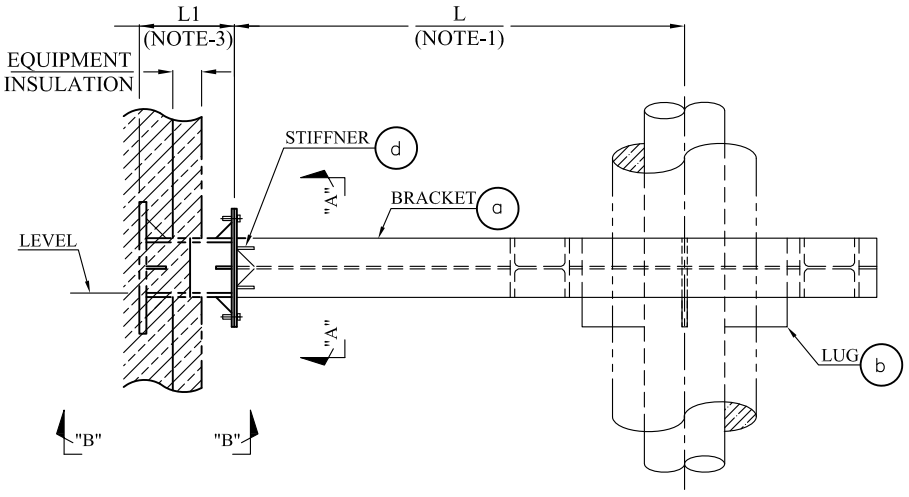
SUPPORT DESCRIPTION:
BRACKET ON VERTICAL VESSEL
DOUBLE GUIDE (TYPE B-AS,SS) 8"~12"
SH-07

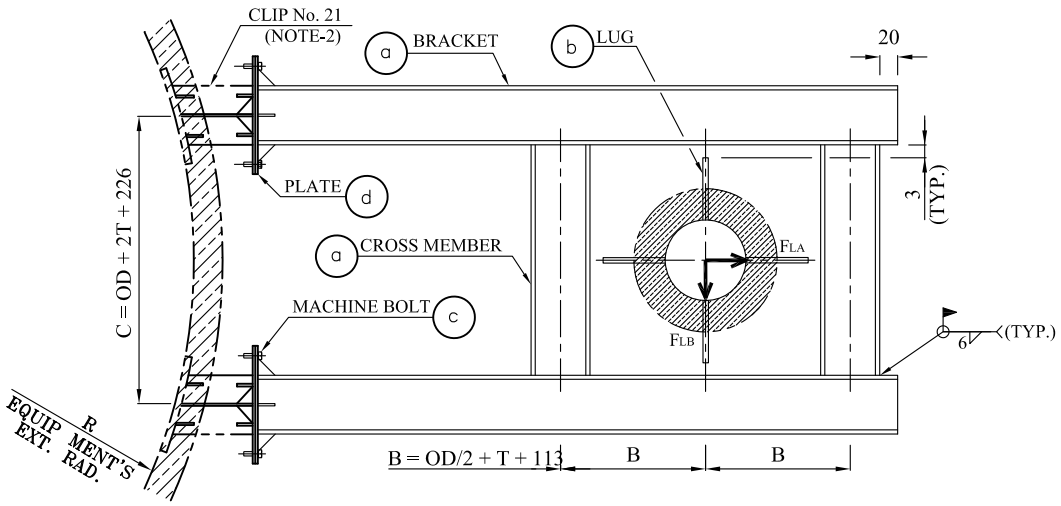
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00





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

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 VERTICAL VESSEL
DOUBLE GUIDE (TYPE CS, AS, OR SS (INSULATED)) 8"~12"
SH-07

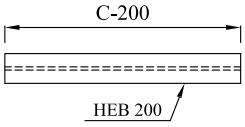
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:
053-073-9184

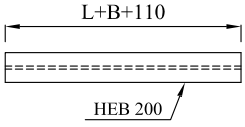
STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

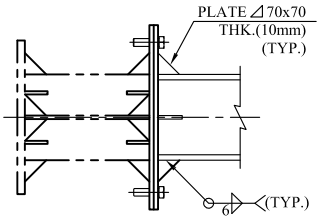
شماره صفحه: 269 از 307



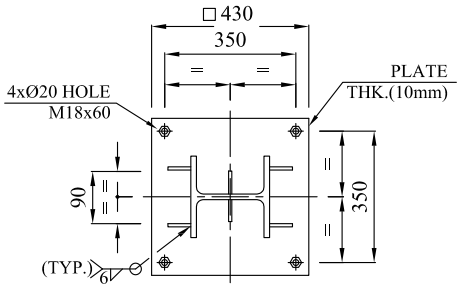
DETAIL OF CROSS MEMBER



DETAIL OF CROSS MEMBER



VIEW " B " ~ " B "



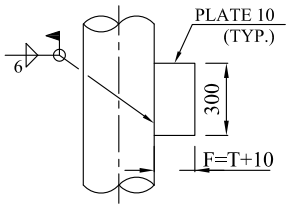
VIEW " A " ~ " A "

LENGHT MARK: (4)

MARK	H	ALLOW. LOAD (kg)	
		F_{LA}	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	MARK	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0° C TO 350°C	MARK	A	B	G
	ⓐ	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)

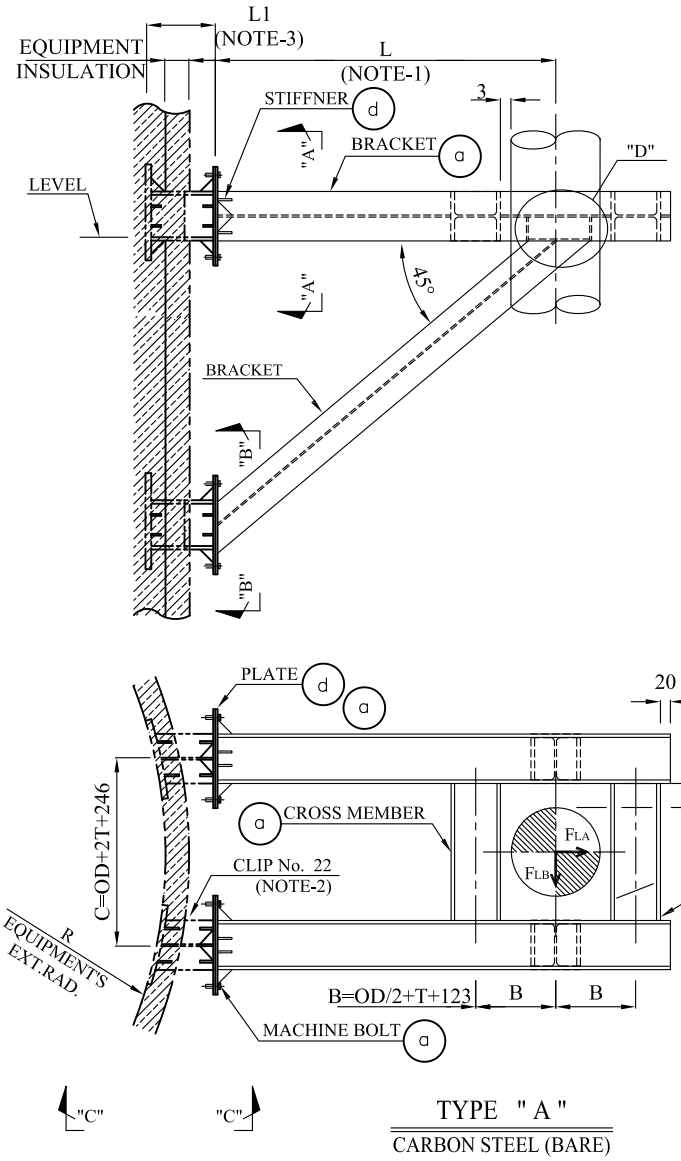
1-TYPE MARK
2-MATERIAL MARK
3-NPS MARK
4-LENGTH MARK
5-INSULATION THK. MARK

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 VERTICAL VESSEL
DOUBLE GUIDE (TYPE CS, AS, OR SS (INSULATED)) 8"~12"
SH-07

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: 270 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	



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:

BRACKET ON VERTICAL VESSEL
DOUBLE GUIDE (TYPE A-CS) 14" ~ 24"
SH-07

NISOC

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

PEDCO

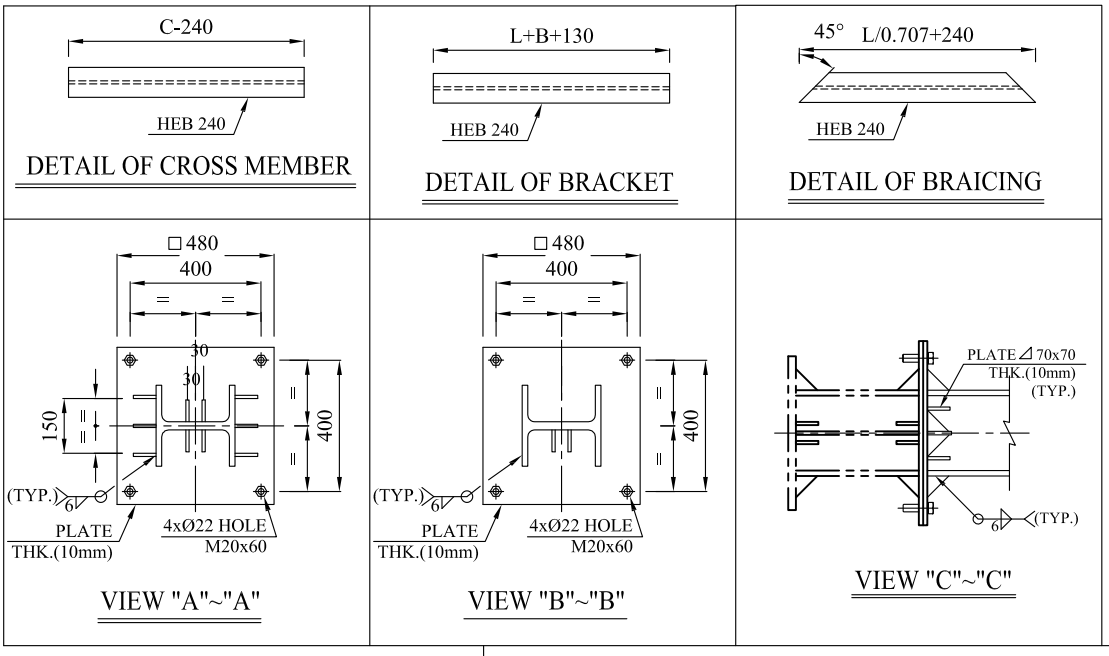
HIRGAN ENERGY

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	D00

شماره صفحه: 271 از 307

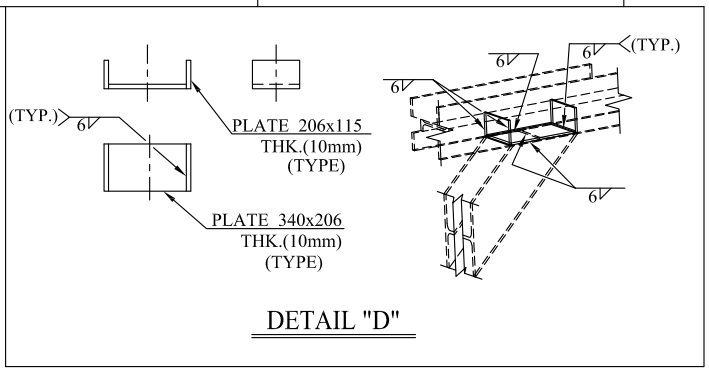


LENGTH MARK: (4)

MARK	L	ALLOW. LOAD (kg) FLA	FLB
01	700	36000	7800
02	800		
03	900		
04	1000		
05	1100		5900
06	1200		
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 IULATIONSN 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	MARK	A	B	G
	ⓐ	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
2-LENGTH MARK
3-INSULATION THK. MARK

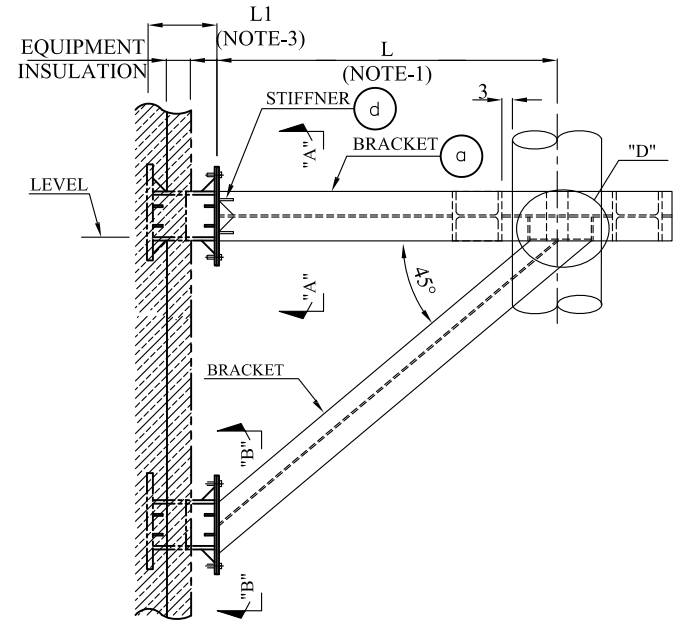
NOTE:
1-DIMENSION "L" CAN BE ADJUSTED AT FIELD.
2-FOR DETAIL OF CLIP SEE (G-03).
3-DIMENSION "L1" SHALL BE SPECIFIED BASED ON CLIP DETAIL.

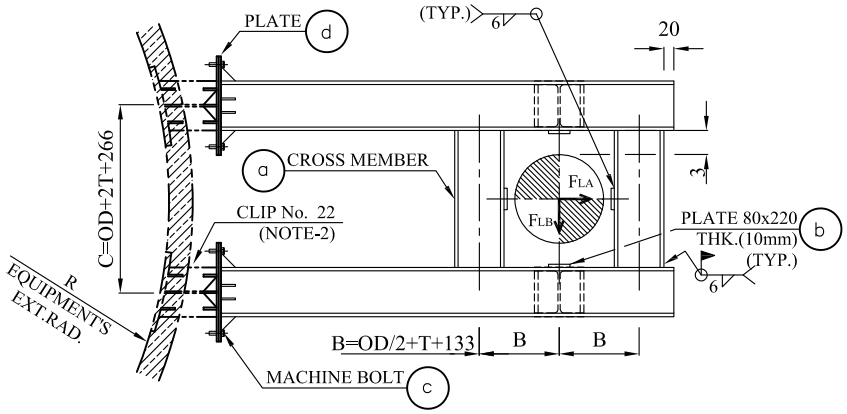
SUPPORT DESCRIPTION:
BRACKET ON VERTICAL VESSEL
DOUBLE GUIDE (TYPE A-CS) 14" ~ 24"
SH-07

SHEET 6 OF 10

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: 272 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	





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:

BRACKET ON VERTICAL VESSEL
DOUBLE GUIDE (TYPE B-AS,SS) 14" ~ 24"
SH-07

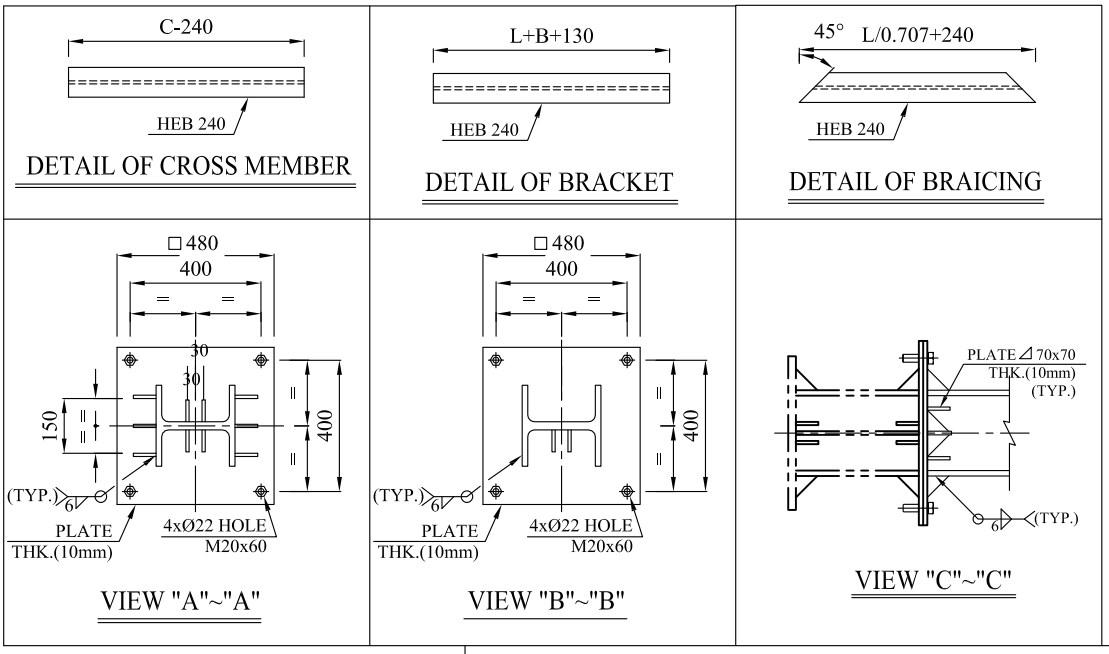
SHEET	7 OF 10

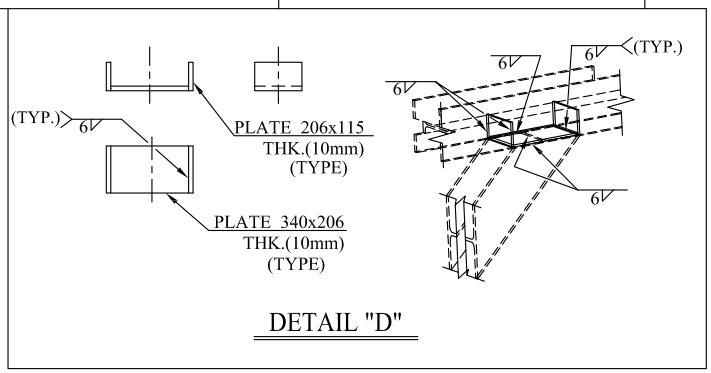
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان: 053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D00	0001	DW	PI	120	PEDCO	GCS	BK





TYPE " B "

ALLOY STEEL OR STAINLESS STEEL (BARE)

LENGTH MARK: (4)

MARK	L	ALLOW. LOAD (kg) FLA	ALLOW. LOAD (kg) FLB
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 IULATIONSN 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	MARK	A	B	G
	ⓐ	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:

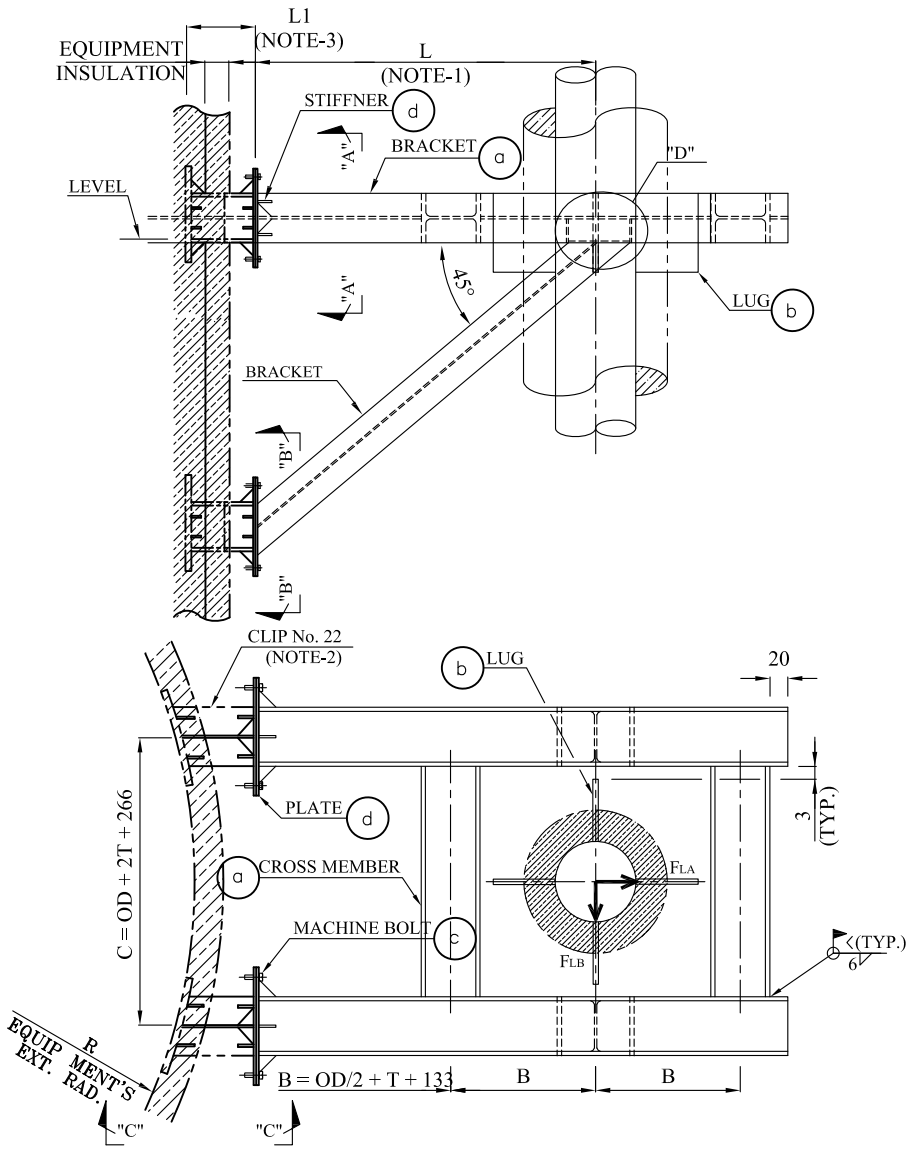
BRACKET ON VERTICAL VESSEL
DOUBLE GUIDE (TYPE B-AS,SS) 14" ~ 24"
SH-07

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	D00



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:

BRACKET ON VERTICAL VESSEL
DOUBLE GUIDE (TYPE CS, AS, OR SS (INSULATED)) 14"~24"
SH-07

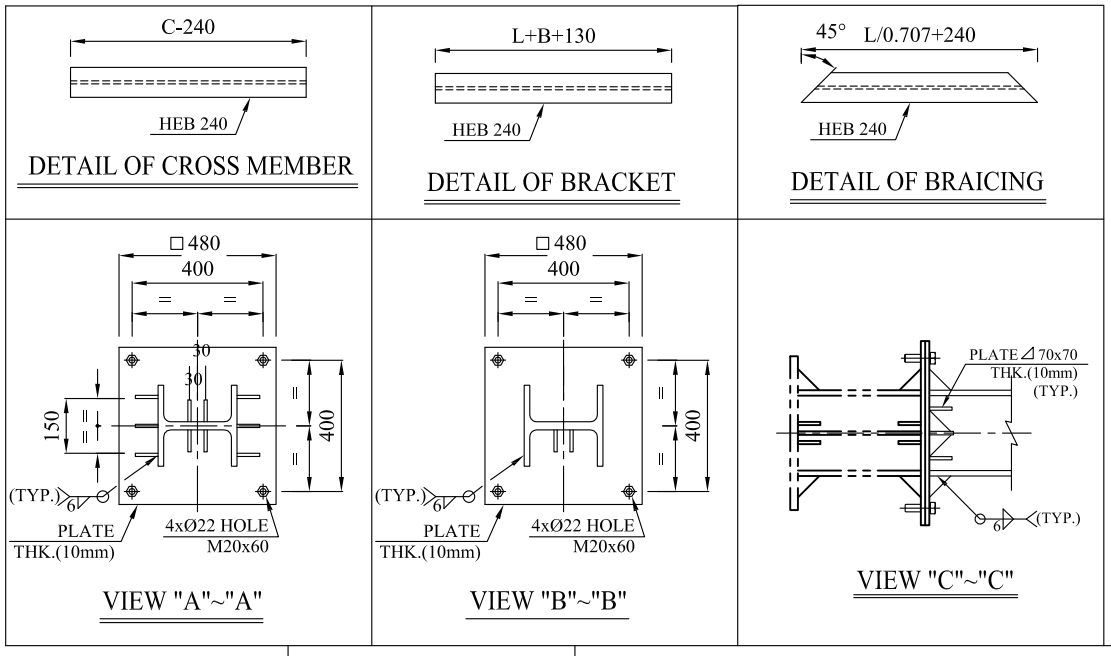
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

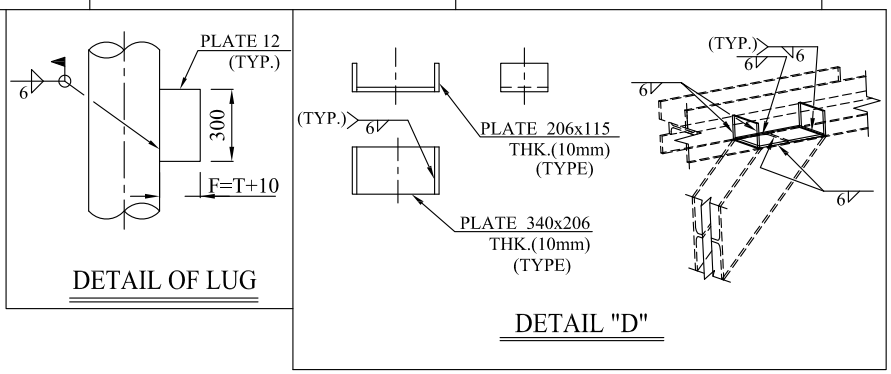
شماره پیمان: 053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D00	0001	DW	PI	120	PEDCO	GCS	BK

شماره صفحه: 275 از 307





LENGTH MARK: (4)

MARK	L	ALLOW. LOAD (kg) FLA	ALLOW. LOAD (kg) FLB
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		

TYPE " C "

CS, AS, OR SS (INSULATED)

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 IULATIONSN 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	MARK	A	B	G
	ⓐ	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 VERTICAL VESSEL
DOUBLE GUIDE (TYPE CS, AS, OR SS (INSULATED)) 14"~24"
SH-07

SHEET 10 OF 10

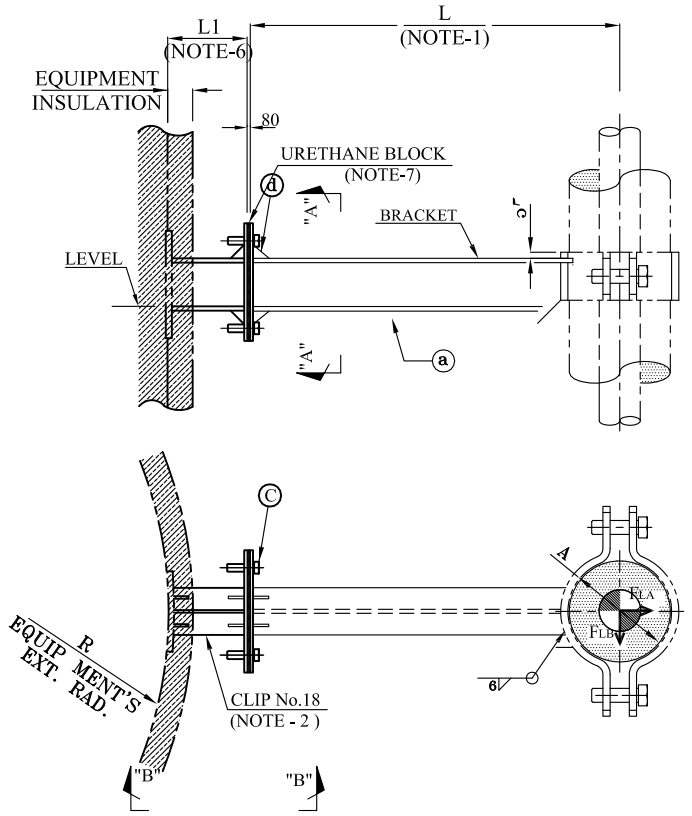
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

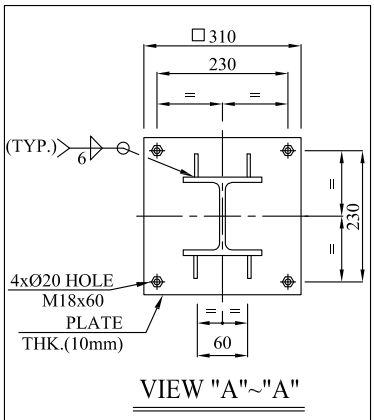
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

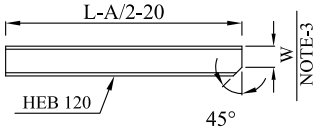
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 276 از 307

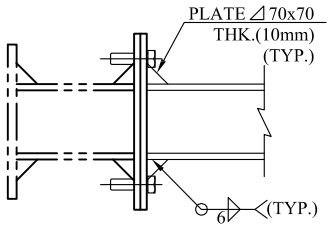




VIEW "A"~"A"



DETAIL OF BRACKET



VIEW "B"~"B"

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	MARK	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
0° C TO 350°C		A	B	G
	ⓐ	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 THK. 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:
BRACKET ON EQUIPMENT
CLAMP TYPE DOUBLE GUIDE
(COLD INSULATION)2" ~ 6"
SH-08

SHEET 1 OF 1

NISOC

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

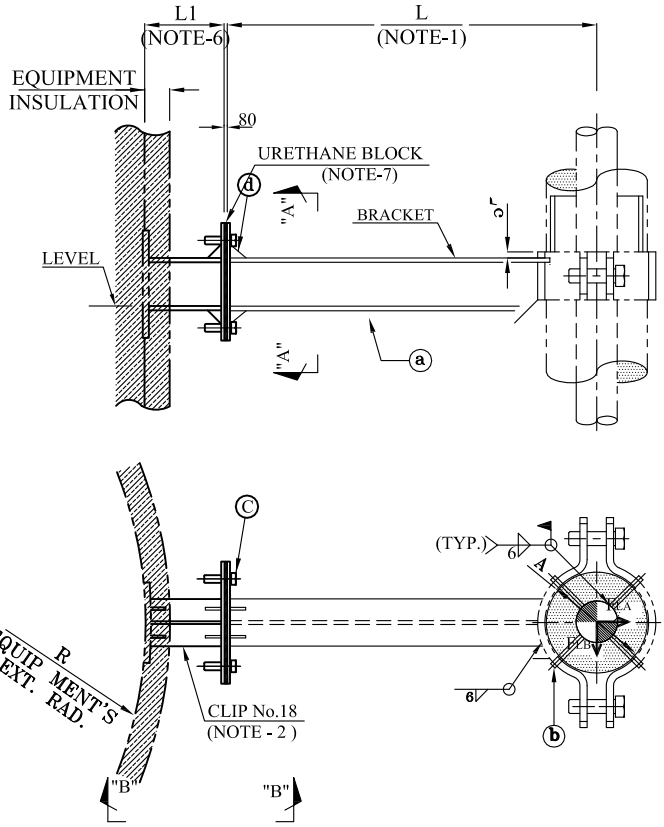
PEDCO
HIRGAN ENERGY

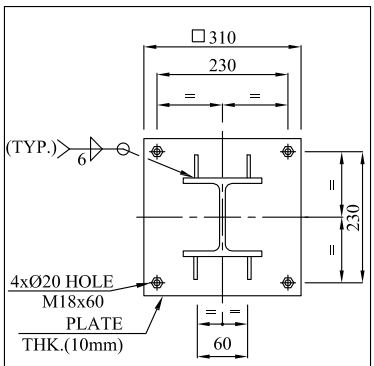
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

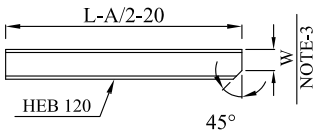
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 277 از 307

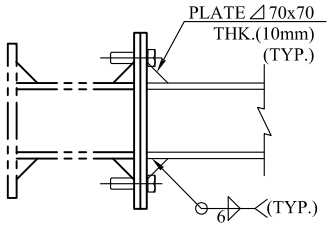




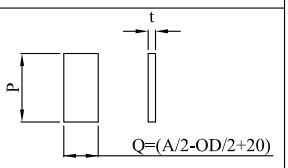
VIEW "A"~"A"



DETAIL OF BRACKET



VIEW "B"~"B"



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) FVF
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	MARK	A	B	G
	ⓐ	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 THK. 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:

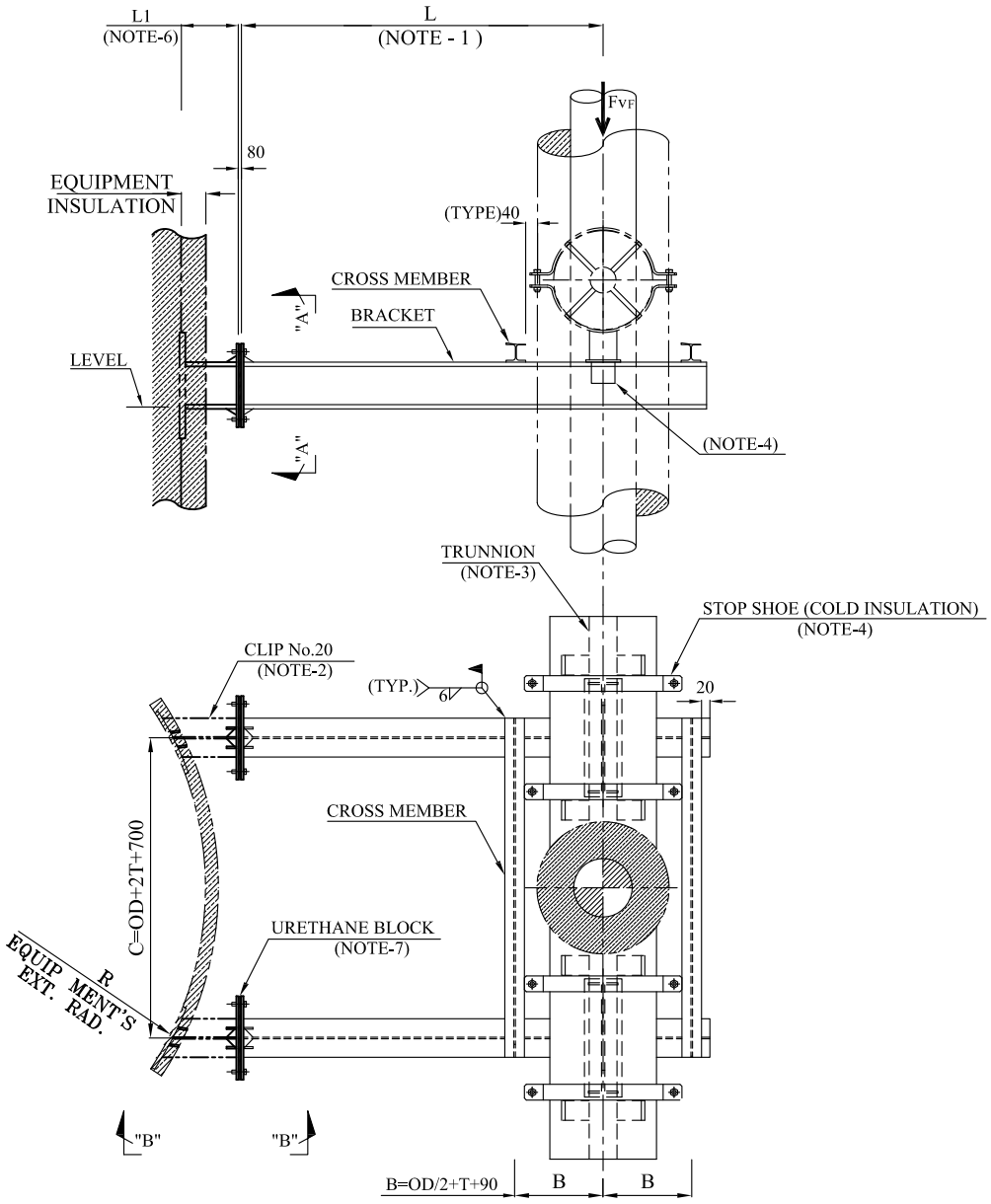
BRACKET ON EQUIPMENT
CLAMP TYPE SEMI ANCHOR
(COLD INSULATION)2" ~ 6"
SH-09

SHEET 1 OF 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	D00

شماره صفحه: 278 از 307



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 VERTICAL VESSEL
REST (COLD INSULATION) 2" ~ 6"
SH-10

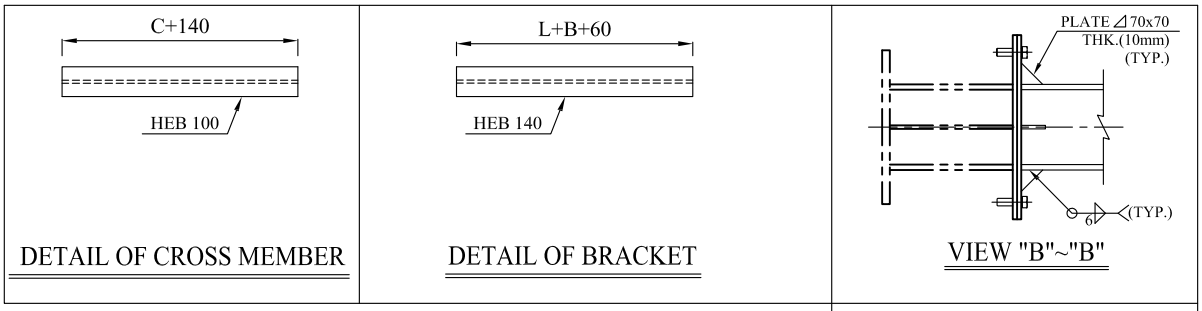
SHEET 1 OF 6

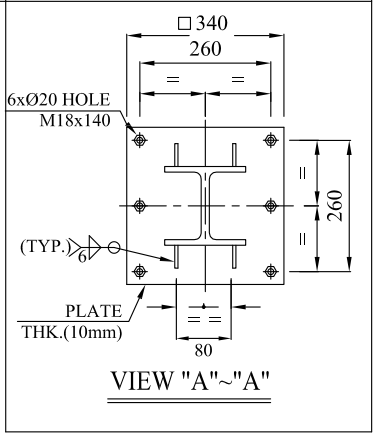
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00





LENGTH
MARK: (2)

MARK	L	ALLOW. LOAD (kg) F_{VF}
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 IULATIONSN THK.	25-50	51-100	101-150	151-200
CRADLE THK.	T=50	T=100	T=50	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).

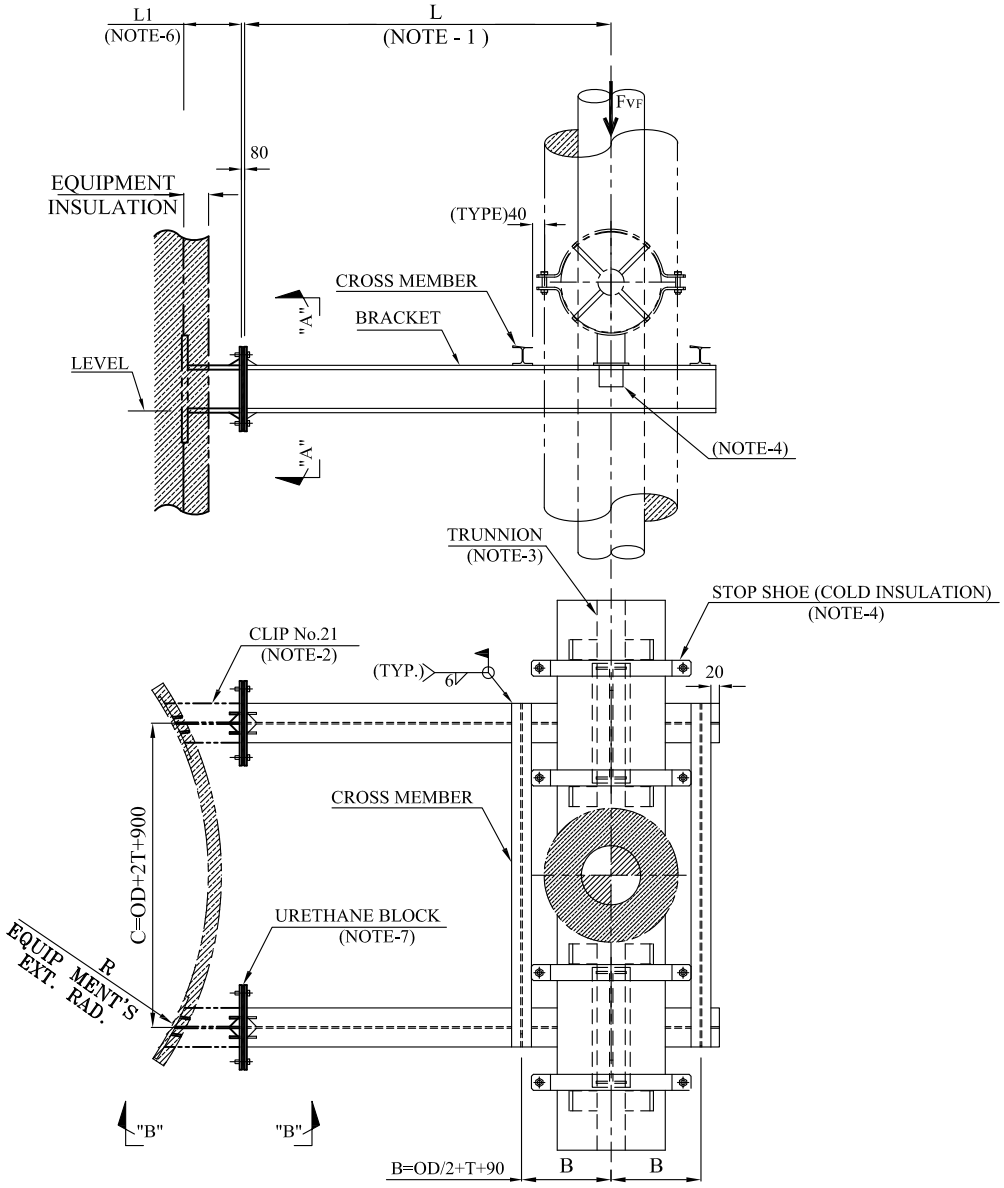
MATERIAL:
STANDARD PROFILE: ASTM A36, BOLT & NUT:A325. PLATE: A283 Gr.C

SUPPORT DESCRIPTION:

BRACKET ON VERTICAL VESSEL
REST (COLD INSULATION) 2" ~ 6"
SH-10

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: 280 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	



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

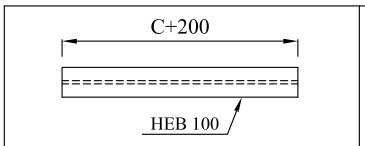
SUPPORT DESCRIPTION:

BRACKET ON VERTICAL VESSEL
REST (COLD INSULATION) 8" ~ 12"
SH-10

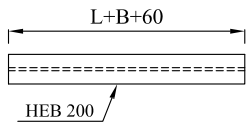
SHEET	3 OF 6

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

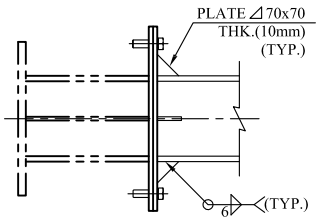
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 281 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



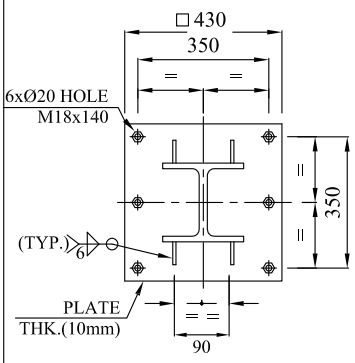
DETAIL OF CROSS MEMBER



DETAIL OF BRACKET



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 IULATIONSN THK.	25-50	51-100	101-150	151-200
CRADLE THK.	T=50	T=100	T=50	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:

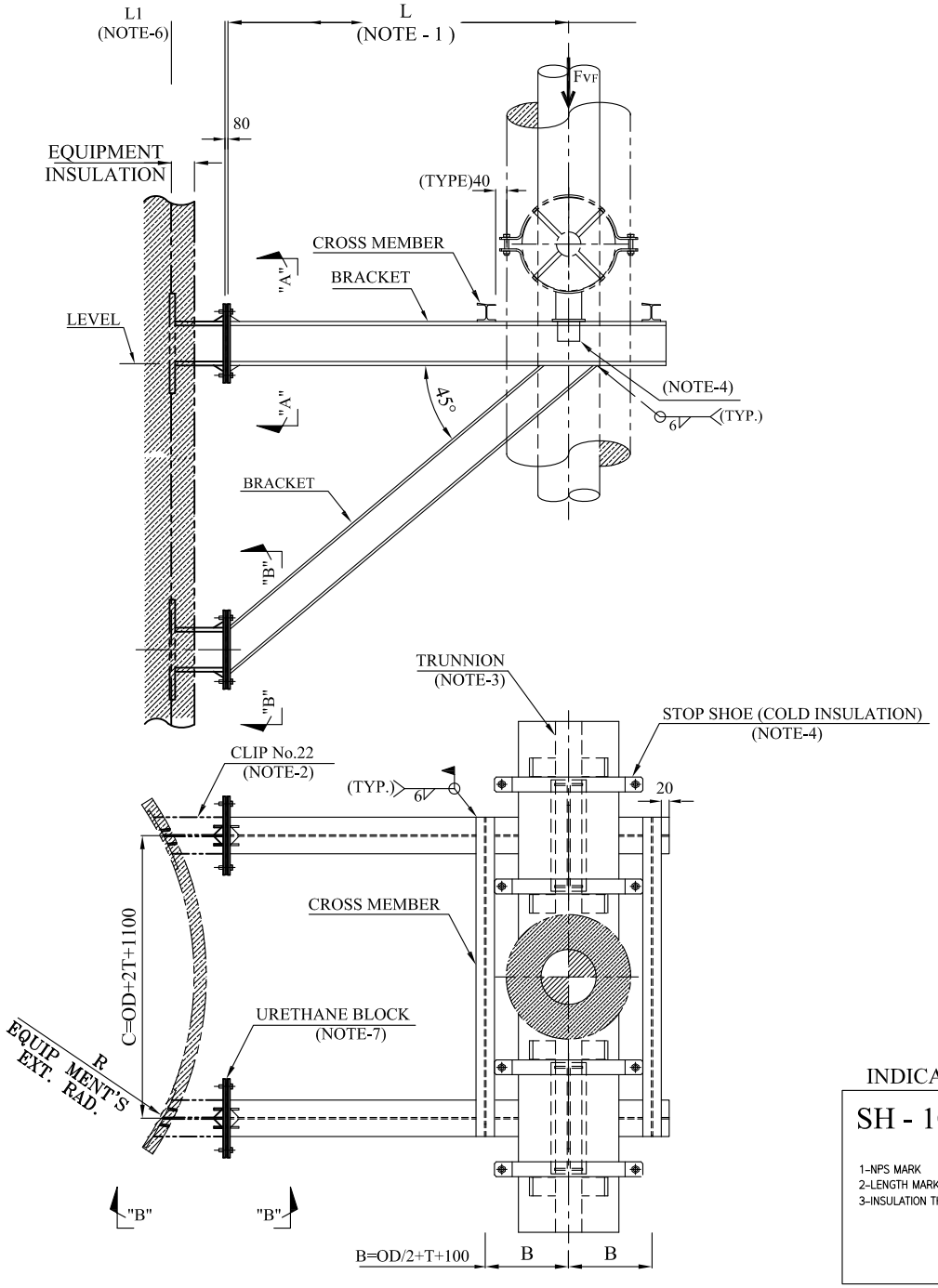
BRACKET ON VERTICAL VESSEL
REST (COLD INSULATION) 8" ~ 12"
SH-10

SHEET 4 OF 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							
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 282 از 307



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

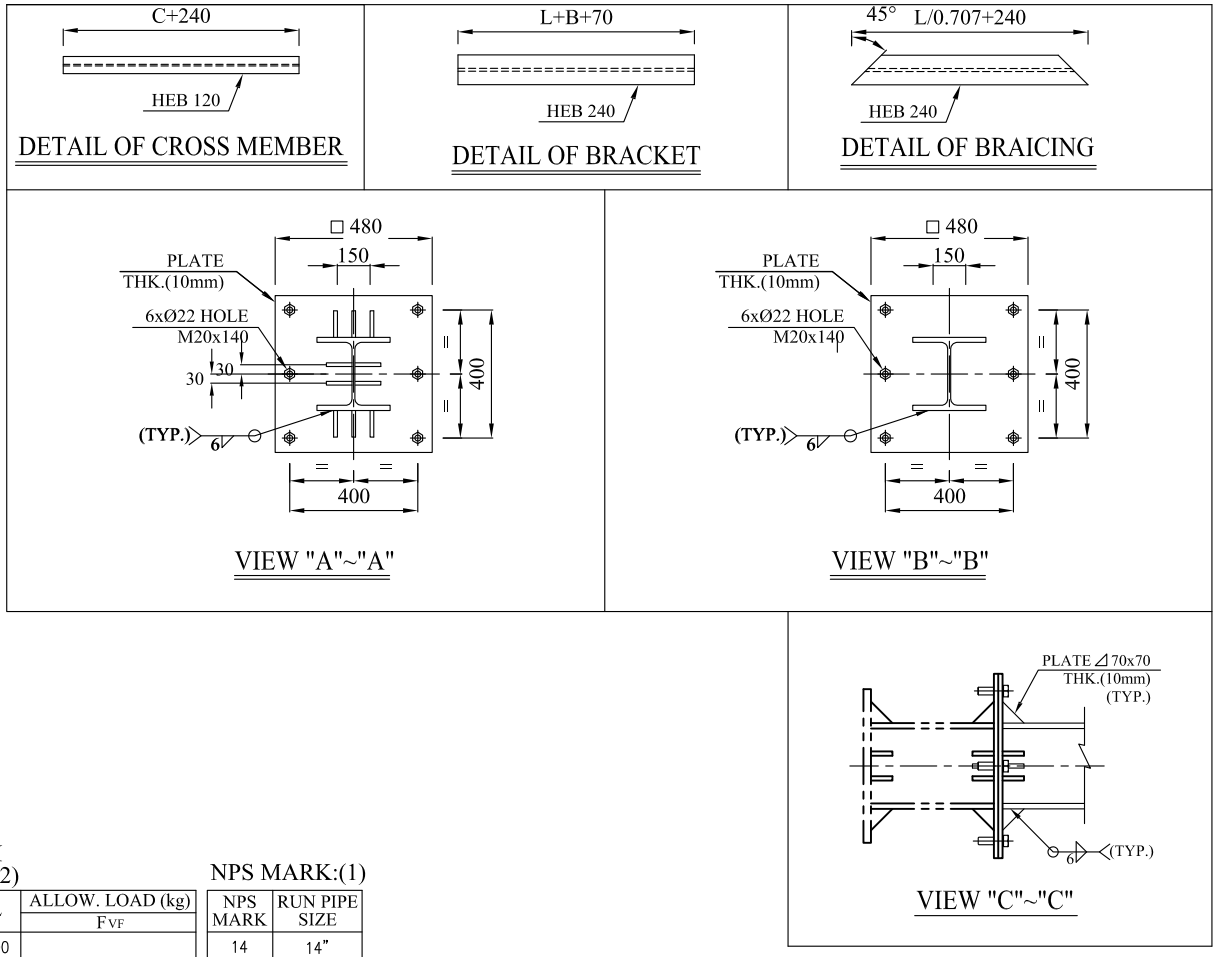
SUPPORT DESCRIPTION:

BRACKET ON VERTICAL VESSEL
REST (COLD INSULATION) 14" ~ 24"
SH-10

SHEET 5 OF 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: 283 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



LENGTH MARK: (2)

MARK	L	ALLOW. LOAD (kg) F_{VF}
01	700	16500
02	800	
03	900	13800
04	1000	
05	1100	
06	1200	10000
07	1300	
08	1400	
09	1500	7700
10	1600	
11	1700	
12	1800	5900
13	1900	
14	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 IULATIONSN THK.	25-50	51-100	101-150	151-200
CRADLE THK.	T=50	T=100	T=50	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:

BRACKET ON VERTICAL VESSEL
REST (COLD INSULATION) 14" ~ 24"
SH-10

SHEET	6 OF 6

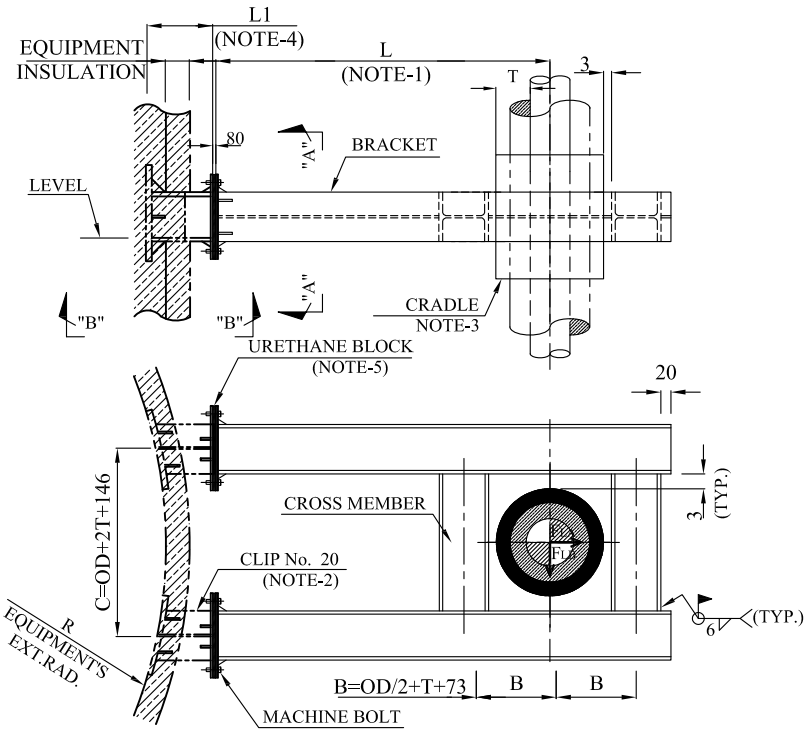
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

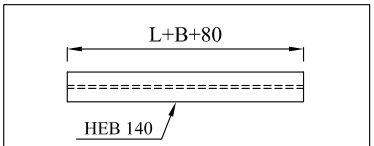
شماره پیمان:
053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

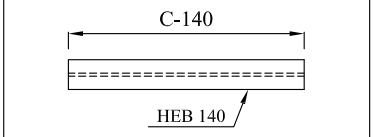
پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 284 از 307

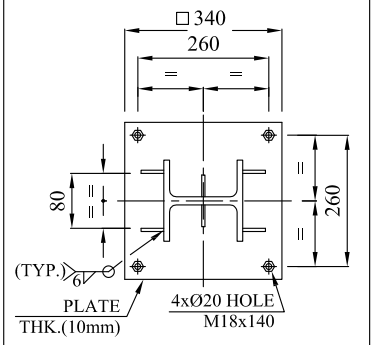




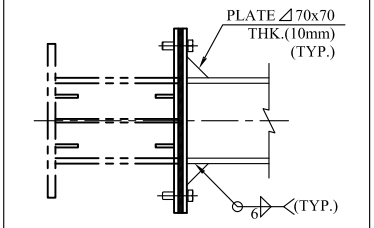
DETAIL OF BRACKET



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 IULATIONSN THK.	25-50	51-100	101-150	151-200
CRADLE THK.	T=50	T=100	T=50	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:

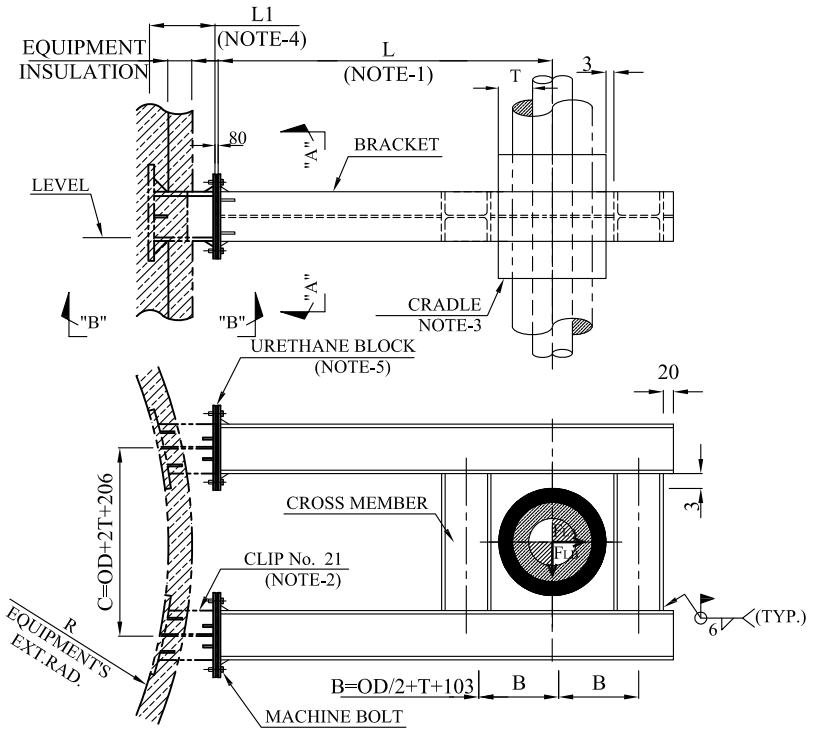
BRACKET ON VERTICAL VESSEL
DOUBLE GUIDE (COLD INSULATION)
2" ~ 6"
SH-11

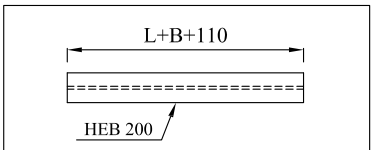
SHEET 1 OF 4

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

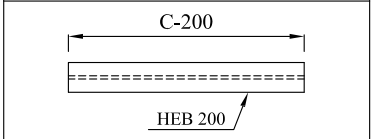
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 285 از 307

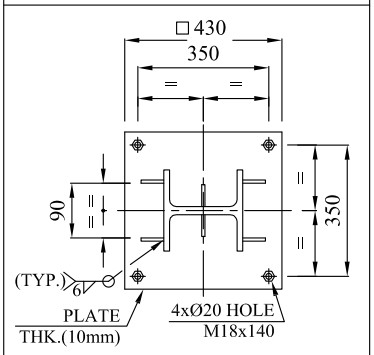




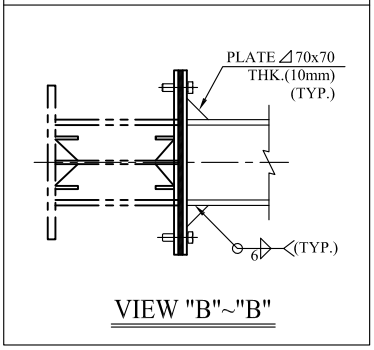
DETAIL OF BRACKET



DETAIL OF CROSS MEMBER



VIEW "A"~"A"



VIEW "B"~"B"

LENGTH MARK: (2)

MARK	L	ALLOW. LOAD (kg)	
		FLA	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"

INSULATION THK. MARK: (3)

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

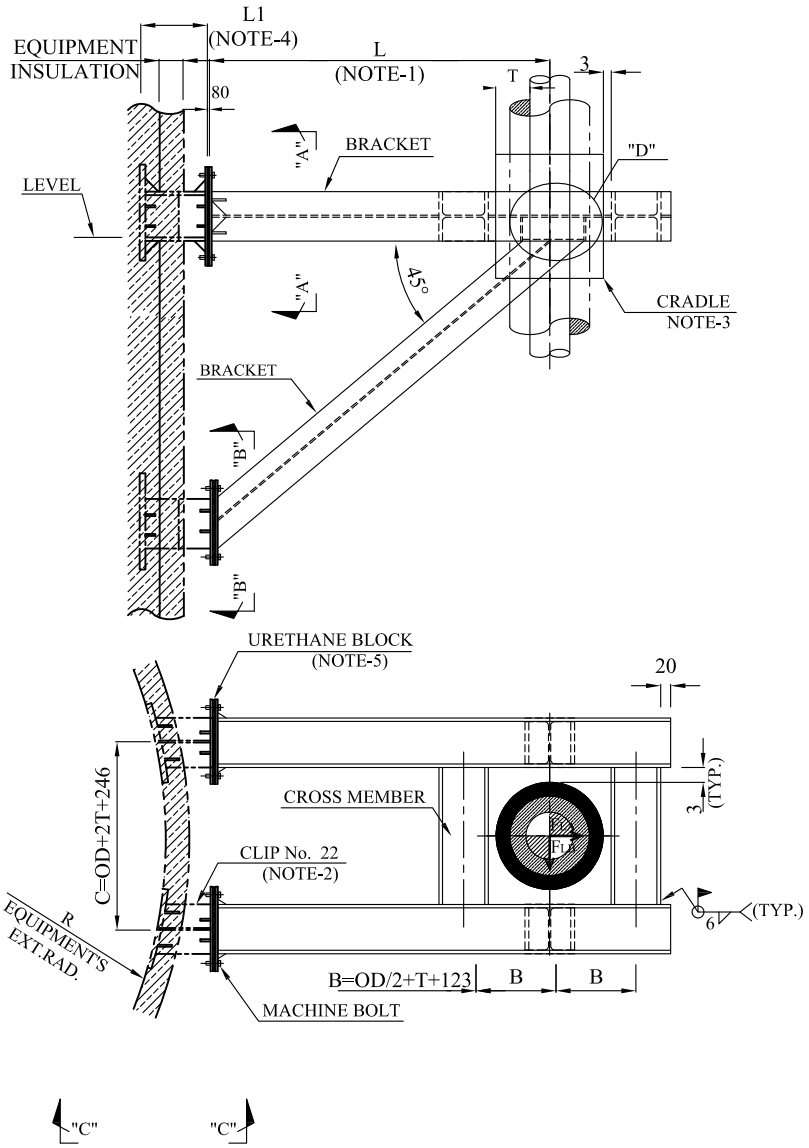
SUPPORT DESCRIPTION:

BRACKET ON VERTICAL VESSEL
DOUBLE GUIDE (COLD INSULATION)
8" ~ 12"
SH-11

SHEET 2 OF 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: 286 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



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 VERTICAL VESSEL
DOUBLE GUIDE (COLD INSULATION)
14" ~ 24"
SH-11

NISOC

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

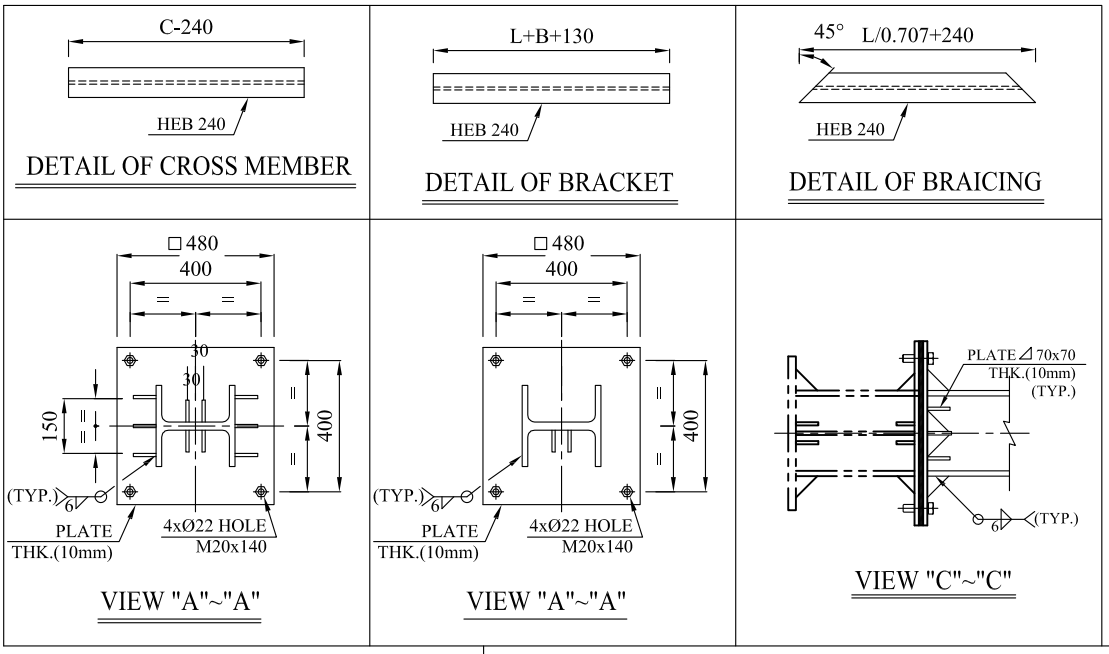
PEDCO

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	D00

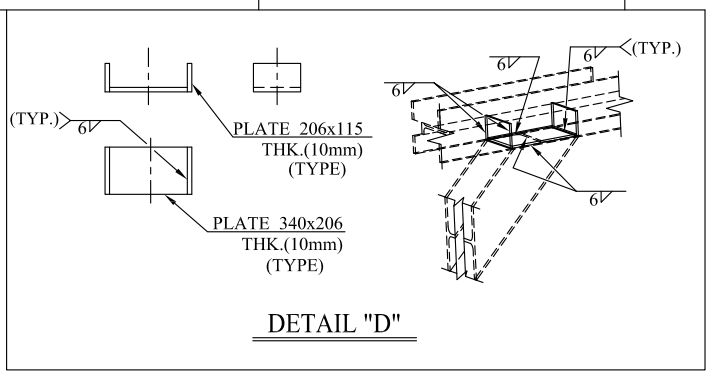


LENGTH MARK: (2)

MARK	L	ALLOW. LOAD (kg) FLA	FLB
01	800	36000	7800
02	900		
03	1000		
04	1100		5900
05	1200		
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"



INDICATION:

SH - 11 – [ ][ ] – [ ][ ][ ]
(1) (2) (3)

1-NPS MARK
2-LENGTH MARK
3-INSULATION THK. MARK

INSULATION THK. MARK: (3)

COLD IULATIONSN THK.	25-50	51-100	101-150	151-200	201-250	251-300
CRADLE THK.	T=50	T=100	T=50	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 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 VERTICAL VESSEL
DOUBLE GUIDE (COLD INSULATION)
14" ~ 24"
SH-11

SHEET 4 OF 4

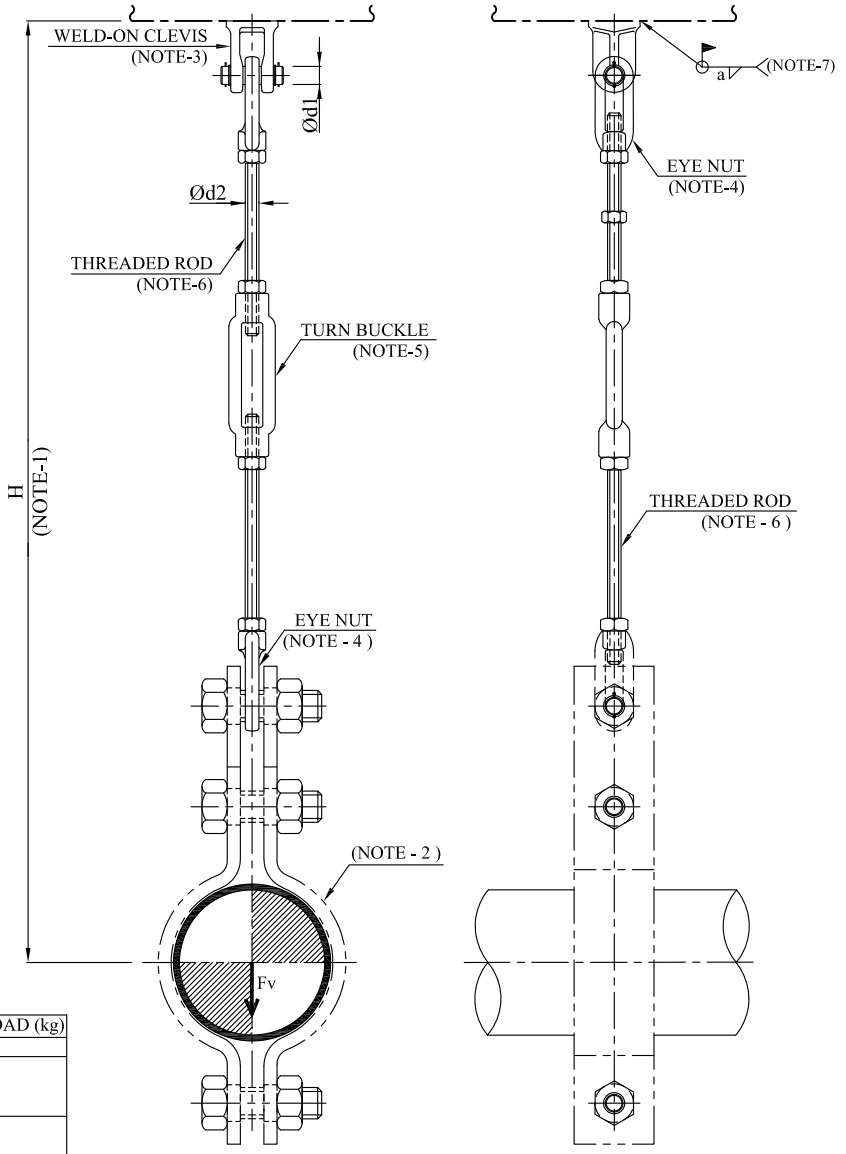
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00

شماره صفحه: 288 از 307



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) F_{VF}
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 ON CLEVIS SEE (G-09).
4- FOR DETAIL OF EYE NUT SEE (G-11).
5- FOR DETAIL 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).

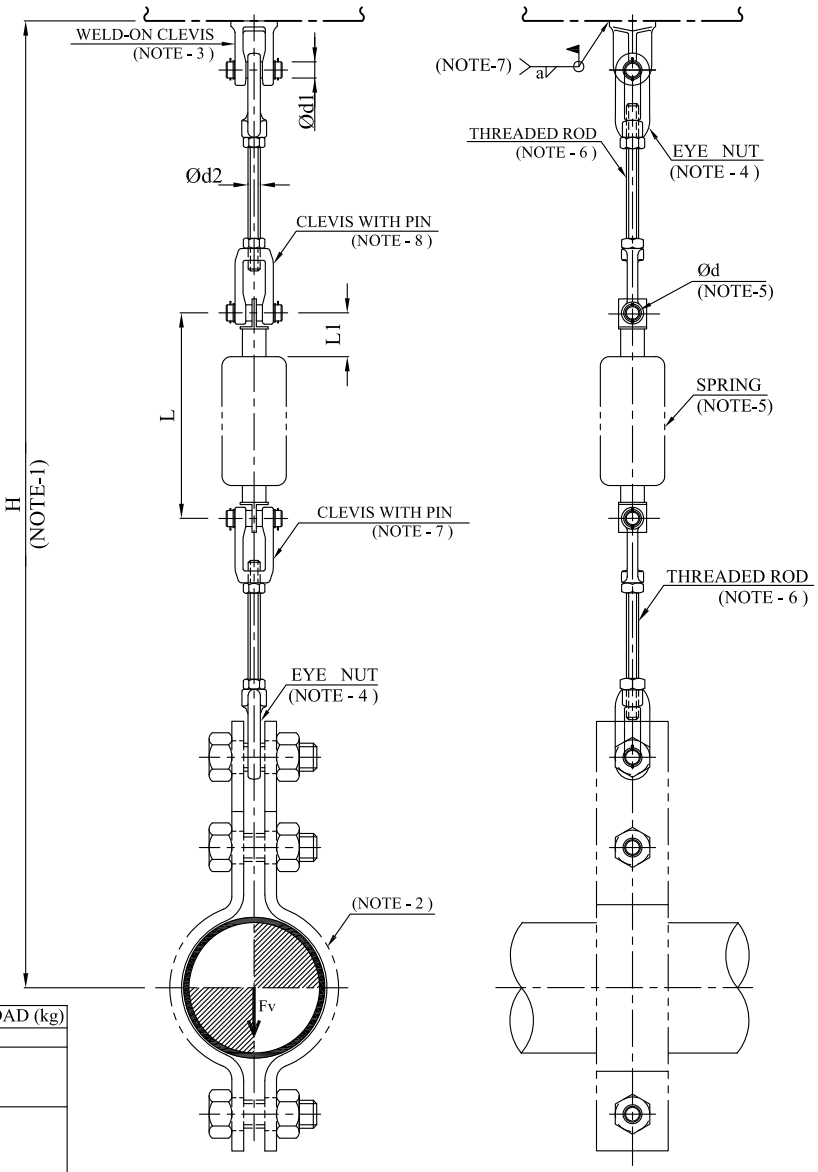
SUPPORT DESCRIPTION:

RIGID HANGER
(CLAMP TYPE) 2" ~ 24"
SI-01

SHEET 1 OF 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: 289 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



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) FVF
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 Id 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:

SPRING HANGER
(CLAMP TYPE) 2" ~ 24"
SI-02

SHEET	1 OF 1

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

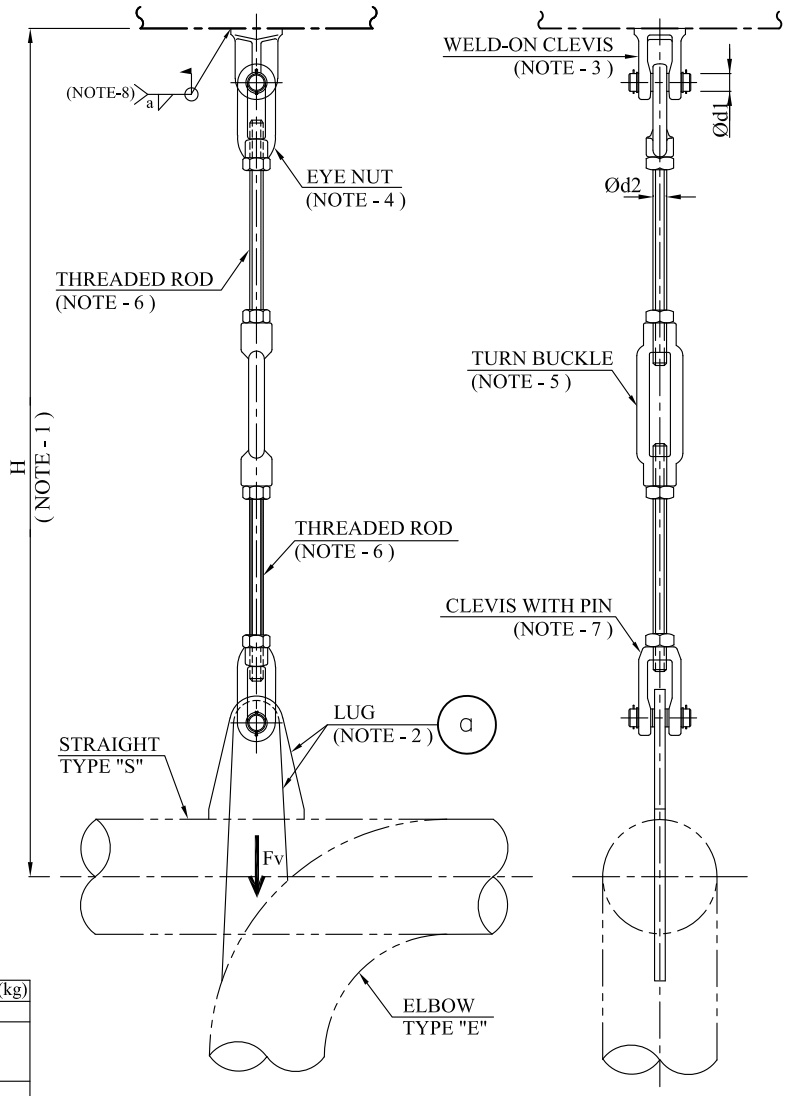
شماره پیمان:

053-073-9184

STANDARD PIPE SUPPORT DRAWINGS

پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	PI	DW	0001	D00

شماره صفحه: 290 از 307



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
3-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. 80ø 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

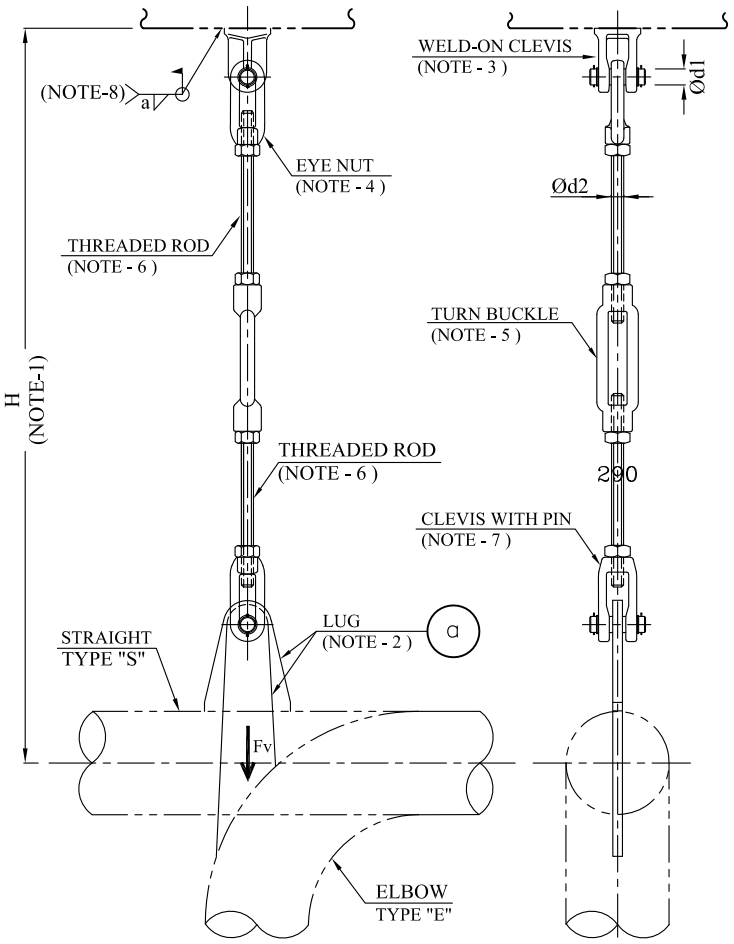
SUPPORT DESCRIPTION:

RIGID HANGER
(CS-WITHOUT PWHT) 2" ~ 24"
SI-03

SHEET 1 OF 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: 291 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



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: (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:(4)

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 Cr.316
	ⓑ	–	–	–
350°C TO 500°C	MARK	B	D	F
	ⓐ	–	A387 Gr.91 Cl.2	A240 Cr.316
	ⓑ	–	–	–

INDICATION:

SI - 04 – □□ – □□□ – □□□

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

1-TYPE OF RUN PIPE
2-MATERIAL MARK
3-NPS MARK
3-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. 80ø 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:

RIGID HANGER
(CS-WITH PWHT, AS, SS) 2"~24"
SI-04

SHEET	1 OF 1

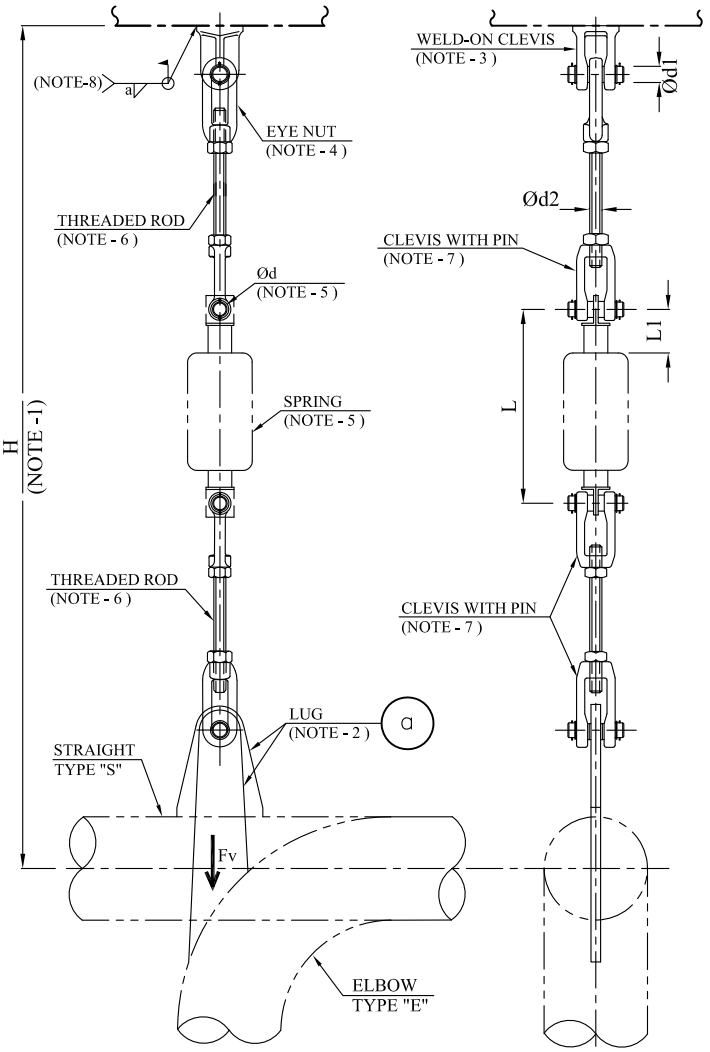
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

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	D00



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 SIAE	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	M16	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
3-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. 80ø 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

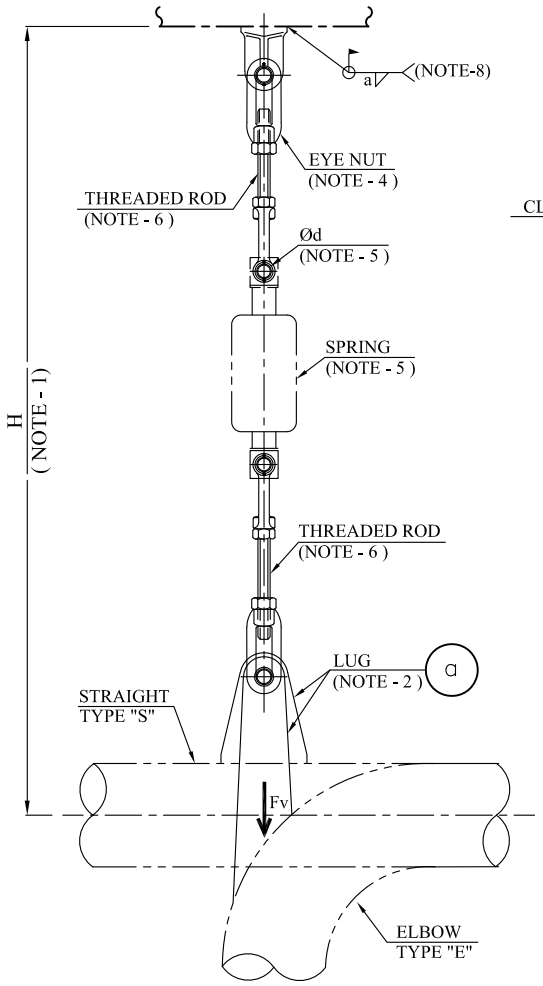
SUPPORT DESCRIPTION:

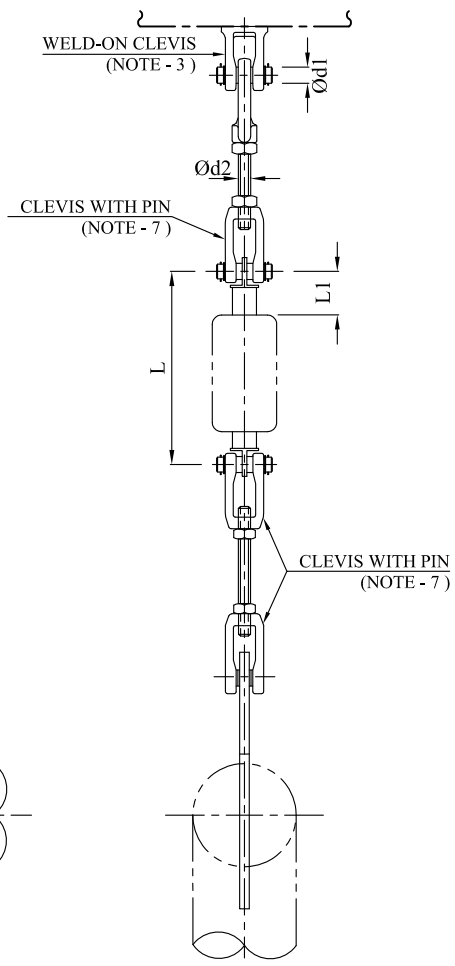
SPRING HANGER
(CS-WITHOUT PWHT) 2" ~ 24"
SI-05

SHEET	1 OF 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: 293 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00





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	M16	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	D	G
	ⓐ	ASTM A36	A387 Gr.91 Cl.2	A240 Gr.316
	ⓑ	–	–	–
350°C TO 500°C	MARK	B	D	F
	ⓐ	ASTM A36	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
3-HEIGHT MARK

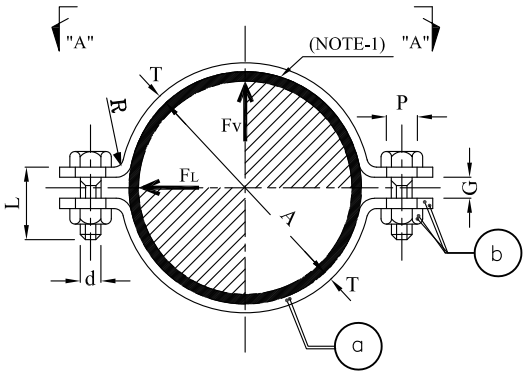
NOTE:
1- DIMENSION "H" CAN BE ADJUSTED AT FIELD.
2- FOR DETAIL OF LUG SEE (G-13) OR (G-14).
3- FOR DETAIL OF WELD-ON CLEVIS SEE (G-09).
4- FOR DETAIL OF EYE NUT SEE (G-11).
5- FOR DETAIL OF TURN BUCKLE SEE (G-08).
6- FOR DETAIL OF THREADED ROD SEE (G-12).
7- FOR DETAIL OF CLEVIS WITH PIN SEE (G-10).
8- THE MINIMUM WELD THICKNESS FOR CLEVIS TO EXISTING IS CONSIDERED IN DRAWING (G-09).
9- ALLOW. LOADS ARE CALCULATED AT TEMP. 80ø 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

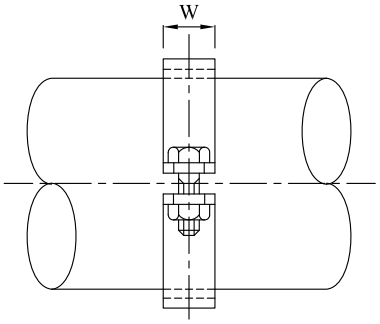
SUPPORT DESCRIPTION:
SPRING HANGER
(CS-WITH PWH,AS,SS) 2" ~ 24"
SI-06

SHEET	1 OF 1

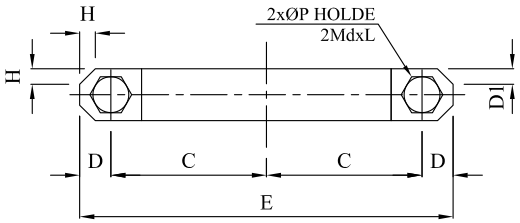
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 294 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00

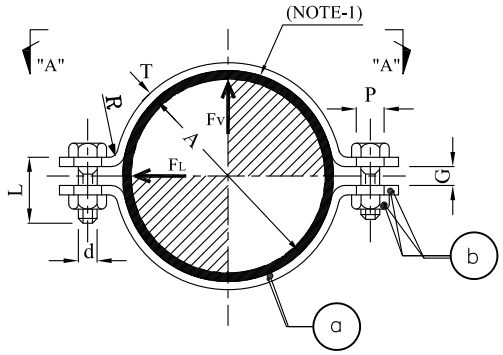


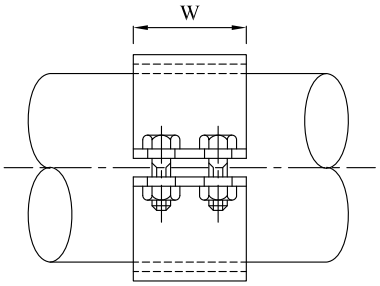


1/2" TO 8"

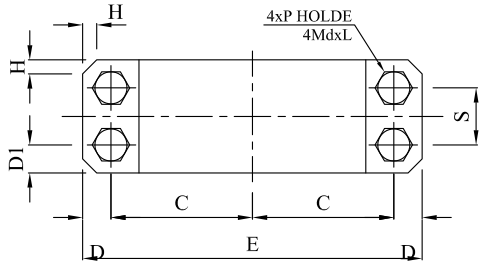


VIEW "A" ~ "A"





10" & 42"



VIEW "A" ~ "A"

INDICATION:

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

1-TYPE 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 THEN 350øC, THIN STAINLESS STEEL OR ALLOY STEEL SHEET WITH THICKNESS 0.5mm CAN BE USED AS AN ANTI CORROSION ITEM.

SUPPORT DESCRIPTION:

SIMPLED CLAMP
1/2" ~ 42"
SK-01

SHEET	1 OF 2

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض 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	D00

شماره صفحه: 295 از 307

NPS MARK: (2)

NPS MARK	RUN PIPE SIZE	CLAMP BODY												MACHINE BOLT MdxL	ALLOWABLE LOAD (kg)	
		A	C	D	E	G	H	DI	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	50	990	55	20	50	80	22	35	180	25	M20x140	800	4300
28	28"	720	465	50	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
	ⓐ	–	A387Gr.91 CL.2	A240 Gr.316
	ⓑ	–	A193 Gr.B16	A193 Gr.B8CL.1
	Ⓒ	–	–	–

INDICATION:

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

1-MATERIAL MARK
2-NPS MARK

NOTE:

SUPPORT DESCRIPTION:

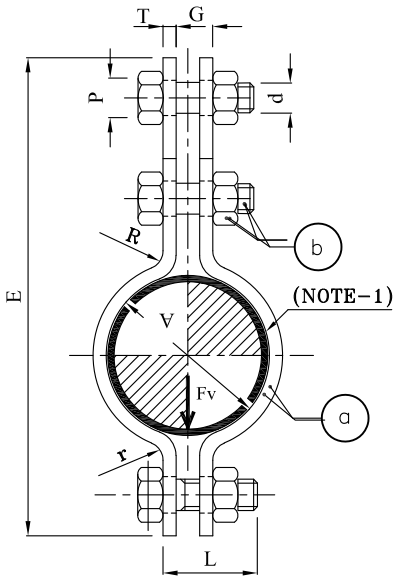
SIMPLED CLAMP
1/2" ~ 42"
SK-01

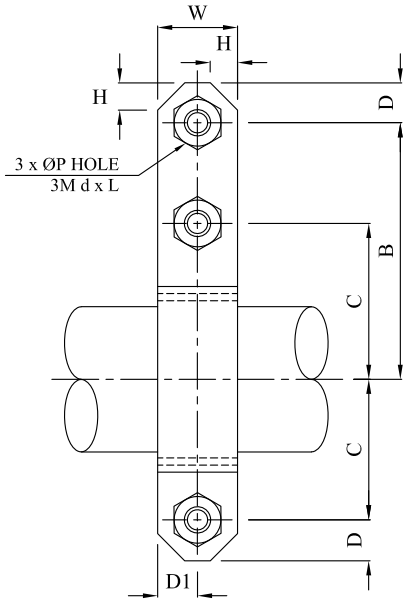
SHEET 2 OF 2

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

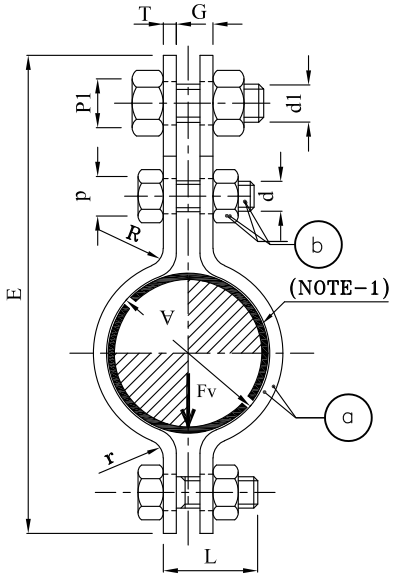
شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00

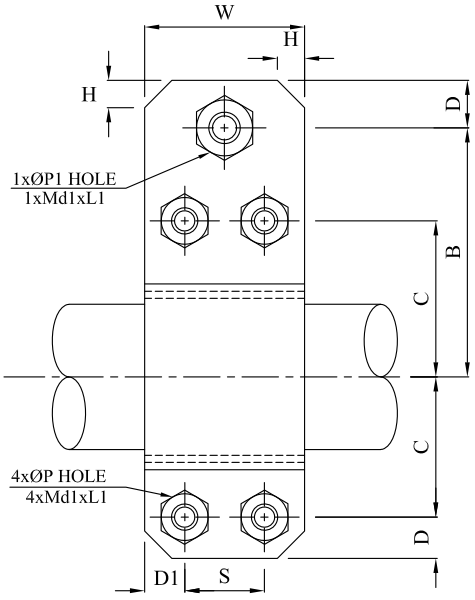
شماره صفحه: 296 از 307





1/2" ~ 8"





10" ~ 42"

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 THEN 350øC, THIN STAINLESS STEEL OR ALLOY STEEL SHEET WITH THICKNESS 0.5mm CAN BE USED AS AN ANTI CORROSION ITEM.

SUPPORT DESCRIPTION:
HANGING CLAMP
1/2" ~ 42"
SK-02

NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض 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	D00

NPS MARK: (2)

NPS MARK	RUN PIPE SIZE	CLAMP BODY														MACHINE BOLT MdxL	MACHINE BOLT MdxLl	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	50	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
	ⓐ	–	A387Gr.91 CL.2	A240 Gr.316
	ⓑ	–	A193 Gr.B16	A193 Gr.B8CL.1
	Ⓒ	–	–	–

INDICATION:

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

1-MATERIAL MARK
2-NPS MARK

NOTE:

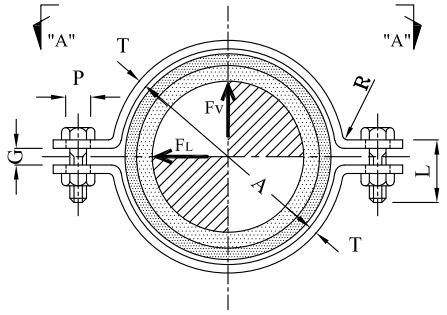
SUPPORT DESCRIPTION:

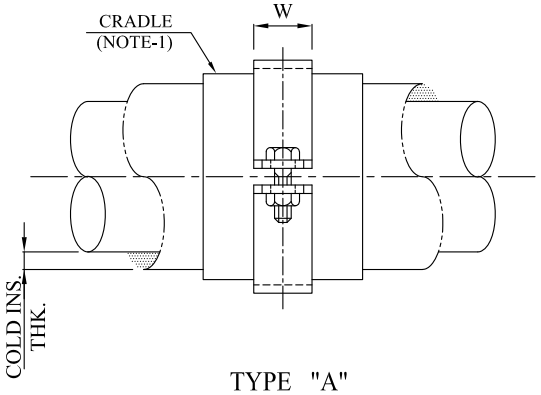
HANGING CLAMP
1/2" ~ 42"
SK-02

SHEET 2 OF 2

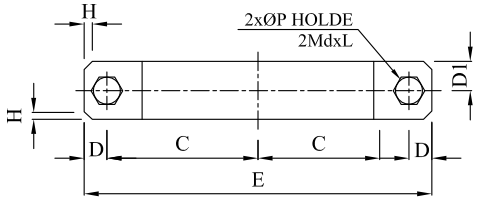
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 298 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00





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		
354	270	30	600	48	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: (1)&(2)

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

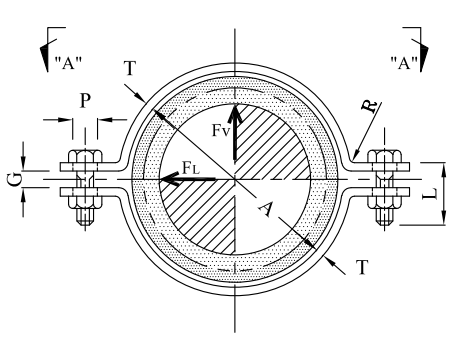
SUPPORT DESCRIPTION:

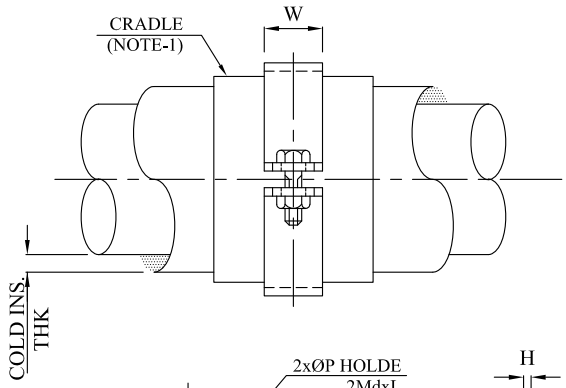
SIMPLE COLD CLAMP
1/2" ~ 1 1/2"
SK-03

SHEET 1 OF 4

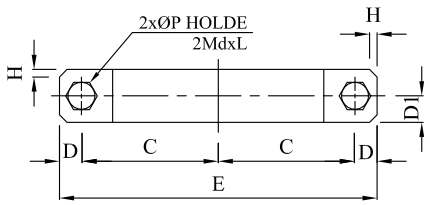
NISOC	پروژه نگهداشت و افزایش تولید میدان نفتی بینک سطح‌الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک	PEDCO HIRGAN ENERGY

شماره پیمان:	STANDARD PIPE SUPPORT DRAWINGS							شماره صفحه: 299 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00





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
163	120	30	300	32	10	16	10	50	10	25	M14 x80	280	740
192	130	30	320	32	10	16	10	50	10	25	M14 x80		
224	150	30	360	32	10	16	10	50	10	25	M14 x80		
251	160	35	390	32	10	22	10	50	10	25	M20 x90		
274	190	35	450	38	10	22	15	80	10	40	M20 x90		
279	195	35	460	38	10	22	15	80	10	40	M20 x90		
292	200	35	470	38	10	22	15	80	10	40	M20 x90		
324	220	35	510	38	10	22	15	80	10	40	M20 x90		
351	260	35	610	45	10	22	20	80	12	40	M20 x100	220	640
374	270	35	590	45	10	22	20	80	12	40	M20 x100		
392	280	35	610	45	10	22	20	80	12	40	M20 x100		
430	290	35	650	45	10	22	20	80	12	40	M20 x100		
451	310	40	700	55	10	22	25	80	12	40	M20 x110		
474	320	40	720	55	10	22	25	80	12	40	M20 x110		
492	330	40	740	55	10	22	25	80	12	40	M20 x110		
530	350	40	780	55	10	22	25	80	12	40	M20 x110		
548	360	40	800	55	10	22	25	80	12	40	M20 x110		

NPS MARK & INS.
THK. MARK: (1)&(2)

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

1-TYPE MARK
2-NPS MARK
3-INSULATION THK. MARK

NOTE:
1-FOR DETAIL OF CRADLE SEE (G-04).

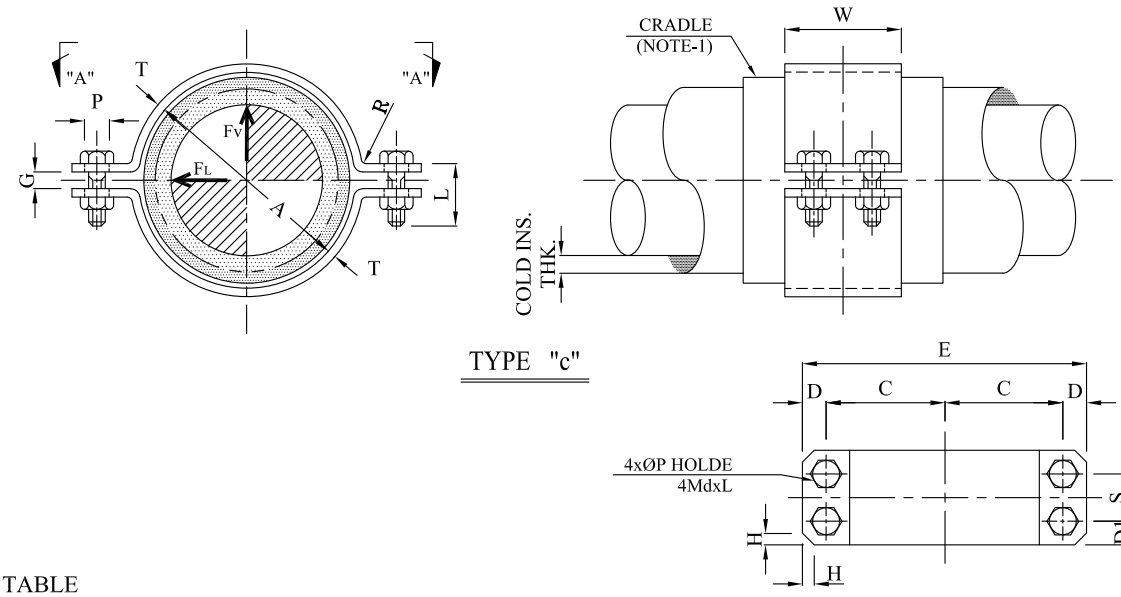
MATERIAL:
BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:

SIMPLE COLD CLAMP
2" ~ 5"
SK-03

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: 300 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



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	M16 x105	430	1300
324	220	40	520	38	10	18	15	100	15	25	50	M16 x105		
374	260	40	600	45	10	18	20	100	15	25	50	M16 x105		
392	270	40	620	45	10	18	20	100	15	25	50	M16 x105		
430	290	40	660	45	10	18	20	100	15	25	50	M16 x105		
474	320	40	720	55	10	18	25	100	15	25	50	M16 x105		
492	330	40	740	55	10	18	25	100	15	25	50	M16 x105		
530	350	40	780	55	10	18	25	100	15	25	50	M16 x105		
578	390	40	860	60	10	18	30	100	15	25	50	M16 x105		
630	415	50	930	60	15	22	30	120	20	30	60	M20 x130	550	2500
678	440	50	980	60	15	22	30	120	20	30	60	M20 x130		
730	465	50	1030	60	15	22	30	120	20	30	60	M20 x130		
778	495	50	1090	60	15	22	30	120	20	30	60	M20 x130		
830	520	50	1140	60	15	22	30	120	20	30	60	M20 x130		
870	540	50	1180	60	15	22	30	120	20	30	60	M20 x130		
920	565	50	1230	60	15	22	30	120	20	30	60	M20 x130		
970	595	50	1290	60	15	22	35	120	20	30	60	M20 x130		

NPS MARK & INS.
THK. MARK: (1)&(2)

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 - 03 - □ - □□□

(1) (2) (3)

1-TYPE MARK
2-NPS MARK
3-INSULATION THK. MARK

NOTE:
1-FOR DETAIL OF CRADLE SEE (G-04).

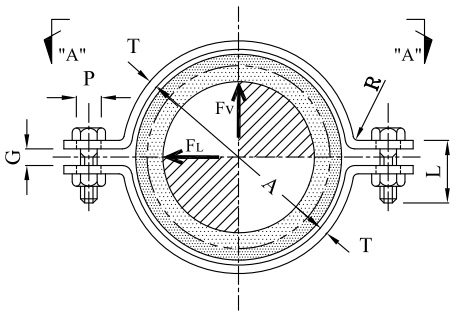
MATERIAL:
BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:

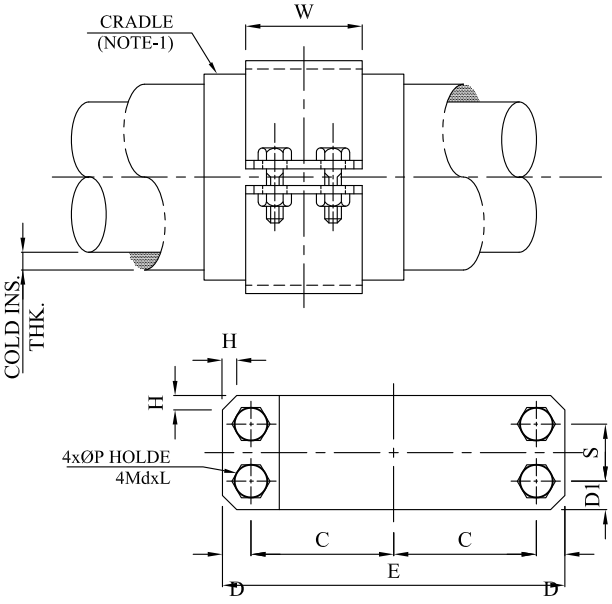
SIMPLE COLD CLAMP
6" ~ 18"
SK-03

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: 301 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



TYPE "D"



VIEW "A"~"A"

DIMENSION TABLE

CLAMP BODY												MACHINE BOLT MdxL	ALLOWABLE LOAD (kg)	
A	C	D	E	G	H	P	R	W	T	D1	S		FL	Fv
630	415	50	930	60	15	22	30	130	20	35	60	M20x130	650	3600
678	440	50	980	60	15	22	30	130	20	35	60	M20x130		
730	465	50	1030	60	15	22	30	130	20	35	60	M20x130		
778	495	50	1090	60	15	22	30	130	20	35	60	M20x130		
830	520	50	1140	60	15	22	30	130	20	35	60	M20x130		
870	540	60	1200	60	20	26	30	180	25	50	80	M24x145	800	5500
920	565	60	1250	60	20	26	30	180	25	50	80	M24x145		
970	595	60	1310	60	20	26	35	180	25	50	80	M24x145		
1020	620	60	1360	60	20	26	35	180	25	50	80	M24x145		
1070	645	60	1410	60	20	26	35	180	25	50	80	M24x145		
1120	670	60	1460	60	20	26	35	180	25	50	80	M24x145		
1170	700	60	1520	60	20	26	40	180	25	50	80	M24x145		2900
1420	725	60	1570	60	20	26	40	180	25	50	80	M24x145		
1270	750	60	1620	60	20	26	40	180	25	50	80	M24x145		
1320	775	60	1670	60	20	26	40	180	25	50	80	M24x145		
1370	800	60	1720	60	20	26	40	180	25	50	80	M24x145		

NPS MARK & INS.
THK. MARK: (1)&(2)

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 - 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
20" ~ 30"
SK-03

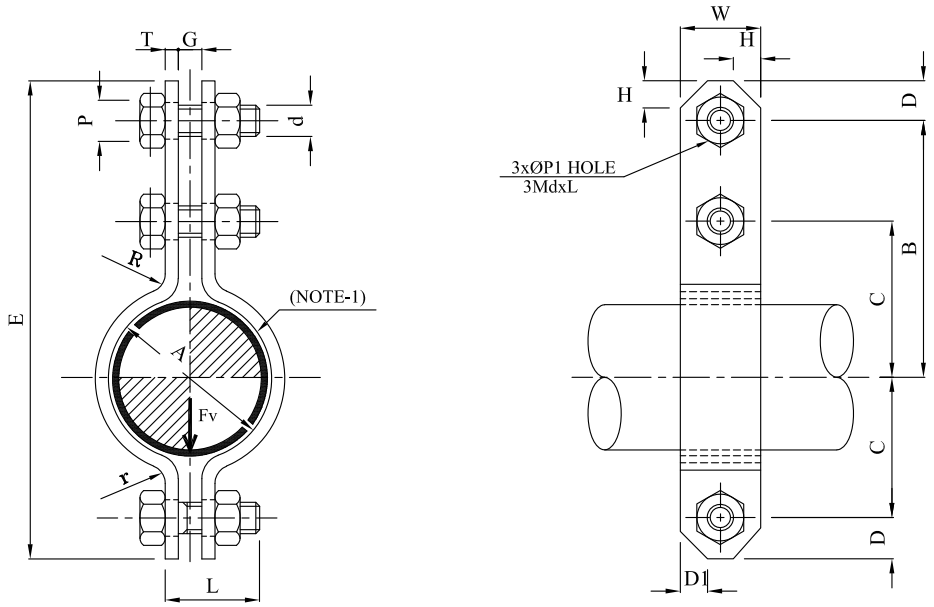
SHEET 4 OF 4

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	D00



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: (1)&(2)

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).

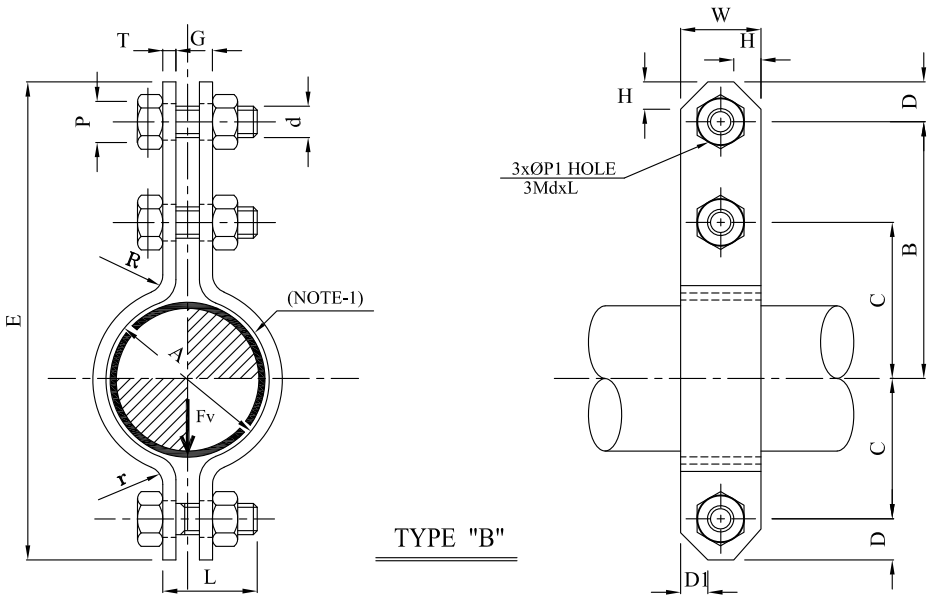
MATERIAL:
BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:
HANGING COLD CLAMP
1/2" ~ 1 1/2"
SK-04

SHEET 1 OF 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: 303 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	PI	DW	0001	D00



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	
254	270	160	35	500	32	10	16	10	50	10	25	M20x90	
274	300	190	35	560	38	10	16	10	80	10	40	M20x90	
279	305	195	35	570	38	10	16	10	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: (1)&(2)

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	392	324	351
3	101-150	T=150	374	392	392	430	454
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:

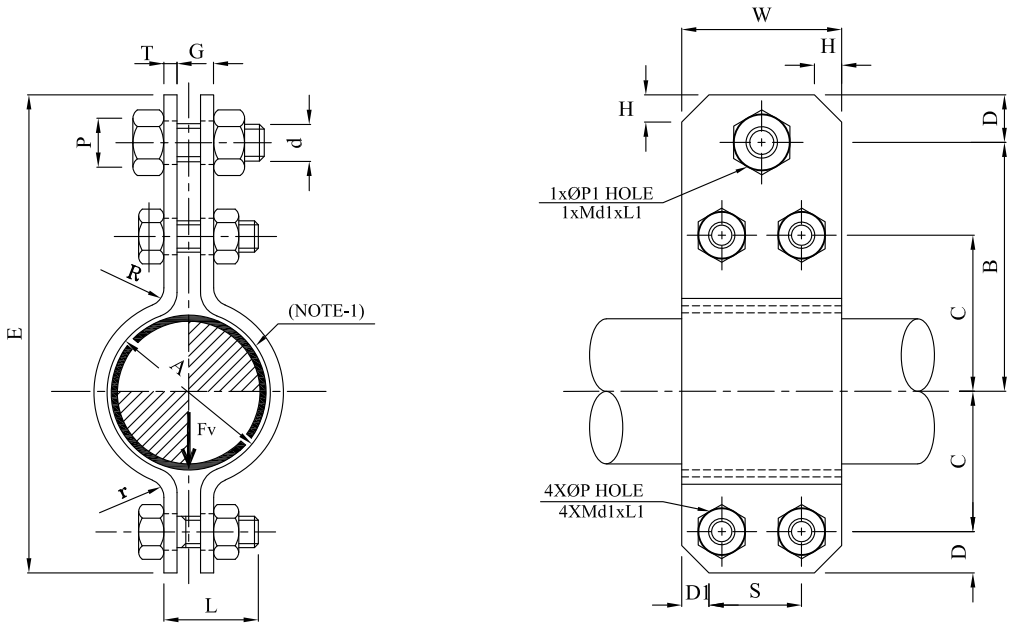
HANGING COLD CLAMP
2" ~ 5"
SK-04

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	D00



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:

HANGING COLD CLAMP
6" ~ 18"
SK-04

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
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: (1)&(2)

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	438	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:

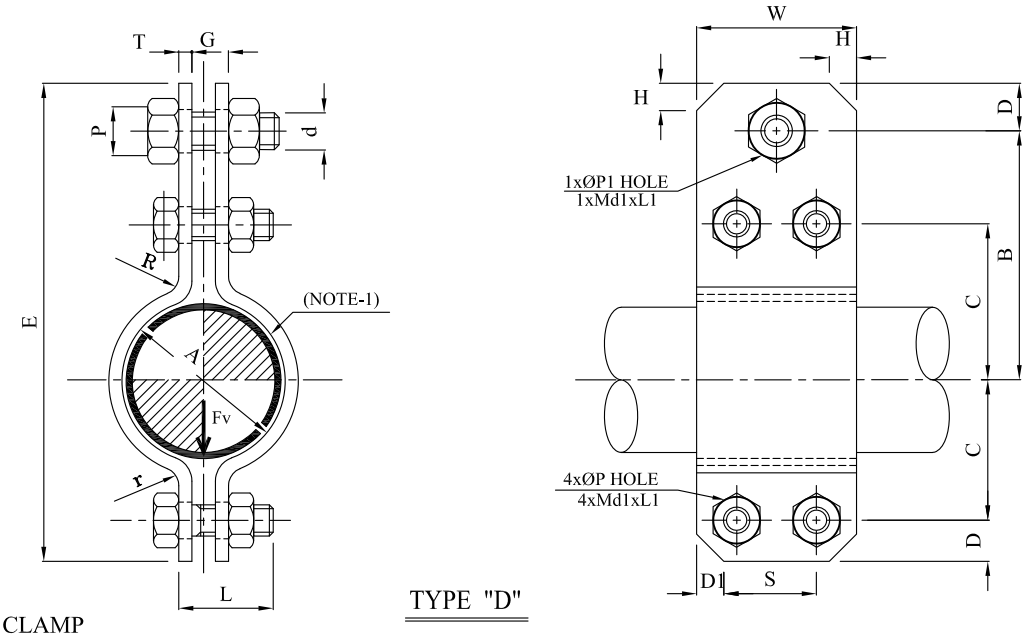
HANGING COLD CLAMP
6" ~ 18"
SK-04

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	D00



TYPE "D"

TABLE OF PIPE CLAMP

CLAMP BODY													MACHINE BOLT MdxL	MACHINE BOLT MdxLl	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	
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	1100
778	695	495	50	1290	60	15	22	30	130	20	35	60	M20x130	M30x150	
830	720	520	50	1340	60	15	22	30	180	20	35	60	M20x130	M30x150	
870	740	540	60	1400	60	20	26	30	180	25	50	80	M24x145	M33x170	
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	30	150	25	50	80	M24x145	M33x170	1500
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: (1)&(2)

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).

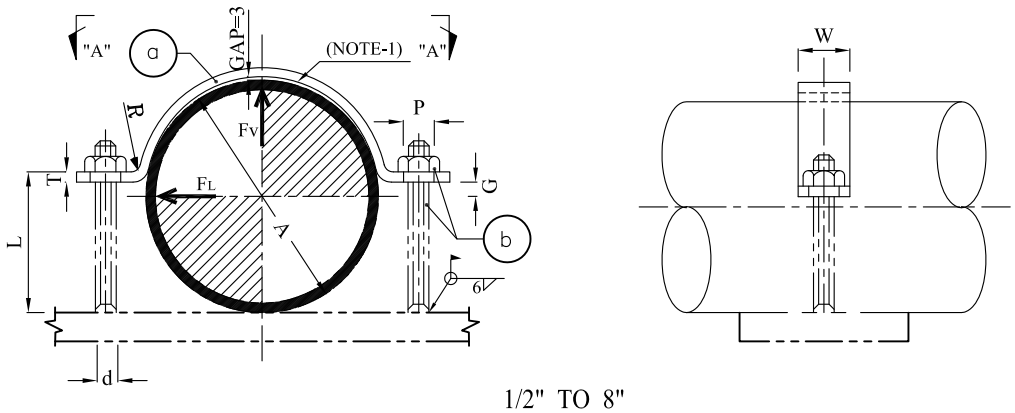
MATERIAL:
BOLT & NUT: A325, PLATE: A283 Gr.C

SUPPORT DESCRIPTION:
HANGING COLD CLAMP
20" ~ 30"
SK-04

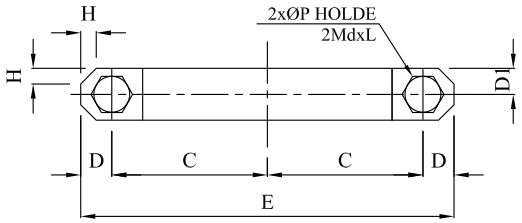
SHEET 5 OF 5

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: 307 از 307
053-073-9184	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	PI	DW	0001	D00	



1/2" TO 8"



VIEW "A" ~ "A"

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"	27	25	15	80	7	5	15	0	12	10	30	5	M10x45	150	170
0B	3/4"	32	30	15	90	7	5	15	0	12	10	30	5	M10x45		
01	1"	39	35	15	100	7	5	20	0	12	10	40	5	M10x55		
1A	1 1/2"	54	50	15	130	7	5	20	0	12	10	40	5	M10x55		
02	2"	66	55	15	140	7	5	20	0	16	10	40	8	M14x75	230	400
2A	2 1/2"	79	65	15	160	7	5	20	0	16	10	40	8	M14x85		
03	3"	95	75	15	180	7	5	20	0	16	10	40	8	M14x85		
04	4"	120	95	25	240	7	10	25	0	22	10	50	10	M20x120	350	560
05	5"	147	115	25	280	7	10	25	0	22	10	50	10	M20x120		
06	6"	174	140	35	350	17	10	40	0	22	15	80	12	M24x150	500	1000
08	8"	225	165	35	400	17	10	40	0	22	15	80	12	M24x170		

MATERIAL MARK: (1)

DES. TEMP \ MATERIAL OF RUN PIPE / MEMBER		CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
	MARK	A	D	G
0° C TO 350°C	ⓐ	A283 Gr.C	A283 Gr.C	A283 Gr.C
	ⓑ	A325	A325	A325
	Ⓒ	-	-	-

INDICATION:

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

1-TYPE 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.

SUPPORT DESCRIPTION:

WELDED CLAMP
1/2" ~ 8"
SK-05

SHEET	1 OF 1