









OWNER:  شرکت سست و پتروشیمی آریلیان (سهامی خاص)	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								
MC : 	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





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 ایرانیا (ساخته شده)	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 ایرانیا اصفهان	Project	Area	Phase	Unit	Dis.	Doc.	Seq.	Contract No : 52-98/445	
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 		Pulsation damper mechanical datasheet		P.O. No.	52-98/445
				Document No.	17811-11C
				Sheet No.	3
				Rev.No	01
 		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(a)		13,5 bar(a)	
4	HYDROTEST PRESSURE			1.3 X MAWP as per ASME VIII	
5	OPERATING TEMPERATURE	°C		5-55	
6	DESIGN TEMPERATURE	°C		0-80	
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 IT		12" X 1100 mm	
12	WEIGHT EMPTY	kg		120	
13	WEIGHT FILLED WITH WATER	kg		210	
14	CAPACITY	Liters		90	
15	TESTING AS PER CODE			ASME VIII Div. 1 Ed. 2021	
16	CORROSION ALLOWANCE	mm		3	
17	PWHT	Yes/No		No	
18	THICKNESS	mm		9.52	
19	RAL COLOR			7035	
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.	Bar		0,291	
22	Maximum Allowable Pressure Drop as per clause 7.9.4.2.5.3.1 of API 618.	Bar		0,18	
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		0,536	
1st stage outlet pulsation damper (20-DC-1002-2)					
26	OPERATING PRESSURE	Bar(a)		14,5 bar(a)	
27	DESIGN PRESSURE	Bar(a)		25 bar(a)	
28	HYDROTEST PRESSURE			1.3 X MAWP as per ASME VIII	
29	OPERATING TEMPERATURE	°C		5-55	
30	DESIGN TEMPERATURE	°C		0-170	
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	DIAX IT		12" X 1100 mm	
36	WEIGHT EMPTY	kg		110	
37	WEIGHT FILLED WITH WATER	kg		190	
38	CAPACITY	Liters		80	
39	TESTING AS PER CODE			ASME VIII Div. 1 Ed. 2021	
40	CORROSION ALLOWANCE	mm		3	
41	PWHT	Yes/No		No	
42	THICKNESS	mm		9.52	
43	RAL COLOR			Aluminium	
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		1,481	
46	Maximum Allowable Pressure Drop as per clause 7.9.4.2.5.3.1 of API 618.	Bar		0,15	
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		1,433	
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50	NOTES:				
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		Pulsation damper mechanical datasheet		P.O. No.	52-98/445
				Document No.	17811-11C
				Sheet No.	4
				Rev.No	01
		BUSHEHR PETROCHEMICAL COMPANY MEG PLANT		Service	nitrogen compressor package
2nd stage inlet pulsation damper (20-DC-1002-3)					
1					
2	OPERATING PRESSURE	Bar(a)	14,5 bar(a)		
3	DESIGN PRESSURE	Bar(a)	25 bar(a)		
4	HYDROTEST PRESSURE		1.3 X MAWP as per ASME VIII		
5	OPERATING TEMPERATURE	°C	50		
6	DESIGN TEMPERATURE	°C	0-80		
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 60 mm		
12	WEIGHT EMPTY	kg	75		
13	WEIGHT FILLED WITH WATER	kg	115		
14	CAPACITY	Liters	34		
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		
19	RAL COLOR		7035		
20	Design aproach		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.	Bar	0,373		
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	bar	0,739		
2nd stage outlet pulsation damper (20-DC-1002-4)					
25					
26	OPERATING PRESSURE	Bar(a)	23,5 bar(a)		
27	DESIGN PRESSURE	Bar(a)	25 bar(a)		
28	HYDROTEST PRESSURE		1.3 X MAWP as per ASME VIII		
29	OPERATING TEMPERATURE	°C	64		
30	DESIGN TEMPERATURE	°C	0-80		
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	45		
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		
43	RAL COLOR		Aluminium		
44	Design aproach		API 618 Design approach 2		
45	Maximum Allowable Compressor Cylinder Flange Pressure Pulsation as per	Bar	0,775		
46	Maximum Allowable Pressure Drop as per clause 7.9.4.2.5.3.1	Bar	0,0603		
47	Maximum Allowable Pulsation Limits at and Beyond Line-side Nozzles of Pulsation	bar	0,9		
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48	NOTES:				
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