



**BUSHEHR PETROCHEMICAL COMPANY  
MEG PLANT**



**After cooler mechanical data sheet for  
reciprocating compressor**



**Owner Document Number:  
17811-11B**

Project	Area	Phase	Unit	Dis.	Doc.	Seq.
BU	20	VD	303	ME		

**Contract No : 52-98/445**

Mechanical items will be checked  
after sending cooler calculation.




**General comments:**  
Following items shall be added  
to data sheet:  
1- Tube type shall be added.  
2- Tube No. OD.  
4- Tube THK (AVG)  
5- Tube Length  
6- Tube Pitch  
7- Shell ID  
8- Shell OD  
9- Tubesheet-Stationary  
material  
10- Floating head cover  
material  
11- Tubesheet-Floating material  
12- Gaskets-Shell Side type  
13- Heat exchanger type  
14- Surf/Unit (Gross/Eff) (m2)  
15- Syrf/Shell (Gross/Eff) (m2)  
16- Shell THK.

**After cooler mechanical data sheet for reciprocating compressor**

<b>Document Review</b>	
Issue Purpose:	IFA
Result Code: AP,AN,CM,RE,NC	CM
Next Status : IFC,IFA,IFI,AFC,AB	IFA
Responsible Department	MECHANICAL
Commented Date	Apr /25/2021
<b>Approval or review hereunder shall not be construed to relieve Vendor / Subcontractor of his responsibilities and liability under the contract.</b>	

Rev.	Date	Purpose of Issue	Prepared	Checked	Approved	AC Code
00	11/12/2020	For approval	KP	KP	KP	



Class: 1 Phase: p

OWNER  شرکت پتروشیمی بوته‌ر	<b>BUSHEHR PETROCHEMICAL COMPANY MEG PLANT</b>						EPC CONTRACTOR: 		
	<b>After cooler mechanical data sheet for reciprocating compressor</b>								
MC:  شرکت سفت و سوی توسعه ایرانیان	Project	Area	Phase	Unit	Dis.	Doc.	Seq.	Contract No : 52-98/445	
Owner Document Number: 17811-11B	BU	20	VD	303	ME	DSH	0017	Rev.:	Page
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VENDOR				<b>Aftercooler mechanical datasheet</b>		P.O. No. 52-98/445 Document No. 17811-11B 3 00	
CONTRACTOR / END USER 				<b>BUSHEHR PETROCHEMICAL COMPANY MEG PLANT</b>		Service instrument air <del>and nitrogen compressor packages</del>	
1		<b>1- Compressor tag number shall be added</b>		<b>ER (20-AEC-1002-1)</b>			
2		<b>SHELL SIDE (HUMID AIR)</b>		<b>TUBE SIDE (WATER)</b>		<b>GENERAL</b>	
3	SHELL OPERATING PRESS.	bar(a)	23,5	TUBE OPERATING PRESS.	bar(g)	4,5	MANUFACTURER <b>Monje</b>
4	SHELL DESIGN PRESS.	bar(g)	25	TUBE DESIGN PRESS.	bar(g)	10	INLET SIZE <b>2" 300#</b>
5	SHELL OPERATING TEMP.	°C	190	TUBE OPERATING TEMP.	°C	35	OUTLET SIZE <b>2" 300#</b>
6	SHELL DESIGN TEMP.	°C	210	TUBE DESIGN TEMP.	°C	95	WATER INLET <b>1 1/2"SAE</b>
7	SHELL DIFF PRESSURE	mbar	4	TUBE DIFF PRESSURE	mbar	5	WATER OUTLER <b>1 1/2"SAE</b>
8	DISCHARGE TEMP.	°C	40	DISCHARGE TEMP.	°C	45	CORROSION ALL. <b>0</b>
9	AIR FLOW	Nm3/hr	173	WATER FLOW	m3/hr	1,4	DIM. LxWxH <b>TBC</b>
10	SHELL MATERIAL		SS316	TUBE MATERIAL		SS316	WEIGHT <b>TBC</b>
11	DESIGN CODE		TEMA C, ASME VIII	DESIGN CODE		TEMA C, ASME VIII	
<b>1 AFTER COOLER (20-AEC-1002-1)</b>							
2		<b>SHELL SIDE (HUMID AIR)</b>		<b>TUBE SIDE (WATER)</b>		<b>GENERAL</b>	
3	SHELL OPERATING PRESS.	bar(a)	21	TUBE OPERATING PRESS.	bar(g)	4,5	MANUFACTURER <b>Monje</b>
4	SHELL DESIGN PRESS.	bar(g)	25	TUBE DESIGN PRESS.	bar(g)	10	INLET SIZE <b>2" 300#</b>
5	SHELL OPERATING TEMP.	°C	185	TUBE OPERATING TEMP.	°C	35	OUTLET SIZE <b>2" 300#</b>
6	SHELL DESIGN TEMP.	°C	210	TUBE DESIGN TEMP.	°C	95	WATER INLET <b>1 1/2"SAE</b>
7	SHELL DIFF PRESSURE	mbar	4	TUBE DIFF PRESSURE	mbar	5	WATER OUTLER <b>1 1/2"SAE</b>
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11	DESIGN CODE		TEMA C, ASME VIII	DESIGN CODE		TEMA C, ASME VIII	
<b>52 NOTES :</b> discrepancy with PID. On PID DP is reported 35.25 bara discrepancy with PID. On PID OT and DT are reported 190 °C and 200 °C respectively. According to PID it seems that cooling water is routed to the shell and instrument air is routed to the tubes. Discrepancy with PID. Shall be specified in next revision. Size of line must be shown on PID.							