









OWNER:  شرکت سست و سوسپانسیون ایرانیان (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






07	16/08/2022	Approved for Construction	KP	CL	JR	
06	14/07/2022	Approved for Construction	KP	CL	JR	
05	06/05/2022	Approved for Construction	KP	CL	JR	
04	25/04/2022	Approved for Construction	KP	CL	JR	
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 موبه‌ئی آوند ایرانیان (سه‌لی نغصه‌لی)	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 موبه‌ئی آوند ایرانیان امدی نغصه‌لی	Project	Area	Phase	Unit	Dis.	Doc.	Seq.	Contract No : 52-98/445	
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1.	X	X	X	X	X
2.	X	X	X	X	X
3.	X	X	X	X	
4.		X	X	X	
5.					

Page	D05	D06	D07		
1.	X	X	X		
2.	X	X	X		
3.		X	X		
4.		X	X		
5.					

		Pulsation damper mechanical datasheet		P.O. No.	52-98/445
				Document No.	17811-11C
				Sheet No.	3
				Rev.No	7
   			BUSHEHR PETROCHEMICAL COMPANY MEG PLANT		
CONTRACTOR / END USER			Service: nitrogen compressor package		
1	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	5-52		
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	9.52		
19	Design aproach	API 618 Design approach 2			
20	Maximum Allowable Compressor Cylinder Flange Pressure Pulsation as per clause 7.9.4.2.5.2.1 of API618.		6,64%		
21	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		
24	1st stage outlet pulsation damper (20-DC-1002-2)				
25	OPERATING PRESSURE	Bar(a)	14,5 bar(a)		
26	DESIGN PRESSURE	Bar(a)	25 bar(a)		
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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48					
49	NOTES:				
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		Pulsation damper mechanical datasheet		P.O. No.	52-98/445
				Document No.	17811-11C
				Sheet No.	4
				Rev.No	7
			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(a)	25 bar(a)		
4	HYDROTEST PRESSURE		1.3 X MAWP as per ASME VIII		
5	OPERATING TEMPERATURE	°C	50		
6	DESIGN TEMPERATURE	°C	0-85		
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(a)	26 bar(a)		
28	HYDROTEST PRESSURE		1.3 X MAWP as per ASME VIII		
29	OPERATING TEMPERATURE	°C	83		
30	DESIGN TEMPERATURE	°C	0-100		
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		
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47					
48	NOTES:				
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