









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



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 نغصیر)	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 نغصیر	Project	Area	Phase	Unit	Dis.	Doc.	Seq.	Contract No : 52-98/445	
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1.	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	6
		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		5-52	
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 IT		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 approach			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	
1st stage outlet pulsation damper (20-DC-1002-2)					
25	OPERATING PRESSURE	Bar(a)		15.5 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 IT		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 approach			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
CONTRACTOR / END USER		BUSHEHR PETROCHEMICAL COMPANY MEG PLANT		Sheet No.	4
   				Rev.No	6
				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	0-85		
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	DIx IT	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 API 618.		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		
25	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	DIx IT	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 API 618.	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:				
49					
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