

OIL & GAS DEVELOPMENT COMPANY LIMITED
PROCUREMENT DEPARTMENT, ISLAMABAD
FOREIGN SECTION E

(To be completed, filled in, signed and stamped by the principal)

1/17

ANNEXURE 'A'

Material PRESSURE TRANSMITTERS WITH MANIFOLD, FLOW TRANSMITTERS, FLOW ELEMENTS AND TEMPERATURE TRANSMITTERS FOR NEW DCS AT DAKHNI PLANT.
Tender Enquiry No PROC-FE/CB/P&P/DKN-2060/2017
Due Date
Evaluation Criteria FULL

SCHEDULE OF REQUIREMENT

Sr No	Description	Unit	Quantity	Unit Price (FOB)	Total Price (FOB)	Unit Price C & F BY SEA	Total Price C & F BY SEA	Deviated From Tender Spec. If Any
1	Diff.Pressure Transmitter with Manifold, Tag No. 20-PDIT- 02, Sate/ Service Vapor, °P (Max./ Oper/ Min) (Psig)5/-/0, Calibration Range (Psig) 0 5, Measuring Range (Psig). 0 15	Number	1					
2	Diff.Pressure Transmitter with Manifold,Tag No. 40-PDIT- 15, Sate/ Service Liquid, °P (Max./ Oper/ Min) (Psig) 5/ 1.5/0, Calibration Range (Psig) 0 5, Measuring Range (Psig). 0 15	Number	1					
3	Diff.Pressure Transmitter with Manifold,Tag No. 40-PDIT- 16, Sate/ Service Liquid, °P (Max./ Oper/ Min) (Psig) 5/ 1.5/0, Calibration Range (Psig) 0 5, Measuring Range (Psig). 0 15	Number	1					
4	Diff.Pressure Transmitter with Manifold,Tag No. 60-PDIT- 15, Sate/ Service Liquid, °P (Max./ Oper/ Min) (Psig) 5/ 1.5/0, Calibration Range (Psig) 0 5, Measuring Range (Psig). 0 15	Number	1					
5	Diff.Pressure Transmitter with Manifold,Tag No. 60-PDIT- 16, Sate/ Service Liquid, °P (Max./ Oper/ Min) (Psig) 5/ 1.5/0, Calibration Range (Psig) 0 5, Measuring Range (Psig). 0 15	Number	1					
6	Flow Element with flanges (Orifice Plate),Tag No. 20 FE 03, (Detailed specification in attachment).	Number	1					
7	Flow Element with flanges (Orifice Plate),Tag No. 20 FE 15, (Detailed specification in attachment).	Number	1					
8	Flow Element with flanges (Orifice Plate),Tag No. 40 FE 15, (Detailed specification in attachment).	Number	1					
9	Flow Element with flanges (Orifice Plate),Tag No. 50 FE 15, (Detailed specification in attachment).	Number	1					
10	Flow Element with flanges (Orifice Plate),Tag No. 60 FE 13, (Detailed specification in attachment).	Number	1					
11	Flow Element with flanges (Orifice Plate),Tag No. 60 FE 15, (Detailed specification in attachment).	Number	1					
12	Flow Element with flanges (Orifice Plate),Tag No. 801 FE 01, (Detailed specification in attachment).	Number	1					
13	Flow Element with flanges (Orifice Plate),Tag No. 801 FE 03, (Detailed specification in attachment).	Number	1					
14	Flow Element with flanges (Orifice Plate),Tag No. 802 FE 01, (Detailed specification in attachment).	Number	1					
15	Flow Element with flanges (Orifice Plate),Tag No. 806 FE 01, (Detailed specification in attachment).	Number	1					
16	Flow Element with flanges (Orifice Plate),Tag No. 806 FE 02, (Detailed specification in attachment).	Number	1					
17	Flow Element with flanges (Orifice Plate),Tag No. 806 FE 03, (Detailed specification in attachment).	Number	1					
18	Flow Element with flanges (Orifice Plate),Tag No. 830 FE 06, (Detailed specification in attachment).	Number	1					
19	Flow Element with flanges (Orifice Plate),Tag No. 830 FE 07, (Detailed specification in attachment).	Number	1					
20	Flow Element with flanges (Orifice Plate),Tag No. 903 FE 01, (Detailed specification in attachment).	Number	1					
21	Flow Transmitter with manifold. (Tag No. 20 FT 03), Calibration Range. 0 100 (inH2O), Measuring Range. 0 250 (inH2O). Display Flow Range. 0 112700 (lb/hr)	Number	1					

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22	Flow Transmitter with manifold, Tag No. 100 FT 02, Calibration Range. 0 100 (inH2O), Measuring Range. 0 250 (inH2O). Display Flow Range. N/A	Number	1
23	Flow Transmitter with manifold, Tag No. 100 FT 06, Calibration Range. 0 100 (inH2O), Measuring Range. 0 250 (inH2O). Display Flow Range. N/A	Number	1
24	Flow Transmitter with manifold, Tag No. 20 FT 15, Calibration Range. 0 100 (inH2O), Measuring Range. 0 250 (inH2O). Display Flow Range. 0 2700 (lb/hr)	Number	1
25	Flow Transmitter with manifold, Tag No. 30 FT 01, Calibration Range. 0 10 (inH2O), Measuring Range. 0 100 (inH2O). Display Flow Range. 0 7325 (lb/hr)	Number	1
26	Flow Transmitter with manifold, Tag No. 40 FT 05, Calibration Range. 0 10 (inH2O), Measuring Range. 0 50 (inH2O). Display Flow Range. 0 10 (USGPM)	Number	1
27	Flow Transmitter with manifold, Tag No. 40 FT 15, Calibration Range. 0 100 (inH2O), Measuring Range. 0 250 (inH2O). Display Flow Range. 0 486400 (lb/hr)	Number	1
28	Flow Transmitter with manifold, Tag No. 50 FT 15, Calibration Range. 0 100 (inH2O), Measuring Range. 0 250 (inH2O). Display Flow Range. 0 65000 (lb/hr)	Number	1
29	Flow Transmitter with manifold, Tag No. 60 FT 07, Calibration Range. 0 100 (inH2O), Measuring Range. 0 250 (inH2O). Display Flow Range. 0 48 (USGPM)	Number	1
30	Flow Transmitter with manifold, Tag No. 60 FT 13, Calibration Range. 0 50 (inH2O), Measuring Range. 0 100 (inH2O). Display Flow Range. 0 1640 (lb/hr)	Number	1
31	Flow Transmitter with manifold, Tag No. 60 FT 15, Calibration Range. 0 100 (inH2O), Measuring Range. 0 250 (inH2O). Display Flow Range. 0 20550 (lb/hr)	Number	1
32	Flow Transmitter with manifold, Tag No. 60 FT 2000, Calibration Range. 0 100 (inH2O), Measuring Range. 0 250 (inH2O). Display Flow Range. N/A	Number	1
33	Flow Transmitter with manifold, Tag No. 801 FT 01, Calibration Range. 0 250 (inH2O), Measuring Range. 0 500 (inH2O). Display Flow Range. 0 1301900 (lb/hr)	Number	1
34	Flow Transmitter with manifold, Tag No. 801 FT 03, Calibration Range. 0 100 (inH2O), Measuring Range. 0 250 (inH2O). Display Flow Range. 0 40060 (lb/hr)	Number	1
35	Flow Transmitter with manifold, Tag No. 802 FT 01, Calibration Range. 0 100 (inH2O), Measuring Range. 0 250 (inH2O). Display Flow Range. 0 85150 (lb/hr)	Number	1
36	Flow Transmitter with manifold, Tag No. 806 FT 01, Calibration Range. 0 100 (inH2O), Measuring Range. 0 250 (inH2O). Display Flow Range. 0 6000 (lb/hr)	Number	1
37	Flow Transmitter with manifold, Tag No. 806 FT 02, Calibration Range. 0 100 (inH2O), Measuring Range. 0 250 (inH2O). Display Flow Range. 0 3000 (lb/hr)	Number	1
38	Flow Transmitter with manifold, Tag No. 806 FT 03, Calibration Range. 0 100 (inH2O), Measuring Range. 0 250 (inH2O). Display Flow Range. 0 3000 (lb/hr)	Number	1
39	Flow Transmitter with manifold, Tag No. 830 FT 01, Calibration Range. 0 100 (inH2O), Measuring Range. 0 250 (inH2O). Display Flow Range. 0	Number	1

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Material PRESSURE TRANSMITTERS WITH MANIFOLD, FLOW TRANSMITTERS, FLOW ELEMENTS AND TEMPERATURE TRANSMITTERS FOR NEW DCS AT DAKHNI PLANT.
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	300 (USGPM)			
40	Flow Transmitter with manifold, Tag No. 830 FT 06, Calibration Range. 0 100 (inH2O), Measuring Range. 0 250 (inH2O). Display Flow Range. 0 162000 (lb/hr)	Number		1
41	Flow Transmitter with manifold, Tag No. 830 FT 07, Calibration Range. 0 100 (inH2O), Measuring Range. 0 250 (inH2O). Display Flow Range. 0 485750 (lb/hr)	Number		1
42	Flow Transmitter with manifold, Tag No. 903 FT 01, Calibration Range. 0 100 (inH2O), Measuring Range. 0 250 (inH2O). Display Flow Range. 0 17200 (lb/hr)	Number		1
43	Flow Transmitter with manifold, Tag No. 910 FT 01, Calibration Range. 0 100 (inH2O), Measuring Range. 0 250 (inH2O). Display Flow Range. N/A	Number		1
44	Flow Transmitter with manifold, Tag No. 911 FT 01, Calibration Range. 0 100 (inH2O), Measuring Range. 0 250 (inH2O). Display Flow Range. 0 180 (USGPM)	Number		1
45	Flow Transmitter with manifold, Tag No. FT 1, Calibration Range. 0 100 (inH2O), Measuring Range. 0 250 (inH2O). Display Flow Range. 0 N/A	Number		1
46	Flow Transmitter with manifold, Tag No. FT 10, Calibration Range. 0 100 (inH2O), Measuring Range. 0 250 (inH2O). Display Flow Range. 0 N/A	Number		1
47	Flow Transmitter with manifold, Tag No. FT 3, Calibration Range. 0 100 (inH2O), Measuring Range. 0 250 (inH2O). Display Flow Range. 0 N/A	Number		1
48	Pressure transmitter with Manifold, Tag No. 20 PT 06, State/ Service Vapor, Max. Press. 305 (Psig), Calibration Range. 0 310 (Psig), Measuring Range. 0 500 (Psig).	Number		1
49	Pressure transmitter with Manifold, Tag No. PC 39, State/ Service Vapor, Max. Press. 70 (Psig), Calibration Range. 0 70 (Psig), Measuring Range. 0 200 (Psig).	Number		1
50	Pressure transmitter with Manifold, Tag No. PC 41, State/ Service Vapor, Max. Press. 70 (Psig), Calibration Range. 0 70 (Psig), Measuring Range. 0 200 (Psig).	Number		1
51	Pressure transmitter with Manifold, Tag No. PIC 10, State/ Service Vapor, Max. Press. 15 (PSI), Calibration Range. 0 20 (PSI), Measuring Range. 0 150 (PSI).	Number		1
52	Pressure transmitter with Manifold, Tag No. PIC 33, State/ Service Vapor, Max. Press. 50 (Psig), Calibration Range. 0 50 (Psig), Measuring Range. 0 150 (Psig).	Number		1
53	Pressure transmitter with Manifold, Tag No. PIC 35, State/ Service Vapor, Max. Press. 515 (Psig), Calibration Range. 0 520 (Psig), Measuring Range. 0 800 (Psig).	Number		1
54	Pressure transmitter with Manifold, Tag No. -60 PT 2000, State/ Service Vapor, Max. Press. 210 (Psig), Calibration Range. 0 210 (Psig), Measuring Range. 0 500 (Psig).	Number		1
55	Pressure transmitter with Manifold, Tag No. 100 PT 01, State/ Service Vapor, Max. Press. 1250 (Psig), Calibration Range. 0 1250 (Psig), Measuring Range. 0 1500 (Psig).	Number		1
56	Pressure transmitter with Manifold, Tag No. 100 PT 02, State/ Service Vapor, Max. Press. 1250 (Psig), Calibration Range. 0 1250 (Psig), Measuring Range. 0 1500 (Psig).	Number		1
57	Pressure transmitter with Manifold, Tag No. 100 PT 03, State/ Service Vapor, Max. Press. 1250 (Psig), Calibration Range. 0 1250 (Psig), Measuring	Number		1

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Material PRESSURE TRANSMITTERS WITH MANIFOLD, FLOW TRANSMITTERS, FLOW ELEMENTS AND TEMPERATURE TRANSMITTERS FOR NEW DCS AT DAKHNI PLANT.
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	Range. 0 1500 (Psig).			
58	Pressure transmitter with Manifold, Tag No. 100 PT 04, State/ Service Vapor, Max. Press. 1250 (Psig), Calibration Range. 0 1250 (Psig), Measuring Range. 0 1500 (Psig).	Number		1
59	Pressure transmitter with Manifold, Tag No. 100 PT 05, State/ Service Vapor, Max. Press. 1250 (Psig), Calibration Range. 0 1250 (Psig), Measuring Range. 0 1500 (Psig).	Number		1
60	Pressure transmitter with Manifold, Tag No. 100 PT 06, State/ Service Vapor, Max. Press. 1265 (Psig), Calibration Range. 0 1270 (Psig), Measuring Range. 0 1500 (Psig).	Number		1
61	Pressure transmitter with Manifold, Tag No. 100 PT 07, State/ Service Vapor, Max. Press. 1265 (Psig), Calibration Range. 0 1270 (Psig), Measuring Range. 0 1500 (Psig).	Number		1
62	Pressure transmitter with Manifold, Tag No. 100 PT 08, State/ Service Vapor, Max. Press. 1250 (Psig), Calibration Range. 0 1250 (Psig), Measuring Range. 0 1500 (Psig).	Number		1
63	Pressure transmitter with Manifold, Tag No. 20 PT 05, State/ Service Vapor, Max. Press. 225 (Psig), Calibration Range. 0 230 (Psig), Measuring Range. 0 500 (Psig).	Number		1
64	Pressure transmitter with Manifold, Tag No. 30 PT 01, State/ Service Liquid, Max. Press. 60 (Psig), Calibration Range. 0 60 (Psig), Measuring Range. 0 150 (Psig).	Number		1
65	Pressure transmitter with Manifold, Tag No. 40 PT 01, State/ Service Vapor, Max. Press. 190 (Psig), Calibration Range. 0 190 (Psig), Measuring Range. 0 500 (Psig).	Number		1
66	Pressure transmitter with Manifold, Tag No. 40 PT 06, State/ Service Liquid, Max. Press. 1160 (Psig), Calibration Range. 0 1160 (Psig), Measuring Range. 0 1500 (Psig).	Number		1
67	Pressure transmitter with Manifold, Tag No. 50 PT 01, State/ Service Mixed, Max. Press. 1082 (Psig), Calibration Range. 0 1090 (Psig), Measuring Range. 0 1500 (Psig).	Number		1
68	Pressure transmitter with Manifold, Tag No. 50 PT 01C, State/ Service Vapor, Max. Press. 1150 (Psig), Calibration Range. 0 1150 (Psig), Measuring Range. 0 1500 (Psig).	Number		1
69	Pressure transmitter with Manifold, Tag No. 50 PT 02, State/ Service Vapor, Max. Press. 500 (Psig), Calibration Range. 0 500 (Psig), Measuring Range. 0 800 (Psig).	Number		1
70	Pressure transmitter with Manifold, Tag No. 50 PT 03, State/ Service Vapor, Max. Press. 950 (Psig), Calibration Range. 0 950 (Psig), Measuring Range. 0 1500 (Psig).	Number		1
71	Pressure transmitter with Manifold, Tag No. 50 PT 051, State/ Service Vapor, Max. Press. 1150 (Psig), Calibration Range. 0 1150 (Psig), Measuring Range. 0 1500 (Psig).	Number		1
72	Pressure transmitter with Manifold, Tag No. 50 PT 07, State/ Service Vapor, Max. Press. 1115 (Psig), Calibration Range. 0 1120 (Psig), Measuring Range. 0 1500 (Psig).	Number		1
73	Pressure transmitter with Manifold, Tag No. 50 PT 08, State/ Service Vapor, Max. Press. 1115 (Psig), Calibration Range. 0 1120 (Psig), Measuring Range. 0 1500 (Psig).	Number		1

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Material PRESSURE TRANSMITTERS WITH MANIFOLD, FLOW TRANSMITTERS, FLOW ELEMENTS AND TEMPERATURE TRANSMITTERS FOR NEW DCS AT DAKHNI PLANT.
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74	Pressure transmitter with Manifold, Tag No. 60 PT 007, State/ Service Vapor, Máx. Press. 75 (Psig), Calibration Range. 0 80 (Psig), Measuring Range. 0 200 (Psig).	Number	1
75	Pressure transmitter with Manifold, Tag No. 60 PT 01, State/ Service Vapor, Max. Press. 600 (Psig), Calibration Range. 0 600 (Psig), Measuring Range. 0 800 (Psig).	Number	1
76	Pressure transmitter with Manifold, Tag No. 60 PT 02, State/ Service Vapor, Max. Press. 50 (Psig), Calibration Range. 0 50 (Psig), Measuring Range. 0 150 (Psig).	Number	1
77	Pressure transmitter with Manifold, Tag No. 60 PT 15, State/ Service Vapor, Max. Press. 510 (Psig), Calibration Range. 0 510 (Psig), Measuring Range. 0 800 (Psig).	Number	1
78	Pressure transmitter with Manifold, Tag No. 60 PT 16, State/ Service Vapor, Max. Press. 225 (Psig), Calibration Range. 0 230 (Psig), Measuring Range. 0 500 (Psig).	Number	1
79	Pressure transmitter with Manifold, Tag No. 60 PT 17, State/ Service Liquid, Max. Press. 600 (Psig), Calibration Range. 0 600 (Psig), Measuring Range. 0 800 (Psig).	Number	1
80	Pressure transmitter with Manifold, Tag No. 801 PT 15, State/ Service Liquid, Max. Press. 80 (Psig), Calibration Range. 0 80 (Psig), Measuring Range. 0 200 (Psig).	Number	1
81	Pressure transmitter with Manifold, Tag No. 801 PT 16, State/ Service Liquid, Max. Press. 90 (Psig), Calibration Range. 0 90 (Psig), Measuring Range. 0 200 (Psig).	Number	1
82	Pressure transmitter with Manifold, Tag No. 802 PT 03, State/ Service Liquid, Max. Press. 130 (Psig), Calibration Range. 0 130 (Psig), Measuring Range. 0 500 (Psig).	Number	1
83	Pressure transmitter with Manifold, Tag No. 803 PT 03, State/ Service Liquid, Max. Press. 50 (Psig), Calibration Range. 0 50 (Psig), Measuring Range. 0 150 (Psig).	Number	1
84	Pressure transmitter with Manifold, Tag No. 806 PT 03, State/ Service Vapor, Max. Press. 210 (Psig), Calibration Range. 0 210 (Psig), Measuring Range. 0 500 (Psig).	Number	1
85	Pressure transmitter with Manifold, Tag No. 806 PT 15, State/ Service Vapor, Max. Press. 1150 (Psig), Calibration Range. 0 1150 (Psig), Measuring Range. 0 1500 (Psig).	Number	1
86	Pressure transmitter with Manifold, Tag No. 806 PT 16, State/ Service Vapor, Max. Press. 210 (PSI), Calibration Range. 0 210 (Psig), Measuring Range. 0 500 (Psig).	Number	1
87	Pressure transmitter with Manifold, Tag No. 830 PT 02, State/ Service Vapor, Max. Press. 45 (Psig), Calibration Range. 0 50 (Psig), Measuring Range. 0 150 (Psig).	Number	1
88	Pressure transmitter with Manifold, Tag No. 830 PT 03, State/ Service Liquid, Max. Press. 20 (Psig), Calibration Range. 0 20 (Psig), Measuring Range. 0 150 (Psig).	Number	1
89	Pressure transmitter with Manifold, Tag No. 830 PT 04, State/ Service Liquid, Max. Press. 200 (Psig), Calibration Range. 0 200 (Psig), Measuring Range. 0 500 (Psig).	Number	1
90	Pressure transmitter with Manifold, Tag No. 830 PT 06, State/ Service Liquid, Max. Press. 20 (Psig), Calibration Range. 0 20 (Psig), Measuring	Number	1

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Material PRESSURE TRANSMITTERS WITH MANIFOLD, FLOW TRANSMITTERS, FLOW ELEMENTS AND TEMPERATURE TRANSMITTERS FOR NEW DCS AT DAKHNI PLANT.
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Item No.	Description	Unit	Quantity
	Range. 0 150 (Psig).		
91	Pressure transmitter with Manifold, Tag No. 830 PT 07, State/ Service Liquid, Max. Press. 60 (Psig), Calibration Range. 0 60 (Psig), Measuring Range. 0 150 (Psig).	Number	1
92	Pressure transmitter with Manifold, Tag No. 830 PT 08, State/ Service Liquid, Max. Press. 200 (Psig), Calibration Range. 0 200 (Psig), Measuring Range. 0 500 (Psig).	Number	1
93	Pressure transmitter with Manifold, Tag No. 901 PT 03, State/ Service Liquid, Max. Press. 150 (Psig), Calibration Range. 0 150 (Psig), Measuring Range. 0 500 (Psig).	Number	1
94	Pressure transmitter with Manifold, Tag No. 903 PT 07, State/ Service Vapor, Max. Press. 30 (Psig), Calibration Range. 0 30 (Psig), Measuring Range. 0 150 (Psig).	Number	1
95	Pressure transmitter with Manifold, Tag No. 911 PT 01, State/ Service Vapor, Max. Press. 265 (Psig), Calibration Range. 0 270 (Psig), Measuring Range. 0 500 (Psig).	Number	1
96	Pressure transmitter with Manifold, Tag No. 911 PT 02, State/ Service Vapor, Max. Press. 265 (Psig), Calibration Range. 0 270 (Psig), Measuring Range. 0 500 (Psig).	Number	1
97	Pressure transmitter with Manifold, Tag No. 911 PT 03, State/ Service Vapor, Max. Press. 265 (Psig), Calibration Range. 0 270 (Psig), Measuring Range. 0 500 (PSI).	Number	1
98	Pressure transmitter with Manifold, Tag No. 911 PT 04, State/ Service Vapor, Max. Press. 265 (Psig), Calibration Range. 0 270 (Psig), Measuring Range. 0 500 (Psig).	Number	1
99	Pressure transmitter with Manifold, Tag No. 912 PT 03, State/ Service Liquid, Max. Press. 45 (Psig), Calibration Range. 0 50 (Psig), Measuring Range. 0 150 (Psig).	Number	1
100	Pressure transmitter with Manifold, Tag No. N/A PT , State/ Service Vapor, Max. Press. 1200 (PSI), Calibration Range. 0 1200 (PSI), Measuring Range. 0 1500 (PSI).	Number	1
101	Pressure transmitter with Manifold, Tag No. N/A PT , State/ Service Vapor, Max. Press. 1500 (PSI), Calibration Range. 0 1500 (PSI), Measuring Range. 0 2000 (PSI).	Number	1
102	Pressure transmitter with Manifold, Tag No. N/A PT , State/ Service Vapor, Max. Press. 400 (PSI), Calibration Range. 0 400 (PSI), Measuring Range. 0 500 (PSI).	Number	1
103	Pressure transmitter with Manifold, Tag No. PC 46, State/ Service Vapor, Max. Press. 50 (Psig), Calibration Range. 0 50 (Psig), Measuring Range. 0 150 (Psig).	Number	1
104	Pressure transmitter with Manifold, Tag No. PIC 51, State/ Service Vapor, Max. Press. 515 (Psig), Calibration Range. 0 520 (Psig), Measuring Range. 0 800 (Psig).	Number	1
105	Spare Temperature Transmitter, Max. Temp.: 1200 °F, Calibration Range: 0 1200 °F, Thermo well required: Yes, Insertion Length :350 mm, Flange Rating/ Class: 1 ½ , 600 # RF	Number	2
106	Spare Temperature Transmitter, Max. Temp.: 1500 °F, Calibration Range: 0 1500 °F, Thermo well required: Yes, Insertion Length :350 mm, Flange Rating/ Class: 1 ½ , 600 # RF	Number	2

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107	Spare Temperature Transmitter, Max. Temp.: 500 °F, Calibration Range: 0 500 °F, Thermo well required: Yes, Insertion Length :350 mm, Flange Rating/ Class: 1 ½ , 600 # RF	Number	2
108	Spare Temperature Transmitter, Max. Temp.: 600 °F, Calibration Range: 0 600 °F, Thermo well required: Yes, Insertion Length :350 mm, Flange Rating/ Class: 1 ½ , 600 # RF	Number	2
109	Spare Temperature Transmitter, Max. Temp.: 900 °F, Calibration Range: 0 900 °F, Thermo well required: Yes, Insertion Length :350 mm, Flange Rating/ Class: 1 ½ , 600 # RF	Number	2
110	Tag No. 120 – TT– 01, Line/ Equipment No, 110–HC–001–6 –E2, Max. Temp.: 200 °F, Calibration Range: 0 200 °F, Thermo well required: Yes, Insertion Length: 310 mm, Flange Rating/ Class: 1 ½ , 900 # RTJ	Number	1
111	Tag No. 120 – TT– 02, Line/ Equipment No, 110–HC–002–6 –E2, Max. Temp: 200 °F, Calibration Range: 0 200 °F, Thermo well required: Yes, Insertion Length : 310 mm, Flange Rating/ Class: 1 ½ , 900 # RTJ	Number	1
112	Tag No. 120 – TT– 03, Line/ Equipment No, 110–HC–003–6 –E2, Max. Temp: 200 °F, Calibration Range: 0 200 °F, Thermo well required: Yes, Insertion Length 310mm, Flange Rating/ Class: 1 ½ , 900 # RTJ	Number	1
113	Tag No. 120 – TT– 04, Line/ Equipment No, 110–HC–004–6 –E2, Max. Temp: 200 °F, Calibration Range: 0 200 °F, Thermo well required: Yes, Insertion Length : 310 mm, Flange Rating/ Class: 1 ½ , 900 # RTJ	Number	1
114	Tag No. 120 – TT– 05, Line/ Equipment No, 110–HC–005–6 –E2, Max. Temp: 200 °F, Calibration Range: 0 200 °F, Thermo well required: Yes, Insertion Length: 310 mm, Flange Rating/ Class: 1 ½ , 900 # RTJ	Number	1
115	Tag No. 120 – TT– 06, Line/ Equipment No, 110–HC–006–6 –E2, Max. Temp: 200 °F, Calibration Range: 0 200 °F, Thermo well required: Yes, Insertion Length: 310 mm, Flange Rating/ Class: 1 ½ , 900 # RTJ	Number	1
116	Tag No. 20 – TT– 15, Line/ Equipment No, 200–GS–505–6 –D2, Max. Temp: 130 °F, Calibration Range: 0 130 °F, Thermo well required: Yes, Insertion Length : 310 mm, Flange Rating/ Class: 1 ½ , 600 # RF	Number	1
117	Tag No. 20 – TT– 16, Line/ Equipment No, 200–GS–505–6 –D2, Max. Temp.: 130 °F, Calibration Range: 0 130 °F, Thermo well required: Yes, Insertion Length :310 mm, Flange Rating/ Class: 1 ½ , 600 # RF	Number	1
118	Tag No. 50 – TT– 01, Line/ Equipment No, 200–TG–008–6 –D1, Max. Temp: 150 °F, Calibration Range: 0 150 °F, Thermo well required: Yes, Insertion Length : 310 mm, Flange Rating/ Class: 1 ½ , 600 # RF	Number	1
119	Tag No. 50 – TT– 02, Line/ Equipment No, 500–TG–006–6 –D3, Max. Temp.: –37 °F, Calibration Range: 40 – 100 °F, Thermo well required: Yes, Insertion Length: 310 mm, Flange Rating/ Class: 1 ½ , 600 # RF	Number	1
120	Tag No. 60 – TT– 01, Line/ Equipment No, DA–601, Max. Temp.: 550 °F, Calibration Range: 0 550 °F, Thermo well required: Yes, Insertion Length : 350 mm, Flange Rating/ Class: 2 , 300 # RF	Number	1
121	Tag No. 60 – TT– 02, Line/ Equipment No, DA–602, Max. Temp: 325 °F, Calibration Range: 0 330 °F, Thermo well required: Yes, Insertion Length : 350 mm, Flange Rating/ Class: 2 , 300 # RF	Number	1
122	Tag No. 60 – TT– 03, Line/ Equipment No, DA–603, Max. Temp: 390 °F, Calibration Range: 0 390 °F, Thermo well required: Yes, Insertion Length : 350mm, Flange Rating/ Class: 2 , 300 # RF	Number	1
123	Tag No. 60 – TT– 13, Line/ Equipment No, 600–HC–029–2 –B1, Max. Temp: –25–40 °F, Calibration Range: –30–100 °F, Thermo well required: Yes,	Number	1

OIL & GAS DEVELOPMENT COMPANY LIMITED
PROCUREMENT DEPARTMENT, ISLAMABAD
FOREIGN SECTION E

(To be completed, filled in, signed and stamped by the principal)

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ANNEXURE 'A'

Material PRESSURE TRANSMITTERS WITH MANIFOLD, FLOW TRANSMITTERS, FLOW ELEMENTS AND TEMPERATURE TRANSMITTERS FOR NEW DCS AT DAKHNI PLANT.
Tender Enquiry No PROC-FE/CB/P&P/DKN-2060/2017
Due Date
Evaluation Criteria FULL

Insertion Length: 270 mm, Flange Rating/ Class: 1 ½ , 300 # RF			
124	Tag No. 60 – TT– 23, Line/ Equipment No, 600–AM–001B–1.5 –B2, Max. Temp.: 150 °F, Calibration Range: 0 150 °F, Thermo well required: Yes, Insertion Length : 270 mm, Flange Rating/ Class: 1 ½ , 300 # RF	Number	1
125	Tag No. 60 – TT– 24, Line/ Equipment No, 600–HC–020–2 –B2, Max. Temp.: 150 °F, Calibration Range: 0 150 °F, Thermo well required: Yes, Insertion Length: 270 mm, Flange Rating/ Class: 1 ½ , 300 # RF	Number	1
126	Tag No. 60 – TT– 25, Line/ Equipment No, DA–604, Max. Temp.: 150 °F, Calibration Range: 0 150 °F, Thermo well required: Yes, Insertion Length: 350 mm, Flange Rating/ Class: 2 , 300 # RF	Number	1
127	Tag No. 60 – TT– 26, Line/ Equipment No, 600–TG–501–1.5 –B1, Max. Temp.: 150 °F, Calibration Range: 0 150 °F, Thermo well required: Yes, Insertion Length : 270 mm, Flange Rating/ Class: 1 ½ , 300 # RF	Number	1
128	Tag No.: 30 – TT– 01, Line/ Equipment No: 300–GL–010–1.5 –A1–H, Max. Temp.: 465 °F, Calibration Range: 0 470 °F, Thermo well required: Yes, Insertion Length: 270mm, Flange Rating/ Class: 1 ½ , 150 # RF	Number	1
129	Tag No.: 30 – TT– 20, Line/ Equipment No : 300–HO–001–2 –B1–H, Max. Temp.: 465 °F, Calibration Range: 0 470 °F, Thermo well required: Yes, Insertion Length : 270 mm, Flange Rating/ Class: 1 ½ , 300 # RF	Number	1
130	Tag No.: 40 – TT– 15, Line/ Equipment No: 400–AM–023–12 –A2–H, Max. Temp.: 280 °F, Calibration Range: 0 280 °F, Thermo well required: Yes, Insertion Length: 400 mm, Flange Rating/ Class: 1 ½ , 150 # RF	Number	1
131	Tag No.: 60 – TT– 028, Line/ Equipment No: 800–HO–501–1.5 –B1–H, Max. Temp: 460 °F, Calibration Range: 0 470 °F, Thermo well required: Yes, Insertion Length : 270mm, Flange Rating/ Class: 1 ½ , 300# RF	Number	1
132	Tag No.: 60 – TT– 029, Line/ Equipment No: 200–HC–525–4 –D2, Max. Temp.: 350 °F, Calibration Range: 0 350 °F, Thermo well required: Yes, Insertion Length: 270mm, Flange Rating/ Class: 1– ½ , 600 # RF	Number	1
133	Tag No.: 801 – TT– 15, Line/ Equipment No: 801–RW–005–10 –A4, Max. Temp.: 120 °F, Calibration Range: 0 120 °F, Thermo well required: Yes, Insertion Length : 400 mm, Flange Rating/ Class: 1 ½ , 150 # RF	Number	1
134	Tag No.: 801 – TT– 16, Line/ Equipment No: 801–SW–006–10 –A4, Max. Temp.: 120 °F, Calibration Range: 0 120 °F, Thermo well required: Yes, Insertion Length :400 mm, Flange Rating/ Class: 1 ½ , 150 # RF	Number	1
135	Tag No.: 830 – TT– 05, Line/ Equipment No : 830–FA–02, Max. Temp: 600 °F, Calibration Range: 0 600 °F, Thermo well required: Yes, Insertion Length : 350 mm, Flange Rating/ Class: 2 , 300 # RF	Number	1
136	Tag No.: 830 – TT– 06, Line/ Equipment No: 830–FB–01, Max. Temp.: 600 °F, Calibration Range: 0 600 °F, Thermo well required: Yes, Insertion Length : 350 mm , Flange Rating/ Class: 2 , 300 # RF	Number	1
137	Tag No.: TT– 5, Line/ Equipment No: H–701, Max. Temp: 650 °F, Calibration Range: 0 650 °F, Thermo well required: Yes, Insertion Length : 350mm, Flange Rating/ Class: 2 , 300 # RF	Number	1
138	Tag No.: TT– 7–1, Line/ Equipment No:18 –P–1203–3BAX, Max. Temp: 700 °F, Calibration Range: 0 700 °F, Thermo well required: Yes, Insertion Length : 500 mm, Flange Rating/ Class: 1– ½ , 300 # RF	Number	1
139	Tag No.: TT– 7–11, Line/ Equipment No, 18 –P–1403–3BAX , Max. Temp.: 550 °F, Calibration Range: 0 550 °F, Thermo well required: Yes, Insertion Length: 500 mm, Flange Rating/ Class: 1– ½ , 300 # RF	Number	1

OIL & GAS DEVELOPMENT COMPANY LIMITED
PROCUREMENT DEPARTMENT, ISLAMABAD
FOREIGN SECTION E

(To be completed, filled in, signed and stamped by the principal)

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ANNEXURE 'A'

Material PRESSURE TRANSMITTERS WITH MANIFOLD, FLOW TRANSMITTERS, FLOW ELEMENTS AND TEMPERATURE TRANSMITTERS FOR NEW DCS AT DAKHNI PLANT.
Tender Enquiry No PROC-FE/CB/P&P/DKN-2060/2017
Due Date
Evaluation Criteria FULL

140	Tag No.: TT- 7-2, Line/ Equipment No: 16 -P-1301-3BAX, Max. Temp.: 700 °F, Calibration Range: 0 700 °F, Thermo well required: Yes, Insertion Length :500 mm, Flange Rating/ Class: 1- ½ , 300 # RF	Number	1
141	Tag No.: TT- 7-7, Line/ Equipment No: 18 -P-1303-3BAX, Max. Temp: 550 °F, Calibration Range: 0 550 °F, Thermo well required: Yes, Insertion Length :500 mm, Flange Rating/ Class: 1- ½ , 300 # RF	Number	1
142	Tag No: TT- 7-17, Line/ Equipment No, 2 -BFW-1607-4JAX, Max. Temp.: 500 °F, Calibration Range: 0 500 °F, Thermo well required: Yes, Insertion Length : 270 mm, Flange Rating/ Class: 1- ½ , 300 # RF	Number	1
143	Tag No: TT- 14, Line/ Equipment No: H-702, Max. Temp.: 500 °F, Calibration Range: 0 500 °F, Thermo well required: Yes, Insertion Length :350 mm, Flange Rating/ Class: 2 , 300 # RF	Number	1
144	Tag No: TT- 15, Line/ Equipment No: H-702, Max. Temp.: 500 °F, Calibration Range: 0 500 °F, Thermo well required: Yes, Insertion Length: 350 mm, Flange Rating/ Class: 2 , 300 # RF	Number	1
145	Tag No: TT- 7-15, Line/ Equipment No, 18 -P-1503-3BAX , Max. Temp: 550 °F, Calibration Range: 0 550 °F, Thermo well required: Yes, Insertion Length : 500 mm, Flange Rating/ Class: 1- ½ , 300 # RF	Number	1
146	Ultrasonic Clamp-on Type Flow meter. Tag No. 902-UFM-01, Service: Flare Gas, Fluid: Gas, (Detailed specification in attachment).	Number	1
147	Vortex Flow meter. Tag No. 30-VFM-15, (Detailed specification in attachment)..	Number	1
148	Vortex Flow meter. Tag No. 830-VFM-08, (Detailed specification in attachment)..	Number	1

Note:

1. **Bid bond**: - Pursuant to tender clause # 2.2, 11.4, 13 & 35.3.2, bid bond amounting USD: 7,000/- (United States Dollar Seven Thousand only) or equivalent in Pak Rupees should be submitted with the technical bid.
2. **Shipment from ACU member Countries**: In case of shipment from ACU member countries, the LC beneficiary should be of that particular country from where the consignment is being shipped.
3. **Terms and conditions**:-Bidders are advised to carefully read all the terms and conditions of the Tender Document available at OGDCL website in the master tender document and attached technical Terms & Conditions.

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Tag No. 20 - FE - 03,
 Line Size (Inch): 8 inch
 State: Vapor
 Normal Flow Rate: 90453.99 lb/hr
 Max. Flow Rate: 112697.1 lb/hr
 Inlet Press. (Psig) 1145
 Temperature Degree F: 147
 Specific Gravity: 0.711
 Vescosity (cP): 0.15
 Vapor Pressure: N/A
 Density (lb/ft)³ 4.63
 CP/CV 1.62
 Diff. Pressure (inH₂O) 100.00
 Bore Size (Inch) 4.744
 Beta Ratio: 0.594
 Flange Rating & Facing: 600 # RF, SCH-80
 Flange Type & Mat: ASTM A-105(S) ANSI-B-16.5 RF WN
 Gasket Mat: 3mm Thick, Spiral Wound 304 S NON ASVESTOSE FILLED.

Tag No. 20 - FE - 15,
 Line Size (Inch): 1.5"; State: Liquid
 Normal Flow Rate: 2250 lb/hr
 Max. Flow Rate: 2700 lb/hr
 Inlet Press. (Psig) 1135
 Temperature Degree F: 126
 Specific Gravity: 1.11
 Vescosity (cP): 12.06
 Vapor Pressure: 0.11
 Density (lb/ft)³ 69.27
 CP/CV N-A
 Diff. Pressure (inH₂O) 100.00
 Bore Size (Inch) : 0.357
 Beta Ratio: 0.222
 Flange Rating & Facing: 600 # RF, SCH-160
 ANSI-B-16.5 RF.SW
 Gasket Mat: 3mm Thick, Spiral Wound 304 S NON ASVESTOSE FILLED.

Flange Type & Mat: ASTM A-105(S)

Tag No. 40 - FE - 15,
 Line Size (Inch): 10"
 State: Liquid
 Normal Flow Rate: 442158 lb/hr
 Max. Flow Rate: 486374 lb/hr
 Inlet Press. (Psig) 130
 Temperature Degree F: 187
 Specific Gravity: 1.02
 Vescosity (cP): 1.38
 Vapor Pressure: 91.42
 Density (lb/ft)³ 63.83
 CP/CV N-A
 Diff. Pressure (inH₂O) 100.00

Bore Size (Inch) 5.190
Beta Ratio: 0.518
Flange Rating & Facing: 150 # RF, SCH-STD
Flange Type & Mat: ASTM A-105(S) ANSI-B-16.5 RF.WN
Gasket Mat: 3mm Thick, Spiral Wound 304 S NON ASVESTOSE FILLED.

Tag No. 830 - FE - 06,
Line Size (Inch): 8"
State: Liquid
Normal Flow Rate: 143000 lb/hr
Max. Flow Rate: 162000 lb/hr
Inlet Press. (Psig) 200
Temperature Degree F: 615
Specific Gravity: 0.8
Vescosity (cP): 0.365
Vapor Pressure: 10.00
Density (lb/ft)³ 49.38
CP/CV N-A

Diff. Pressure (inH₂O) 100.00
Bore Size (Inch) 3.240
Beta Ratio: 0.406

Flange Rating & Facing: 300 # RF, SCH-STD
105(S) ANSI-B-16.5 RF.WN
EQUIVALENT

Tag No. 801 - FE - 01,
Line Size (Inch): 10"
State: Liquid
Normal Flow Rate: 901300 lb/hr
Max. Flow Rate: 1301900 lb/hr
Inlet Press. (Psig) 80
Temperature Degree F: 95

Specific Gravity: 1.0
Vescosity (cP): 1.0
Vapor Pressure: 0.80
Density (lb/ft)³ 62.42
CP/CV N/A
Diff. Pressure (inH₂O) 250
Bore Size (Inch) 6.578
Beta Ratio: 0.657

Flange Rating & Facing: 300 # RF, SCH-80
Flange Type & Mat: ASTM A-105(S) ANSI-B-16.5 RF.WN
Gasket Mat: 3mm Thick, Spiral Wound 304 S NON ASVESTOSE FILLED.

Tag No. 830 - FE - 07,
Line Size (Inch): 6"
State: Liquid
Normal Flow Rate: 437144 lb/hr
Max. Flow Rate: 485715 lb/hr
Inlet Press. (Psig) 27
Temperature Degree F: 598

Flange Type & Mat: ASTM A-
Gasket Mat: 1.5mm Thick, GARLOCK 7021 OR

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Specific Gravity: 0.92
Vescosity (cP): 0.856
Vapor Pressure: 0.34
Density (lb/ft)³: 55.01
CP/CV N-A
Diff. Pressure (inH₂O) 200.00
Bore Size (Inch) 4.277
Beta Ratio: 0.705
Flange Rating & Facing: 300 # RF, SCH-STD
ANSI-B-16.5 RF.WN

Flange Type & Mat: ASTM A-105(S)
Gasket Mat: 1.5mm Thick, GARLOCK 7021 OR EQUIVALENT

Tag No. 806- FE - 02,
Line Size (Inch): 3"
State: Vapor
Normal Flow Rate: 2400 lb/hr
Max. Flow Rate: 3000 lb/hr
Inlet Press. (Psig) 210
Temperature Degree F: 150
Specific Gravity: 0.7
Vescosity (cP): 0.01
Vapor Pressure: N/A
Density (lb/ft)³ 0.7523
CP/CV 1.34
Diff. Pressure (inH₂O) 100.00
Bore Size (Inch) 1.252
Beta Ratio: 0.408

Flange Rating & Facing: 300 # RF, SCH-80
Flange Type & Mat: ASTM A-105(S) ANSI-B-16.5 RF.WN
Gasket Mat: 3mm Thick, Spiral Wound 304 S NON ASVESTOSE FILLED.

Tag No. 806 - FE - 03,
Line Size (Inch): 3"
State: Vapor
Normal Flow Rate: 1284 lb/hr
Max. Flow Rate: 3000 lb/hr
Inlet Press. (Psig) 50
Temperature Degree F: 150
Specific Gravity: 0.7
Vescosity (cP): 0.01
Vapor Pressure: N/A
Density (lb/ft)³ 0.2204
CP/CV 1.30
Diff. Pressure (inH₂O) 100.00
Bore Size (Inch) 1.672
Beta Ratio: 0.545

Flange Rating & Facing: 300 # RF, SCH-80
Flange Type & Mat: ASTM A-105(S) ANSI-B-16.5 RF.WN
Gasket Mat: 3mm Thick, Spiral Wound 304 S NON ASVESTOSE FILLED.

Tag No. 801 - FE - 03,
Line Size (Inch): 2"
State: Liquid

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Normal Flow Rate: 27540 lb/hr
Max. Flow Rate: 40058 lb/hr
Inlet Press. (Psig) 110
Temperature Degree F: 80
Specific Gravity: 1.0
Vescosity (cP): 1.0
Vapor Pressure: 0.50
Density (lb/ft)³ 62.42
CP/CV N/A
Diff. Pressure (inH₂O) 100
Bore Size (Inch) 1.419
Beta Ratio: 0.687
Flange Rating & Facing: 300 # RF, SCH-80
Flange Type & Mat: ASTM A-105(S) ANSI-B-16.5 RF.WN
Gasket Mat: 3mm Thick, Spiral Wound 304 S NON ASVESTOSE FILLED.

Tag No. 802 - FE - 01
Line Size (Inch): 3"
State: Liquid
Normal Flow Rate: 60087 lb/hr
Max. Flow Rate: 85123 lb/hr
Inlet Press. (Psig) 130
Temperature Degree F: 80
Specific Gravity: 0.99
Vescosity (cP): 0.7
Vapor Pressure: 2.21
Density (lb/ft)³ 61.49
CP/CV N/A
Diff. Pressure (inH₂O) 100
Bore Size (Inch) 2.092
Beta Ratio: 0.682
Flange Rating & Facing: 300 # RF, SCH-40
Flange Type & Mat: ASTM A-105(S) ANSI-B-16.5 RF.WN
Gasket Mat: 3mm Thick, Spiral Wound 304 S NON ASVESTOSE FILLED.

Tag No. 903 - FE - 01,
Line Size (Inch): 3"
State: Liquid
Normal Flow Rate: 12268 lb/hr
Max. Flow Rate: 17175 lb/hr
Inlet Press. (Psig) 10
Temperature Degree F: 150
Specific Gravity: 0.98
Vescosity (cP): 0.434
Vapor Pressure: 15.37
Density (lb/ft)³ 60.98
CP/CV N/A
Diff. Pressure (inH₂O) 100
Bore Size (Inch) 1.000

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Beta Ratio: 0.326
Flange Rating & Facing: 300 # RF, SCH-80 -
Flange Type & Mat: ASTM A-105(S) ANSI-B-16.5 RF.WN
Gasket Mat: 3mm Thick, Spiral Wound 304 S NON ASVESTOSE FILLED.

Tag No. 50 - FE - 15,
Line Size (Inch): 6"
State: Vapor
Normal Flow Rate: 64910 lb/hr
Max. Flow Rate: 64910 lb/hr
Inlet Press. (Psig) 1115
Temperature Degree F: 110
Specific Gravity: 0.644
Vescosity (cP): 0.01
Vapor Pressure: N/ A
Density (lb/ft)³ 3.92
CP/CV 1.54
Diff. Pressure (inH₂O) 100.00
Bore Size (Inch) 3.736
Beta Ratio: 0.616

Flange Rating & Facing: 600 # RF, SCH-80
Flange Type & Mat: ASTM A-105(S) ANSI-B-16.5 RF.WN
Gasket Mat: 3mm Thick, Spiral Wound 304 S NON ASVESTOSE FILLED.

Tag No. 60 - FE - 15,
Line Size (Inch): 2"
State: Liquid
Normal Flow Rate: 17864 lb/hr
Max. Flow Rate: 20544 lb/hr
Inlet Press. (Psig) 300
Temperature Degree F: 115
Specific Gravity: 0.681
Vescosity (cP): 0.3202
Vapor Pressure: 24.13
Density (lb/ft)³ 42.52
CP/CV N/ A
Diff. Pressure (inH₂O) 100
Bore Size (Inch) 1.164
Beta Ratio: 0.563

Flange Rating & Facing: 300 # RF, SCH-160
Flange Type & Mat: ASTM A-105(S) ANSI-B-16.5 RF.WN
Gasket Mat: 1.5 mm Thick, GARLOCK 7021 Or Equalant.

Tag No. 60 - FE - 13,
Line Size (Inch): 2"
State: Vapor
Normal Flow Rate: 1486 lb/hr
Max. Flow Rate: 1635 lb/hr

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Inlet Press. (Psig) 454
 Temperature Degree F: -24
 Specific Gravity: 0.74
 Vescosity (cP): 0.01
 Vapor Pressure: N/A
 Density (lb/ft)³ 21.24
 CP/CV 1.764
 Diff. Pressure (inH₂O) 50
 Bore Size (Inch) 0.468
 Beta Ratio: 0.226
 Flange Rating & Facing: 300 # RF, SCH-160
 Flange Type & Mat: ASTM A-105(S) ANSI-B-16.5 RF.WN
 Gasket Mat: 1.5 mm Thick, GARLOCK 7021 Or Equalant.

Tag No. 806 - FE - 01,
 Line Size (Inch): 3"
 State: Vapor
 Normal Flow Rate: 4736 lb/hr
 Max. Flow Rate: 6000 lb/hr

Inlet Press. (Psig) 205
 Temperature Degree F: 150
 Specific Gravity: 0.63
 Vescosity (cP): 0.01
 Vapor Pressure: N/A
 Density (lb/ft)³ 0.7523
 CP/CV 1.34
 Diff. Pressure (inH₂O) 100.00
 Bore Size (Inch) 1.734
 Beta Ratio: 0.565

Flange Rating & Facing: 300 # RF, SCH-80
 105(S) ANSI-B-16.5 RF.WN
 FILLED.

Flange Type & Mat: ASTM A-
 Gasket Mat: 3mm Thick, Spiral Wound 304 S NON ASVESTOSE

Ultrasonic Flow Meter (Clamp - on Type): Tag Number: 902-UFM-01,
 Service: Flare Gas, Pipe Size: 20", Pipe Schedule: Sch STD, P&ID ID No: 2310-PB-2063 (Flare System)
 Process Service Conditions:

Fluid: Gas, Flow Max.: 40 MMSCFD, Flow Oper.: 24 MMSCFD, Flow Min.: 12 MMSCFD, Pressure Max.: 50 PSIG, Pressure Oper.: 5 PSIG, Temperature Max.: 408 oF, Temperature Oper.: 150 oF,
 Molecular Weight: 20.62 MW, Operating Viscosity: 0.01 cP, Operating Specific Gravity: 0.714

Meter Specifications:
 Meter Type: Clamp-on Type, Measuring Principle: Transit Time Based Measurement / VTA,
 Application: Totalizer / Flow Rate Display Measuring Range: 0 - 50 MMSCFD
 Calibrated Range: 0 - 40 MMSCFD; Meter Size: VTA; Accuracy: +/- 1% of Reading Repeatability: +/- 0.1% to 0.3% of
 reading; Power Supply (Loop Powered): 24 VDC Output Signal: 4 - 20 mA with HART Protocol; Display: LCD Digital Display ; Electronic
 Meter Enclosure Material: Stainless Steel / VTA; Meter Mounting: Remote Mount with extension Cable; Transducers Material: VTA; Transducer Cable
 type: Co-Axial / VTA; Transducer Cable Length: 70 Meters; Electrical Entry: M20 x 1.5; Tagging: SSt Tag wired to Meter
 Electrical Classification: EEx d IIC T4 ; Enclosure Protection Rating: IP 65; NACE Compliance: Yes.

Vortex Flow Meter: Tag Number: 830-VFM-08,
 Line No. 630-HO-001-16?-B1-ET; P & ID No: 2310-PB-2075 (Hot Oil System)
 Process Service Conditions:

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Fluid: Hot Oil ;State: Liquid ;
Maximum Conditions:
Flow rate Max. (Q) : 7758 USGPM ; Max. Inlet Pressure: 30 PSIG;
Temperature Max.: 500 oF;
Operating Conditions:
Flow rate Max. (Q) : 7052.7 USGPM; Max. Inlet Pressure: 20 PSIG
Temperature Max.: 200 oF
Minimum Conditions:
Flow rate Max. (Q) : 4655 USGPM
Max. Inlet Pressure: 15 PSIG
Temperature Max.: 36 oF
Specific Gravity / Density at Operating Conditions: 0.88
Gas Compressibility Factor: N/A
Viscosity: 4.55 cP
Specific Heat Ratio (K): N/A
Allowable Pressure Loss: less than 3 PSIG
Body:
Sensor Type: Vortex Shedder Bar
Sensor Material: 316SS
Body Type: Flanged
Body Size: VTA
Body Material: 316SS
Flange Size/Rating/Face Finish: VTA/300#/RF Sch Std
Flange Material: ASTM A-105, ANSI B16.5, RF, WN
Transmitter:
Digital Indicator: Yes
Unit: USGPM
Mounting: Inline ; Measuring Range Limit: 0 - 7760 USGPM;Calibrated Range: 0 - 9000 USGPM;
Pressure;Power Supply (loop Powered): 24 VDC;Output Signal: 4 - 20 mA with HART Protocol;Accuracy: 0.075 % of Calibrated Span; Electrical
Connection: M20 x 1.5;
Enclosure Material: Cast Aluminium ;Enclosure Protection Rating: IP 65;Tropicalization: Yes;
Accessories:
Temperature Compensation: Not Required. ; Tag Plate: Yes - SS; NACE Compliance: Yes
Over Pressure Limits: Twice Max
Electrical Classification: EExd IIC T4;
Vortex Flow Meter:Tag Number: 30-VFM-15,
Line No. 300-HIC-005-1.5"-A3;P & ID No: E-3588-30005A (Glycol Re-generation System)
Process Service Conditions:
Fluid: TEG (Tri Ethylene Glycol) ; State: Liquid.
Maximum Conditions:
Flow rate Max. (Q) : 250lb/hr ;Max. Inlet Pressure: 40 PSIG;Temperature Max.: 200 oF
Operating Conditions:
Flow rate Max. (Q) : 150 lb/hr ;Max. Inlet Pressure: 20 PSIG; Temperature Max.: 105oF
Minimum Conditions:
Flow rate Max. (Q) : 50 lb/hr;Max. Inlet Pressure: 20 PSIG;Temperature Max.: 36 oF
Specific Gravity / Density at Operating Conditions: 1.0 ;Gas Compressibility Factor: N/A;
Viscosity: 14.18 cP;Specific Heat Ratio (K): N/A;Allowable Pressure Loss: less than 3 PSIG
Body:
Sensor Type: Vortex Shedder Bar ; Sensor Material: 316SS
Body Type: Flanged;Body Size: VTA;Body Material: 316SS; Flange Size/Rating/Face Finish: VTA/150 # /RF Sch 80;Flange Material: ASTM A-350
LF2. ANSI B16.5, RF, WN

Transmitter:
Digital Indicator: Yes; Unit: Lb/hr; Mounting: Inline ; Measuring Range Limit: 0 - 500lb/hr
Calibrated Range: 0 - 250 lb/hr ; Over Pressure Limits: Twice Max Pressure
Power Supply (loop Powered): 24 VDC
Accuracy: 0.075 % of Calibrated Span
Enclosure Material: Cast Aluminium
Tropicalization: Yes
Accessories:
Temperature Compensation: Not Required. ; Tag Plate: Yes - SS,, NACE Compliance: Yes

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TERM AND CONDITION FOR INDENT # DKN-1944

1. STANDARD WARRANTY /GURANTTEE FOR ALL ITEMS.
2. MANUFACTURER SHOULD BE ISO 9001 - 2000 CERTIFIED.
3. OEM AUTHORITY LETTER IN THE FAVOUR OF BIDDER ALONG WITH TECHNICAL LITERATURE FOR ALL THE QUOTED ITEM.
4. STANDARD TEST / QUALITY CONTROL DOCUMENT/CERTIFICATES.
5. DETAIL OF WORKS (MANUFACTURING FACILITIES)
6. TEST/ INSPECTION AT MANUFAURING FACILITY.
7. REFERENCE FOR SIMILAR TYPE OF TRANSMITTERS ALREADY SUPPLIED IN PAKISTAN VERIFIABLE BY E-MAIL/PHONE/FAX.
8. MINIMUM 07 YEAR EXPERIENCE MANUFACTURING THE SAME CAPACITY OF TRANSMITTERS.
9. ALL ITEMS ARE NACE COMPLIANCE.