
 <b>NISOC</b>	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک								
	MECHANICAL DATA SHEETS FOR INSTRUMENT AIR RECEIVER								
شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۱۸۴	پروژه BK	بسته کاری GCS	صادر کننده PEDCO	تسهیلات 120	رشته ME	نوع مدرک DT	سریال 0008	نسخه D01	شماره صفحه: ۸ از ۱

## طرح نگهداشت و افزایش تولید ۲۷ مخزن

### MECHANICAL DATA SHEETS FOR INSTRUMENT AIR RECEIVER

#### نگهداشت و افزایش تولید میدان نفتی بینک



D01	SEP. 2022	IFA	H.Adineh	M.Fakharian	M.Mehrshad	
D00	NOV.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: F0Z-708839

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

 <b>NISOC</b>	<b>نگهداشت و افزایش تولید میدان نفتی بینک</b> <b>سطح الارض</b> <b>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</b>							 	
	<b>MECHANICAL DATA SHEETS FOR INSTRUMENT AIR RECEIVER</b>								
شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۱۸۴	پروژه BK	بسته کاری GCS	صادر کننده PEDCO	تسهیلات 120	رشته ME	نوع مدرک DT	سریال 0008	نسخه D01	شماره صفحه: ۸ از ۲



### REVISION RECORD SHEET

Page	D00	D01	D02	D03	D04	Page	D00	D01	D02	D03	D04
1	X	X				65					
2	X	X				66					
3	X	X				67					
4	X	X				68					
5	X	X				69					
6	X	X				70					
7	X	X				71					
8	X	X				72					
9						73					
10						74					
11						75					
12						76					
13						77					
14						78					
15						79					
16						80					
17						81					
18						82					
19						83					
20						84					
21						85					
22						86					
23						87					
24						88					
25						89					
26						90					
27						91					
28						92					
29						93					
30						94					
31						95					
32						96					
33						97					
34						98					
35						99					
36						100					
37						101					
38						102					
39						103					
40						104					
41						105					
42						106					
43						107					
44						108					
45						109					
46						110					
47						111					
48						112					
49						113					
50						114					
51						115					
52						116					
53						117					
54						118					
55						119					
56						120					
57						121					
58						122					
59						123					
60						124					
61						125					
62						126					
63						127					
64						128					



Rev	Description	U01
	1. The Asterisk * denotes information and/or confirmation required from VENDOR. TJ: Confirmed	
D01	2. Deleted	
	3. 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	
D01	4. Painting and coating (internal & external) shall be as per project 'Specification for Painting', Doc. No. BK-GNRL-PEDCO-000-PI-SP-0006. and Specification For Lining Doc. No. BK-GNRL-PEDCO-000-PI-SP-0007 respectively. TJ: Confirmed	
D01	5. Flanges shall comply with ASME B16.5. Nozzle bolt holes shall straddle the natural centrelines for horizontal nozzles. TJ: Confirmed VENDOR to confirm maximum allowable nozzle loads and moments (RF: Raised Face, WN: Welding Neck)	
	6. 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	
	7. 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	
	8. All external bolts and nuts shall be hot dip galvanized. Internal bolts and nuts shall be stainless steel. TJ: Confirmed	
	9. Loads at support base, Shall be calculated and determined by vendor. TJ: Confirmed	
	10. Access Ladder & Platform to be considered . TJ: Confirmed	
D01	11. Deleted	
	12. All material, corrosion allowance and their suitability for the process fluid at design pressure and temperature to be confirmed by vendor. TJ: Confirmed	
D01	13. The vendor shall be responsible for mechanical strength of the equipment based on mentioned condition in data sheets. TJ: Confirmed	
D01	14. All nozzle locations and orientations to be finalized later. TJ: Confirmed	
	15. Instrumentation items are excluded from vendor's scope of supply. TJ: Confirmed	
	16. Any changes in material of construction, location & orientation of the nozzles shall be confirmed by client. TJ: Confirmed	
	17. All materials shall be new and unused. TJ: Confirmed	
	18. Fabrication tolerances for vessel shall be in accordance with requirement of ASME code. TJ: Confirmed	
	19. Location and number of lifting lugs on vessels shall be specified on VENDOR drawing. TJ: Confirmed	
	20. All items shall be clearly match marked against vessel drawings to facilitate erection. TJ: Confirmed	
D01	21. Deleted	
	22. Vendor shall supply details of all welding connections and give general specification of used materials. TJ: Confirmed	
	23. 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	
	24. 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	
	25. Specified accessories and attachments shall be supplied by vendor. TJ: Confirmed	
	26. Gasket shall be spiral wound type, graphite filled with inner ring and outer ring S.S.316 TJ: Confirmed	
D01	27. Deleted	
D01	28. Deleted	
	29. Two M12 earthing bosses shall be provided on vessel support. Material of Earthing Bosses shall be S.S. 316 TJ: Confirmed	



		<p>نگهداشت 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 INSTRUMENT AIR RECEIVER</p>									
شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۱۸۴		پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: ۸ از ۵	
		BK	GCS	PEDCO	120	ME	DT	0008	D01		
Mechanical Data Sheets For Instrument Air Receiver (V-2203) / sheet 1 of 4											
Rev	DATA SHEET										Rev
	1	Description : <i>Instrument Air Receiver</i>									
	2	Tag No. : <i>V-2203</i>		Quantity : <i>1 Set</i>							
	3	Type : <i>Pressure Vessel</i>									
	4	Process Design Data <span style="float: right;">D01</span>									
	5	Contents		Corrosive / Erosive							
	6	Operating Temp. (°C)	<i>65</i>		Liquid Flow (kg/h)						
	7	Operating Press. (barg)	<i>8</i>		Vap. Molec. Weight (kg/kmol)						
	8	Gas Flow (kg/h)			Liquid Sp. Gravity						
	9	Liquid Viscosity (cP)			Service:	<i>N/A</i>					
	10	Mechanical Design Data <span style="float: right;">D01</span>									
	11	Design Temp. (°C)	<i>85</i>		Vessel Orientation	<i>Vertical</i>					
D01	12	Design Press. (barg)	<i>12.5</i>		HHLL (mm)	<i>300</i>					D01
	13	Test Press. (barg)	<i>Per Code &amp; Spec Requirements</i>								
	14	Internal Vacuum (barg)	<i>-</i>		Nor. Liquid Vol. (m³)	<i>N/A</i>					
D01	15	In. Dia. of Shell (mm)	<i>1500</i>		In. Dia. Of Boots (mm)	<i>N/A</i>					
D01	16	Tan/Tan Dim. (mm)	<i>5000</i>		Boot Length (mm)	<i>N/A</i>					
	17	Vessel Head Type	<i>2:1 elliptical</i>		Boot Head Type	<i>N/A</i>					
D01	18	Shell Wall Thk. (mm)	<i>* TJ: 10 mm</i>		Corr. Allowance (mm)	<i>1.6</i>					
D01	19	Head Wall Thk. (mm)	<i>* (After forming) TJ: 6 mm</i>		Joint Efficiency	<i>0.7 (Skirt)/0.85 (Shell) / 1 (Head)</i>					
	20	Seismic Design	<i>Zone: III, Code: ASCE 7-10</i>		Ambient Temp. (°C)	<i>5</i>					D01
	21	Wind Design	<i>Speed: 110 Km/hr (Max.), Code: ASCE 7-10</i>		MDMT (°C)	<i>-</i>					
	22	Insulation Required <span style="float: right;">D01</span>									
	23	Materials									
D01	24	Code	<i>ASME II / ASTM</i>		Nozzle Necks:						
D01	25	Shell / Heads	<i>A 516 Gr. 70</i>		Pipes	<i>A 106 Gr.B</i>					D01
D01	26	Heads	<i>A 516 Gr. 70</i>		Plates	<i>A 516 Gr.70</i>					D01
	27	Lining / Cladding	<i>Epoxy Coating</i>		Forgings	<i>A 105</i>					D01
D01	28	Skirt (Top / Bottom)	<i>A 516 Gr. 70 / A 283 Gr. C</i>		Flanges	<i>A 105</i>					D01
	29	Platform Gratings	<i>Hot Dip Galvanized C.S.</i>		Fittings	<i>A 234 Gr. WPB</i>					D01
	30	Gaskets	<i>Note 26</i>		External Bolts	<i>A 193 Gr. B7 (Note 8)</i>					D01
D01	31	Lifting Lugs	<i>A 516 Gr.70 / A 283 Gr. C</i>		External Nuts	<i>A 194 Gr.2H (Note 8)</i>					D01
D01	32	Reinforcing Pads	<i>A 516 Gr.70</i>		Internal Bolts / Nuts	<i>S.S.</i>					
	33	Ladder & Platform	<i>C.S.</i>		Name Plate	<i>S.S. 316</i>					
	34	REFERENCE STANDARDS & DOCUMENTS									
	35	Mechanical Design Code	<i>ASME Sec VIII Div 1, IPS-G-ME-150</i>								
	36	Specification for Pressure Vessels	<i>BK-GNRAL-PEDCO-000-ME-SP-0001</i>								
	37	Process Basis of Design	<i>BK-GNRAL-PEDCO-000-PR-DB-0001</i>								
	38	Piping & Instrument Diagram (P&ID)	<i>BK-GCS-PEDCO-120-PR-PI-0015</i>								
	39	Specification for Painting	<i>BK-GNRAL-PEDCO-000-PI-SP-0006</i>								
	40	Specification for Insulation	<i>BK-GNRAL-PEDCO-000-PI-SP-0019</i>								
	41	Specification For Material Requirements in Sour service	<i>BK-GNRAL-PEDCO-000-PI-SP-0008</i>								
	42	Fabrication and Inspection Requirements									
	43	Inspection Authority	<i>TPI &amp; Client</i>								
	44	Material Certification	<i>In Accordance with BS EN 10204:2004, Type 3.1, Minimum for Pressure Containing and Attachments</i>								
	45	Hydro Test Medium	<i>Water</i>		Hydro Test Procedure	<i>Yes; Per Code &amp; Spec. Requirements</i>					
	46	Post Weld Heat Treatment	<i>Per Code &amp; Spec. Requirements</i>		PT	<i>100%</i>					
	47	MT	<i>100 % on Lifting Lug Fillet Welds</i>		UT	<i>Yes; Per Code &amp; Spec. Requirements</i>					
	48	RT	<i>100 % On T-Joints and Head Joints Butt-Welds,</i>								
	49		<i>Spot On Shell Longitudinal and Circumferential Joints Butt-Welds,</i>								
	50		<i>100 % On Nozzle Neck to Flange &amp; Fabricated Nozzle Neck Longitudinal Butt-Welds,</i>								
	51	RT Report	<i>Yes; Per Code &amp; Spec. Require.</i>		PT Report	<i>Yes; Per Code &amp; Spec. Requirements</i>					
	52	MT Report	<i>Yes; Per Code &amp; Spec. Require.</i>		UT Report	<i>Yes; Per Code &amp; Spec. Requirements</i>					
	53	Fabrication Quality Control Plan (With Offer)	<i>Yes</i>								
	54	Welding Procedure Review / Approval	<i>Yes</i>								
	55	Surface Preparation & Coating	<i>Specification for Painting Doc. No. BK-GNRAL-PEDCO-000-PI-SP-0006</i>								
	56		<i>Specification for Lining Doc. No. BK-GNRAL-PEDCO-000-PI-SP-0007</i>								
	57										
	58										
	59										
	60										
	61										



## احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

## MECHANICAL DATA SHEETS FOR INSTRUMENT AIR RECEIVER



شماره صفحه: ۶ از ۸

شماره پیمان:

• 03 - • 73 - 9184

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D01	0008	DT	ME	120	PEDCO	GCS	BK

Mechanical Data Sheets For Instrument Air Receiver (V-2203) / sheet 2 of 4

Rev.

ACCESSORIES , NOZZLES LIST & LOADS @ BASE

Rev.

1

Accessories & Attachments (Note 25)

D01

2

Supporting Saddles

NO

Name Plate Bracket

YES

3

Access Ladder & Platform

YES

Name Plate

YES

4

Insulation Support

NO

Earthing Lug (Note 30)

YES

5

Insulation

NO

Tailing Lug

YES

6

Insulation Cover

NO

Cathodic Protection (Sacrificial Anodes)

NO

7

Fireproofing Support

NO

Anchor Bolts

NO

8

Lifting Lugs

YES

Instrumentations

NO

9

Internal/ External Clips

YES

Skid

NO

10

Tamplate

YES

Support Clips

YES

11

Boot

NO

Vortex Breaker

NO

12

Davit for Manhole

YES

Rung & Grip

NO

13

Internal Lining (By Painting)

YES

Heating Coil

NO

14

15

16

17

18

Nozzles List (Note 1)

D01

19

Mark

Qty.

Description

Pipe

Size

Thk.

Sch.

Flange

Type

Rate.

Face

Proj. (mm)

(Note 32)

Reinforcement

Thk.

O.D.

Remarks

20

A

1

Inlet

2"

WN

#150

RF

965\*

21

B

1

Gas Outlet

2"

WN

#150

RF

See DWG

22

PSV

1

Pressure Safety Valve

2"

WN

#150

RF

965\*

23

V

1

Vent

2"

WN

#150

RF

See DWG

24

M

1

Manhole

24"

WN

#150

RF

115

\*

\*

Note 7

25

P

1

Pressure Gauge

2"

WN

#300

RF

965

26

D

1

Drain

2"

WN

#150

RF

See DWG

27

L 1,2

2

Level Gauge

2"

WN

#300

RF

965

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

Wind and Seismic Loads at Base \* Note(9)

44

Load Condition

Max. Shear @ Base (Kg)

Max. Moment @ Base (Kg.m)

Weight (Kg)

Operating Condition

Max. Shear @ Base (Kg)

Max. Moment @ Base (Kg.m)

Weight (Kg)

Testing Condition

Max. Shear @ Base (Kg)

Max. Moment @ Base (Kg.m)

Weight (Kg)

45

1

2

3

4

5

6

7

8

46

WIND

47

48

SEISMIC

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65



NISOC

نگهداشت و افزایش تولید میدان نفتی بینک  
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

MECHANICAL DATA SHEETS FOR INSTRUMENT AIR RECEIVER



شماره پیمان:

۰۵۳ - ۰۷۳ - ۹۱۸۴

پروژه

BK

پسته کاری

GCS

صادر کننده

PEDCO

تسهیلات

120

رشته

ME

نوع مدرک

DT

سریال

0008

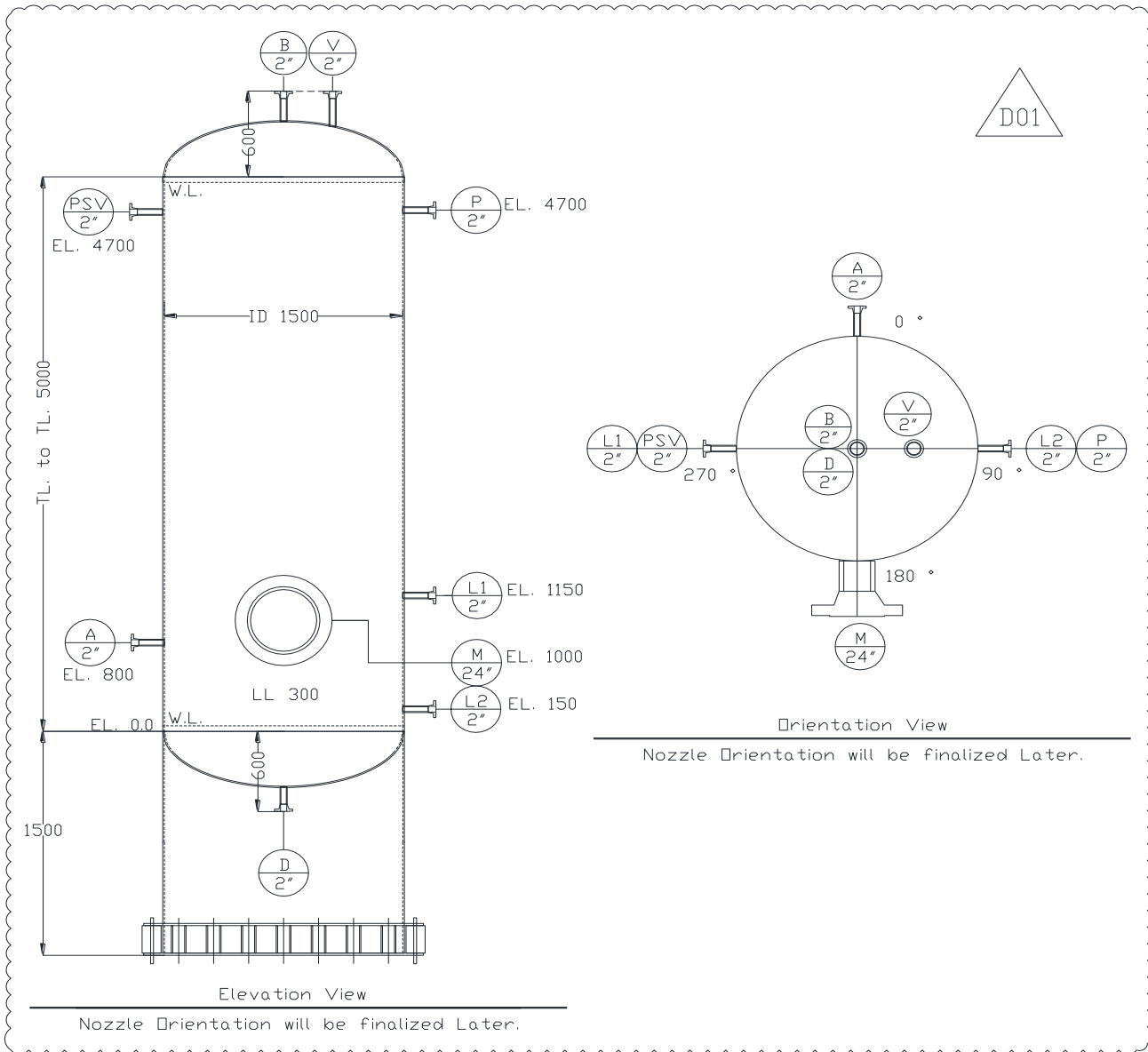
نسخه

D01

شماره صفحه: ۸ از ۷

Mechanical Data Sheets For Instrument Air Receiver (V-2203) / sheet 3 of 4

Sketch





نگهداشت و افزایش تولید میدان نفتی بینک  
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

MECHANICAL DATA SHEETS FOR INSTRUMENT AIR RECEIVER



شماره پیمان:

۰۵۳ - ۰۷۳ - ۹۱۸۴

پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	ME	DT	0008	D01

شماره صفحه: ۸ از ۸

Mechanical Data Sheets For Instrument Air Receiver (V-2203) / sheet 4 of 4

Rev.	WEIGHT						Rev.	
1	<b>WEIGHT CONTROL DATA SHEET</b> SI UNIT *					D01	1/1	D01
2								
3								
4								
5								
6	Service :	Instrument Air Receiver				Location :	Bushehr (Binak Oilfield)	
7	Type :					Quotation No. :		
8	No. trains :					Serial No. :		
9	No. stages :							
10	Supplier :							
11	Manufacturer :							
12	Model :							
13								
14	Note: Information to be completed by equipment vendor.							
15								
16	<b>Total weight (kg) *</b>							
17	Fabrication	Erection	Operation	Hydrostatic Test	Removable internal	Ladder & Platform		
18								
19								
20								
21								
22								
23	<b>WEIGHT AND C OF G DATA REQUIRED *</b>							
24	CONDITION	WEIGHT ACCURACY %	WEIGHT (kg)	CENTER OF GRAVITY (mm)				
25				X	Y	Z		
26	Dry							
27								
28								
29								
30	<b>SKETCH</b>							
31								
32								
33								
34								
35								
36								
37								
38								
39								
40								
41								
42								
43								
44								
45								
46								
47								
48								
49								
50								
51								
52	<b>NOTES</b>							
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								