









OWNER:  شرکت سست و پتروشیمی آرمینان (سهامی خاص)	<b>BUSHEHR PETROCHEMICAL COMPANY MEG PLANT</b>						EPC CONTRACTOR:  Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT		
	<b>PULSATION DAMPER MECHANICAL DATA SHEET FOR NITROGEN GAS BOOSTER</b>								
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
								05	1 of 4

## PULSATION DAMPER MECHANICAL DATA SHEET FOR NITROGEN GAS BOOSTER



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	
<b>Rev.</b>	<b>Date</b>	<b>Purpose of Issue</b>	<b>Prepared</b>	<b>Checked</b>	<b>Approved</b>	<b>AC Code</b>
					<b>Class: 1</b>	<b>Phase: P</b>



OWNER:  شرکت سست موبوئی آوند ایرانیان (سهایی خصوصی)	<b>BUSHEHR PETROCHEMICAL COMPANY MEG PLANT</b>						EPC CONTRACTOR:  Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT		
	<b>PULSATION DAMPER MECHANICAL DATA SHEET FOR NITROGEN GAS BOOSTER</b>						 Netherlands		
MC :  شرکت سست موبوئی آوند ایرانیان سهایی خصوصی	<b>Project</b>	<b>Area</b>	<b>Phase</b>	<b>Unit</b>	<b>Dis.</b>	<b>Doc.</b>	<b>Seq.</b>	<b>Contract No : 52-98/445</b>	
<b>Owner Document Number: 17811-11C</b>	<b>BU</b>	<b>20</b>	<b>VD</b>	<b>303</b>	<b>ME</b>	<b>DSH</b>	<b>0027</b>	<b>Rev.:</b>	<b>Page</b>
								05	2 of 4

### TABULATION OF REVISED PAGES

Page	D00	D01	D02	D03	D04
1.	X	X	X	X	X
2.	X	X	X	X	X
3.	X	X	X	X	
4.		X	X	X	
5.					

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

		<b>Pulsation damper mechanical datasheet</b>		P.O. No.	52-98/445
				Document No.	17811-11C
				Sheet No.	3
				Rev.No	5
		<b>BUSHEHR PETROCHEMICAL COMPANY MEG PLANT</b>		Service	nitrogen compressor package
<b>1st stage inlet pulsation damper (20-DC-1002-1)</b>					
2	OPERATING PRESSURE	Bar(a)		<b>9 bar(a)</b>	
3	DESIGN PRESSURE	Bar(g)		<b>14.5 bar(g)</b>	
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		<b>96</b>	
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	
<b>1st stage outlet pulsation damper (20-DC-1002-2)</b>					
25	OPERATING PRESSURE	Bar(a)		<b>15.5 bar(a)</b>	
26	DESIGN PRESSURE	Bar(g)		<b>26 bar(g)</b>	
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		<b>96</b>	
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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49	<b>NOTES:</b>				
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		<b>Pulsation damper mechanical datasheet</b>		P.O. No.	52-98/445
				Document No.	17811-11C
				Sheet No.	4
				Rev.No	4
		<b>BUSHEHR PETROCHEMICAL COMPANY MEG PLANT</b>		Service	nitrogen compressor package
<b>2nd stage inlet pulsation damper (20-DC-1002-3)</b>					
1					
2	OPERATING PRESSURE	Bar(a)	<b>14,5 bar(a)</b>		
3	DESIGN PRESSURE	Bar(g)	<b>26 bar(g)</b>		
4	HYDROTEST PRESSURE	1.3 X MAWP as per ASME VIII			
5	OPERATING TEMPERATURE	°C	<b>50</b>		
6	DESIGN TEMPERATURE	°C	<b>0-85</b>		
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 TI	10" X 600 mm		
12	WEIGHT EMPTY	kg	75		
13	WEIGHT FILLED WITH WATER	kg	115		
14	CAPACITY	Liters	<b>38</b>		
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		
<b>2nd stage outlet pulsation damper (20-DC-1002-4)</b>					
25					
26	OPERATING PRESSURE	Bar(a)	<b>23,5 bar(a)</b>		
27	DESIGN PRESSURE	Bar(g)	<b>26 bar(g)</b>		
28	HYDROTEST PRESSURE	1.3 X MAWP as per ASME VIII			
29	OPERATING TEMPERATURE	°C	<b>83</b>		
30	DESIGN TEMPERATURE	°C	<b>0-85</b>		
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 TI	10" X 800 mm		
36	WEIGHT EMPTY	kg	85		
37	WEIGHT FILLED WITH WATER	kg	130		
38	CAPACITY	Liters	<b>48</b>		
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	<b>NOTES:</b>				
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51					