











OWNER:  شرکت سست موبلی آوند ایرانیان (سهامی خاص)	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT						EPC CONTRACTOR:  Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT		
MC :  شرکت سست موبلی آوند ایرانیان اصفهان	PULSATION DAMPER MECHANICAL DATA SHEET FOR NITROGEN GAS BOOSTER								
	Project	Area	Phase	Unit	Dis.	Doc.	Seq.	Contract No : 52-98/445	
Owner Document Number: 17811-11C	BU	20	VD	303	ME	DSH	0027	Rev.:	Page
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PULSATION DAMPER MECHANICAL DATA SHEET FOR NITROGEN GAS BOOSTER

 شرکت سست موبلی آوند ایرانیان	 Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT
Document Review		
Issue Purpose:	IFA	
Result Code: AP,AN,CM,RE,NC	AN	
Next Status : IFC,IFA,IFI,AFC,AB	AFC	
Responsible Department	MECHANICAL	
Commented Date	4/19/2022	
Approval or review hereunder shall not be construed to relieve Vendor / Subcontractor of his responsibilities and liability under the contract.		






03	13/04/2022	For approval	KP	CL	JR	
02	10/03/2022	For approval	KP	CL	JR	
01	28/02/2022	For approval	KP	CL	JR	
00	11/12/2020	For approval	KP	KP	KP	
Rev.	Date	Purpose of Issue	Prepared	Checked	Approved	AC Code
					Class: 1	Phase: P

OWNER:  شرکت سست موبلی آوند ایرانیاان (سازمان تخصصی)	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT						EPC CONTRACTOR:  Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT		
	PULSATION DAMPER MECHANICAL DATA SHEET FOR NITROGEN GAS BOOSTER						 Netherlands		
MC :  شرکت سست موبلی آوند ایرانیاان (سازمان تخصصی)	Project	Area	Phase	Unit	Dis.	Doc.	Seq.	Contract No : 52-98/445	
Owner Document Number: 17811-11C	BU	20	VD	303	ME	DSH	0027	Rev.:	Page
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TABULATION OF REVISED PAGES



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1.	X	X	X	X	
2.	X	X	X	X	
3.	X	X	X	X	
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		Pulsation damper mechanical datasheet		P.O. No.	52-98/445
				Document No.	17811-11C
				Sheet No.	3
				Rev.No	3
CONTRACTOR / END USER    			BUSHEHR PETROCHEMICAL COMPANY MEG PLANT		
			Service: nitrogen compressor package		
1st stage inlet pulsation damper (20-DC-1002-1)					
2	OPERATING PRESSURE	Bar(a)		9 bar(a)	
3	DESIGN PRESSURE	Bar(g)		14,5 bar(g)	
4	HYDROTEST PRESSURE			1.3 X MAWP as per ASME VIII	
5	OPERATING TEMPERATURE	°C		5-52	
6	DESIGN TEMPERATURE	°C		0-85	
7	DESIGN CODE			ASME VIII Div. 1 Ed. 2021	
8	MATERIAL CERTIFICATE			3.1	
9	MATERIAL OF CONSTRUCTION			Shell /pipes : SA106 gr B, Heads : SA234 WPB, flanges : SA105	
10	NOZZLE SIZE INLET/OUTLET			2" 150# for inlet and outlet, 1/2 NPT-F for drain	
11	DIMENSIONS	DIAX TT		12" X 1100 mm	
12	WEIGHT EMPTY	kg		120	
13	WEIGHT FILLED WITH WATER	kg		210	
14	CAPACITY	Liters		96	
15	TESTING AS PER CODE			ASME VIII Div. 1 Ed. 2021	
16	CORROSION ALLOWANCE	mm		3	
17	PWHT	Yes/No		No	
18	THICKNESS	mm			
19	Design aproach				
20	Maximum Allowable Compressor Cylinder Flange Pressure Pulsation as per clause 7.9.4.2.5.2.1 of API618.				
21	Maximum Allowable Pressure Drop as per clause 7.9.4.2.5.3.1 of API 618.	Bar			
23	Maximum Allowable Pulsation Limits at and Beyond Line-side Nozzles of Pulsation Suppression Devices as per clause 7.9.4.2.5.2.2.1 of API 618.	bar			
1st stage outlet pulsation damper (20-DC-1002-2)					
25	OPERATING PRESSURE	Bar(a)		15,5 bar(a)	
26	DESIGN PRESSURE	Bar(g)		26 bar(g)	
27	HYDROTEST PRESSURE			1.3 X MAWP as per ASME VIII	
28	OPERATING TEMPERATURE	°C		134	
29	DESIGN TEMPERATURE	°C		0-170	
30	DESIGN CODE			ASME VIII Div. 1 Ed. 2021	
31	MATERIAL CERTIFICATE			3.1	
32	MATERIAL OF CONSTRUCTION			Shell /pipes : SA106 gr B, Heads : SA234 WPB, flanges : SA105	
33	NOZZLE SIZE INLET/OUTLET			2" 300# for inlet and outlet, 1/2 NPT-F for drain	
34	DIMENSIONS	DIAX TT		12" X 1100 mm	
35	WEIGHT EMPTY	kg		110	
36	WEIGHT FILLED WITH WATER	kg		190	
37	CAPACITY	Liters		96	
38	TESTING AS PER CODE			ASME VIII Div. 1 Ed. 2021	
39	CORROSION ALLOWANCE	mm		3	
40	PWHT	Yes/No		No	
41	THICKNESS	mm		9,52	
43	Design aproach			API 618 Design approach 2	
44	Maximum Allowable Compressor Cylinder Flange Pressure Pulsation as per clause 7.9.4.2.5.2.1 of API618.	Bar		6,64%	
45	Maximum Allowable Pressure Drop as per clause 7.9.4.2.5.3.1 of API 618.	Bar		0,15	
46	Maximum Allowable Pulsation Limits at and Beyond Line-side Nozzles of Pulsation Suppression Devices as per clause 7.9.4.2.5.2.2.1 of API 618.	bar		1,433	
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49	NOTES:				
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With reference to mechanical datasheet and P&ID design temperature is 210 C .

It is not clear why design temperature has changed.

		Pulsation damper mechanical datasheet		P.O. No.	52-98/445
				Document No.	17811-11C
				Sheet No.	4
				Rev.No	3
			BUSHEHR PETROCHEMICAL COMPANY MEG PLANT		Service
					nitrogen compressor package
2nd stage inlet pulsation damper (20-DC-1002-3)					
2	OPERATING PRESSURE	Bar(a)		14,5 bar(a)	
3	DESIGN PRESSURE	Bar(g)		26 bar(g)	
4	HYDROTEST PRESSURE			1.3 X MAWP as per ASME VIII	
5	OPERATING TEMPERATURE	°C		50	
6	DESIGN TEMPERATURE	°C		0-85	
7	DESIGN CODE			ASME VIII Div. 1 Ed. 2021	
8	MATERIAL CERTIFICATE			3.1	
9	MATERIAL OF CONSTRUCTION			Shell /pipes : SA106 gr B, Heads : SA234 WPB, flanges : SA105	
10	NOZZLE SIZE INLET/OUTLET			2" 300# for inlet and outlet, 1/2 NPT-F for drain	
11	DIMENSIONS	DIxT		10" X 600 mm	
12	WEIGHT EMPTY	kg		75	
13	WEIGHT FILLED WITH WATER	kg		115	
14	CAPACITY	Liters		38	
15	TESTING AS PER CODE			ASME VIII Div. 1 Ed. 2021	
16	CORROSION ALLOWANCE	mm		3	
17	PWHT	Yes/No		No	
18	THICKNESS	mm		9,27	
20	Design approach			API 618 Design approach 2	
21	Maximum Allowable Compressor Cylinder Flange Pressure Pulsation as per clause 7.9.4.2.5.2.1 of API618.			4,54%	
22	Maximum Allowable Pressure Drop as per clause 7.9.4.2.5.3.1 of API 618.	Bar		0,0636	
23	Maximum Allowable Pulsation Limits at and Beyond Line-side Nozzles of Pulsation Suppression Devices as per clause 7.9.4.2.5.2.2.1 of API 618.	bar		0,739	
2nd stage outlet pulsation damper (20-DC-1002-4)					
26	OPERATING PRESSURE	Bar(a)		23,5 bar(a)	
27	DESIGN PRESSURE	Bar(g)		26 bar(g)	
28	HYDROTEST PRESSURE			1.3 X MAWP as per ASME VIII	
29	OPERATING TEMPERATURE	°C		83	
30	DESIGN TEMPERATURE	°C		0-85	
31	DESIGN CODE			ASME VIII Div. 1 Ed. 2021	
32	MATERIAL CERTIFICATE			3.1	
33	MATERIAL OF CONSTRUCTION			Shell /pipes : SA106 gr B, Heads : SA234 WPB, flanges : SA105	
34	NOZZLE SIZE INLET/OUTLET			2" 300# for inlet and outlet, 1/2 NPT-F for drain	
35	DIMENSIONS	DIxT		10" X 800 mm	
36	WEIGHT EMPTY	kg		85	
37	WEIGHT FILLED WITH WATER	kg		130	
38	CAPACITY	Liters		48	
39	TESTING AS PER CODE			ASME VIII Div. 1 Ed. 2021	
40	CORROSION ALLOWANCE	mm		3	
41	PWHT	Yes/No		No	
42	THICKNESS	mm		9,27	
44	Design approach			API 618 Design approach 2	
45	Maximum Allowable Compressor Cylinder Flange Pressure Pulsation as per clause 7.9.4.2.5.2.1 of API618.	Bar		4,54%	
46	Maximum Allowable Pressure Drop as per clause 7.9.4.2.5.3.1 of API 618.	Bar		0,0603	
47	Maximum Allowable Pulsation Limits at and Beyond Line-side Nozzles of Pulsation Suppression Devices as per clause 7.9.4.2.5.2.2.1 of API 618.	bar		0,9	
48	NOTES:				
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