
 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک								
	MECHANICAL DATA SHEETS FOR DIESEL OIL DRUM								
شماره پیمان: ۰۵۳ - ۰۲۳ - ۹۱۸۴	پروژه: BK	بسته کاری: GCS	صادر کننده: PEDCO	تسهیلات: 120	رشته: ME	نوع مدرک: DT	سریال: 0007	نسخه: D00	شماره صفحه: ۸ از ۱

طرح نگهداشت و افزایش تولید ۲۷ مخزن

MECHANICAL DATA SHEETS FOR DIESEL OIL DRUM (V-2206)

نگهداشت و افزایش تولید میدان نفتی بینک



D00	DEC.2021	IFC	H.Adineh	M.Fakharian	M.Mehrshad	
Rev.	Date	Purpose of Issue / Status	Prepared by:	Checked by:	Approved by:	CLIENT Approval

Class: 2 CLIENT Doc. Number:

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

نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

MECHANICAL DATA SHEETS FOR DIESEL OIL DRUM



شماره پیمان:

۰۵۳ - ۰۷۳ - ۹۱۸۴



نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D00	0007	DT	ME	120	PEDCO	GCS	BK

شماره صفحه: ۲ از ۸



REVISION RECORD SHEET

Page	D00	D01	D02	D03	D04
1	X				
2	X				
3	X				
4	X				
5	X				
6	X				
7	X				
8	X				
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					
43					
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
63					
64					

Page	D00	D01	D02	D03	D04
65					
66					
67					
68					
69					
70					
71					
72					
73					
74					
75					
76					
77					
78					
79					
80					
81					
82					
83					
84					
85					
86					
87					
88					
89					
90					
91					
92					
93					
94					
95					
96					
97					
98					
99					
100					
101					
102					
103					
104					
105					
106					
107					
108					
109					
110					
111					
112					
113					
114					
115					
116					
117					
118					
119					
120					
121					
122					
123					
124					
125					
126					
127					
128					

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض								
	احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک								
	MECHANICAL DATA SHEETS FOR DIESEL OIL DRUM								
شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۱۸۴	پروژه BK	بسته کاری GCS	صادرکننده PEDCO	تجهیزات 120	رشته ME	نوع مدرک DT	سریال 0007	نسخه D00	شماره صفحه: ۸ از ۳

General Notes
<ol style="list-style-type: none"> The Asterisk * denotes information and/or confirmation required from VENDOR. All thicknesses given on this document shall be considered as a minimum required thickness. vendor shall checked and calculated actual thicknesses under mechanical guarantee accordingly. TJ: Confirmed Shall be advised by MFR. TJ: Please clarify this item. VENDOR shall include for the services of a independent verification body for mechanical design, stage inspection, testing and stamping of the equipment (if possible). TJ: Confirmed Painting and coating (internal & external) shall be as per project 'Specification for Painting & Lining', Doc. No. BK-GNRL-PEDCO-000-PI-SP-0006& BK-GNRL-PEDCO-000-PI-SP-0007. TJ: Confirmed Flanges shall comply with ASME B16.5 & B16.47 Series A. Nozzle bolt holes shall straddle the natural centrelines for horizontal nozzles. VENDOR to confirm maximum allowable nozzle loads and moments (RF: Raised Face, WN: Welding Neck, LWN: Long Welding Neck) TJ: Confirmed All reinforcement pads shall have 1/4" (6mm) tell-tale hole and 1/8" (3mm) vent hole as per Standard Detail Drawing For Pressure Vessels and Heat Exchangers', Doc. No. BK-GNRL-PEDCO-000-ME-DW-0001". TJ: Confirmed Manways shall be supplied complete with blind flange, external grab handles, internal grab handle and ladder rungs, nuts, bolting, gasket and proof load test davits. Davits shall be proof load tested on the vessels to 1.5 x Safe Working Load (SWL) and shall be marked accordingly. TJ: Confirmed All external bolts and nuts shall be hot dip galvanized. Internal bolts and nuts shall be stainless steel. TJ: Confirmed Loads at support base, Shall be calculated and determined by vendor. TJ: Confirmed Access Ladder & Platform to be considered . TJ: Confirmed Stand pipe connections on equipment shall be at least 3", 150# and for instruments installation on the stand pipe at least 2", 300# flanges shall be considered (on the related piping system) TJ: Confirmed All material, corrosion allowance and their suitability for the process fluid at design pressure and temperature to be confirmed by vendor. TJ: Confirmed The vendor shall be responsible for mechanical and process performance of the equipment based on mentioned condition in data sheets. TJ: Confirmed All nozzle locations and orientations will be finalized later. (by piping department) TJ: Confirmed Instrumentation items are excluded from vendor's scope of supply. TJ: Confirmed Any changes in material of construction, location & orientation of the nozzles shall be confirmed by client. TJ: Confirmed All materials shall be new and unused. TJ: Confirmed Fabrication tolerances for vessel shall be in accordance with requirement of ASME code. TJ: Confirmed Location and number of lifting lugs on vessels shall be specified on VENDOR drawing. TJ: Confirmed All items shall be clearly match marked against vessel drawings to facilitate erection. TJ: Confirmed For instrument's connections please refer to project "Specification For Instrumentation", Doc. No. BK-GNRL-PEDCO-000-IN-SP-0001 TJ: Confirmed Vendor shall supply details of all welding connections and give general specification of used materials. TJ: Confirmed For equipment requiring PWHT, final inspection and acceptance by the CLIENT or its nominated representative shall only be undertaken against NDE after PWHT. All weldings shall be made before vessel heat treatment (if any). TJ: Confirmed Equipment packaging, preparation for shipment and delivery shall be in accordance with the project Minimum Requirements for Marking, Packing, Shipment & Storage' Document No. IPS-G-GN-210. TJ: Confirmed Specified accessories and attachments shall be supplied by vendor. TJ: Confirmed Gasket shall be spiral wound type, graphite filled with inner ring and outer ring S.S.316 TJ: Confirmed Fire proofing requirement will be specified as per result of fire proofing zone layout. TJ: Confirmed Insulation shall be as per project 'Specification for Insulation', Document No. BK-GNRL-PEDCO-000-PI-SP-0019. TJ: Confirmed Two M12 earthing bosses shall be provided on vessel support. Material of Earthing Bosses shall be S.S. 316 TJ: Confirmed For standard detail of Earth lug execution refer to the Project "Standard Detail Drawing For Pressure Vessels and Heat Exchangers' Doc. No. BK-GNRL-PEDCO-000-ME-DW-0001". TJ: Confirmed Elliptical heads shall be Ultrasonic Tested for lamination after forming. TJ: RT test will be performed. The projection of equipment's nozzles should be considered as per 'Standard Detail Drawing For Pressure Vessels and Heat Exchangers', Doc. No. BK-GNRL-PEDCO-000-ME-DW-0001". TJ: Confirmed

 NISOC	<p>تکهداشت و افزایش تولید میدان نفتی بینک سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p> <p>MECHANICAL DATA SHEETS FOR DIESEL OIL DRUM</p>								
شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۱۸۴	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: ۴ از ۸
	BK	GCS	PEDCO	120	ME	DT	0007	D00	

General Notes (Cont'd)	
<p>33. The elevation of equipment's nozzels should be specified as follows :</p> <p>I. For vertical vessels : from bottom T.L. TJ: Confirmed</p> <p>II. For horizontal vessels : from Left T.L.</p> <p>34. Nozzles and flanges shall be suitably supported and reinforced based on nozzle loads provided in project Specification for Pressure Vessels, Document No. BK-GNRL-PEDCO-000-ME-SP-0001. TJ: Confirmed</p> <p>35. Prior to sealing the vessel for shipping and storage, the inside surface of the equipment shall be 100% visually inspected. Internal surfaces shall be clean and thoroughly dried. The CLIENT or its nominated representative shall witness the cleanliness of internal surfaces. Flange faces shall be protected by wooden or plastic dummy flanges. TJ: Confirmed</p> <p>36. VENDOR shall supply following items as spare parts (for all blanked off nozzles and manways. TJ: Confirmed</p> <ul style="list-style-type: none"> - Commissioning Spare Parts: 100% gasket and 10% bolting (Min 2 bolts and 4 nuts of each size) - Two Years Spare Parts: 200% gasket and 10% bolting (Min 2 bolts and 4 nuts of each size) <p>37. Lifting Lugs / trunnions shall be provided to facilitate a single point lift. If a single point lift cannot be achieved without the use of a lifting beam, then VENDOR shall provide a suitable, certified, lifting beam. TJ: Confirmed</p> <p>38. Design pressure specified is at top of vessels. VENDOR design shall include static head for vessels flooded with specific gravity of the handled liquid. TJ: Confirmed</p> <p>39. VENDOR is to maximize shop fabrication based on the following transportation limits: TJ: Confirmed</p> <ul style="list-style-type: none"> - Maximum weight: 96 tonnes - Maximum load per axle: 12 tonnes - Maximum length: 50.0 m - Maximum width: 5.0 m - Maximum height: 5.2 m <p>For items with dimensions and weights greater than the road capacity specified above, VENDOR may be required to split the package into several components.</p> <p>40. All external attachments directly welded to the pressure part shall be the same material as vessel grade. TJ: Confirmed</p> <p>41. All dimensions are in "mm" unless otherwise specified. TJ: Confirmed</p> <p>42. Nozzle loads shall be in accordance with "Specification for pressure vessel, Doc. No.: BK-GNRL-PEDCO-000-ME-SP-0001". TJ: Confirmed</p> <p>43. All nozzle must be vertical or horizontal and not perpendicular or parallel to vessel center line. TJ: Confirmed</p>	



احداث ردیف تراکم گاز در ایستگاه جمع آوری سنک

MECHANICAL DATA SHEETS FOR DIESEL OIL DRUM



شماره ۵ صفحه: ۵ از ۸

شماره پیمان:

• 03 - • 73 - 9184

پروژہ

نته کاری

صادر کنندہ

تسهيلات

روشته

نوع مدرک

سویال

	4
--	---

ف	
---	--

Mechanical Data Sheets For Diesel Oil Drum (V-2206) / sheet 1 of 4

Rev	DATA SHEET				Rev
1	Description : Diesel Oil Drum				
2	Tag No. : V-2206		Quantity : 1 Set		
3	Type : Pressure Vessel				
4	Process Design Data				
5	Contents		Corrosive / Erosive	-	
6	Operating Temp. (°C)	AMB.	Liquid Flow (kg/h)	-	
7	Operating Press. (barg)	ATM	Vap. Molec. Weight (kg/kmol)	-	
8	Gas Flow (kg/h)	-	Liquid Density (kg/m3)	860	
9	Liquid Viscosity (cP)	-	Lethal:	-	
10	Mechanical Design Data (Note 1)				
11	Design Temp. (°C)	85	Vessel Orientation	Horizontal	
12	Design Press. (barg)	3.5	HLL / LLL (mm)	2000 / 1000	
13	Test Press. (barg)	Per Code & Spec. Requirements	Nor. Liquid Vol. (m³)	28.1	
14	Internal Vacuum (barg)		In. Dia. Of Boots (mm)	-	
15	In. Dia. of Shell (mm)	2300	Boot Length (mm)	-	
16	Tan/Tan Dim. (mm)	6000	Boot Head Type	-	
17	Vessel Head Type	2:1 Elliptical (Note 23)	Corr. Allowance (mm)	1.6	
18	Shell Wall Thk. (mm)	8 (Note 1) TJ: 6 mm	Joint Efficiency	0.85 (Shell) / 1 (Head)	
19	Head Wall Thk. (mm)	6 (Note 1) TJ: 4 mm	Ambient Temp. (°C)	-	
20	Seismic Design	Zone: III, Code: ASCE 7-10	MDMT (°C)	3.24	
21	Wind Design	Speed: 110 Km/hr (Max.), Code: ASCE 7-10	Insulation Required	-	
22	Materials				
23	Code	ASME II	Internal Welded Supports	S.S.	
24	Shell	SA 516 70	Nozzle Necks	SA 106 Gr.B	
25	Heads	SA 516 70	Pipes	SA 106 Gr.B	
26	Lining	P8	Plates	SA 516 70	
27	Saddles	SA 283 Gr. C	Forgings	SA 105	
28	Wear Plate	SA 516 70	Flanges	SA 105	
29	Stiffening Rings	SA 516 70	Fittings	SA 234 Gr. WPB	
30	Gaskets	Note 26	Welded Internals	S.S.	
31	Lifting Lugs	SA 516 Gr.70 / SA 283 Gr. C	External Bolts / Nuts	SA 193 Gr. B7 / SA 194 Gr. 2H(8)	
32	Reinforcing Pads	SA 516 70	Internal Bolts / Nuts	S.S.(8)	
33	Ladder & Platform	C.S.	Insulation	NO	
34	Gratings	Hot Dip Galvanized C.S.	Name Plate	S.S. 316	
35	External Welded Clips	SA 516 Gr.70			
36					
37	REFERENCE STANDARDS & DOCUMENTS				
38	Mechanical Design Code	ASME SEC. VIII, DIV. 1, IPS-G-ME-150			
39	Specification for Pressure Vessels	BK-GNRAL-PEDCO-000-ME-SP-0001			
40	Process Basis of Design	BK-GNRAL-PEDCO-000-PR-DB-0001			
41	Piping & Instrument Diagram (P&ID)	BK-GCS-PEDCO-120-PR-PI-0023			
42	Specification for Painting	BK-GNRAL-PEDCO-000-PI-SP-0006			
43	Specification for Insulation	BK-GNRAL-PEDCO-000-PI-SP-0019			
44	Specification for Lining (Internal protection of equipment by painting)	BK-GNRAL-PEDCO-000-PI-SP-0007			
45	Fabrication and Inspection Requirements				
46	Inspection Authority	TPI & Client			
47	Material Certification	In Accordance with BS EN 10204:2004, Type 3.1, Minimum for Pressure Containing and Attachments			
48	Hydro Test Medium	Water	Hydro Test Procedure	Yes; Per Code & Spec. Requirements	
49	Post Weld Heat Treatment	Per Code & Spec. Requirements	PT	100%	
50	MT	100 % on Lifting Lug Fillet Welds	UT	Yes; Per Code & Spec. Requirements	
51	RT	100 % On T-Joints and Head Joints Butt-Welds,			
52		Spot On Shell Longitudinal and Circumferential Joints Butt-Welds,			
53		Spot On Nozzle Neck to Flange & Fabricated Nozzle Neck Longitudinal Butt-Welds,			
54	RT Report	Yes; Per Code & Spec. Requir.	PT Report	Yes; Per Code & Spec. Requirements	
55	MT Report	Yes; Per Code & Spec. Requir.	UT Report	Yes; Per Code & Spec. Requirements	
56	Fabrication Quality Control Plan (With Offer)		Yes		
57	Welding Procedure Review / Approval		Yes		
58	Surface Preparation & Coating		Per Specification for Painting with Doc. No. "BK-GNRAL-PEDCO-PI-SP-0006"		
59			Per Specification for Lining with Doc. No. "BK-GNRAL-PEDCO-PI-SP-0007"		
60					
61					
62					
63					
64					



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره صفحه: ۶ از ۸

شماره پیمان:

• 03 - • 73 - 9184

۵ و ۶

سته کاری

صادرکننده

تسهيلات

۱۷۸

ع مدرک

مال

--	--

فست	
-----	--

Mechanical Data Sheets For Diesel Oil Drum (V-2206) / sheet 2 of 4

[illegible]



NISOC

نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

MECHANICAL DATA SHEETS FOR DIESEL OIL DRUM



شماره پیمان:

۰۵۳ - ۰۷۳ - ۹۱۸۴

پروژه

BK

بسته کاری

GCS

صادرکننده

PEDCO

تسهیلات

120

رشته

ME

نوع مدرک

DT

سریال

0007

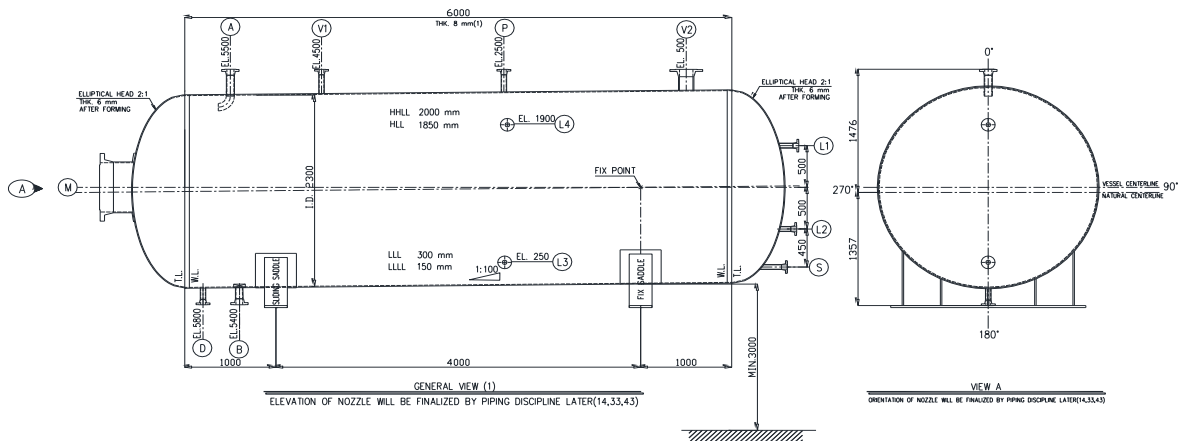
نسخه

D00

شماره صفحه: ۷ از ۸

Mechanical Data Sheets For Diesel Oil Drum (V-2206) / sheet 3 of 4

Sketch





NISOC

تکهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

MECHANICAL DATA SHEETS FOR DIESEL OIL DRUM



شماره پیمان:

۰۵۳ - ۰۷۳ - ۹۱۸۴

پروژه

BK

بسته کاری

GCS

صادر کننده

PEDCO

تسهیلات

120

رشته

ME

نوع مدرک

DT

سریال

0007

نسخه

D00

شماره صفحه: ۸ از ۸

Mechanical Data Sheets For Diesel Oil Drum (V-2206) / sheet 4 of 4

Rev.	WEIGHT						Rev.
1	WEIGHT CONTROL DATA SHEET SI UNIT *					1/1	
2							
3							
4							
5							
6	Service : Diesel Oil Drum			Location : Bushehr			
7	Type :			Quotation No.			
8	No. trains : -			Serial No.			
9	No. stages : -						
10	Supplier :						
11	Manufacturer :						
12	Model :						
13	Note: Information to be completed by equipment vendor.						
14							
15							
16	Total weight (kg) *						
17	Fabrication	Erection	Operation	Hydrostatic Test	Removable internal	Ladder & Platform	
18							
19							
20							
21							
22							
23	WEIGHT AND C OF G DATA REQUIRED *						
24	CONDITION	WEIGHT ACCURACY %	WEIGHT (kg)	CENTER OF GRAVITY (mm)			
25				X	Y	Z	
26	Dry						
27							
28							
29							
30	SKETCH						
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							
49							
50							
51							
52	NOTES						
53	1) All lifting points to be load tested and certified.						
54	2) Any spreader beam to be load tested and certified.						
55	3) Lifting / rigging plan for skid mounted equipment to be provided by the Vendor.						
56							
57							
58							
59							
60							
61							
62							
63							