

	LIDCO, Pars SEE Zone, Assaluyeh, Integrated Methanol and Ammonia Plant 3000 MTPD MeOH / 900 MTPD NH3 PROJECT						
	Inter / After Cooler Data Sheet						
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**Airpack B.V. - Air Compressor –
Integrated Methanol and Ammonia Plant
17735-COM Inter / After Cooler Data Sheet (K020)**

Code 2
M.Dalakeh

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Inter / After Cooler Data Sheet




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VENDOR				Inter- after cooler data sheet		P.O. No.	LIDCO-PO-NEC-278-6019		
						Document No.	17735-11B		
CONTRACTOR / END USER		 		LIDCO, Pa Integrated Plant 3000 MT					
1									
2	SHELL SIDE (HUMID AIR)								
3	SHELL OPERATING PRESS.	bar(g)	23,3	TUBE OPER					
4	LINE DESIGN PRESS.	bar(g)	30,5	LINE DESIG					
5	SHELL DESIGN PRESS.	bar(g)	-1 TO 39	TUBE DESIG					
6	SHELL OPERATING TEMP.	°C	157	TUBE OPER					
7	LINE DESIGN TEMP.	°C	175	LINE DESIG					
8	SHELL DESIGN TEMP.	°C	-10 TO 175	TUBE DESIG					
9	SHELL DIFF PRESSURE	mbar	1,249	TUBE DIFF PRESSURE	mbar	1,08	DIM. LxWxH	482,4x300x115	
10	DISCHARGE TEMP.	°C	60	DISCHARGE TEMP.	°C	46	WEIGHT	15 kg	
11	AIR FLOW	Nm3/hr	35	WATER FLOW	m3/hr	0,3	OPERATING WEIGHT	15,8 kg	
12	SHELL MATERIAL	TP316 - SA-312		TUBE MATERIAL	TP316L - SA-312			DESIGN CODE	TEMA C, ASME VIII Div. 1
13	TEST PRESSURE	bar(g)	64,35	TEST PRESSURE	bar(g)	15			
14	VOLUME	L	1,7	VOLUME	L	0,8			
15	AFTER COOLER								
16	SHELL SIDE (HUMID AIR)			TUBE SIDE (WATER)			GENRAL		
17	SHELL OPERATING PRESS.	bar(g)	30	TUBE OPERATING PRESS.	bar(g)	4,5	MANUFACTURER	IWS Monje	
18	LINE DESIGN PRESS.	bar(g)	39	LINE DESIGN PRESS.	bar(g)	7	INLET SIZE	3/4" 600# WNRF	
19	SHELL DESIGN PRESS.	bar(g)	-1 TO 39	TUBE DESIGN PRESS.	bar(g)	-1 TO 10	OUTLET SIZE	3/4" 600# WNRF	
20	SHELL OPERATING TEMP.	°C	116	TUBE OPERATING TEMP.	°C	46	WATER INLET	G 3/4"	
21	LINE DESIGN TEMP.	°C	135	LINE DESIGN TEMP.	°C	75	WATER OUTLER	G 3/4"	
22	SHELL DESIGN TEMP.	°C	-10 TO 175	TUBE DESIGN TEMP.	°C	-10 TO 100	CORROSION ALL.	0 mm	
23	DIFF PRESSURE	mbar	0,9397	TUBE DIFF PRESSURE	mbar	0,3826	DIM. WxHxL	482,4x300x115	
24	DISCHARGE TEMP.	°C	60	DISCHARGE TEMP.	°C	46	WEIGHT	15 kg	
25	AIR FLOW	Nm3/hr	35	WATER FLOW	m3/hr	0,14	OPERATING WEIGHT	15,8 kg	
26	SHELL MATERIAL	TP316 - SA-312		TUBE MATERIAL	TP316L - SA-312			DESIGN CODE	TEMA C, ASME VIII Div. 1
27	TEST PRESSURE	bar(g)	64,35	TEST PRESSURE	bar(g)	15			
28	VOLUME	L	1,7	VOLUME	L	0,8			
29	NOTES :								
30									
31									
32									

Outlet pressure of 2nd stage compressor is equal to 30 barg, considering 0.94 bar as pressure drop of after cooler, air pressure at BL will be almost 29 barg (line loss is ignored) that has discrepancy with reported value in vendor P&ID and compressor data sheet.

Also, this issue already has been commented in compressor data sheet, that 30 barg is required in package BL and compressor discharge pressure shall be calculated considering pressure drop from package BL to compressor nozzle.