

**AIR COOLED EXCHANGER  
SPECIFICATION SHEET**

Date	Fri* 3:10 pm*18-JAN-2002
Proposal/Job No.	013-01PY
Reference UCS PO#	94-0003
Item No.	AC

1	Customer	UNIVERSAL COMPRESSION			Item No.	AC
2	Plant Location	CALGARY				
3	Service	AC				
4	Model	1 F14-090-1	Type	FORCED	No. of Bays	1 (2 Units)
5	Surface per Unit-Finned Tube	10,410	BTU/Hr	FT <sup>2</sup>	Bare Tubes	491.5 FT <sup>2</sup>
6	Heat Exchanged	1,095,000	BTU/Hr	MTD (Eff.)	32.4 (Counter Flow)°F	
7	Transfer Rate-Finned Tube	3.24	Bare Tube, Service	68.70	BTU/Hr. FT <sup>2</sup>	°F

**PERFORMANCE DATA-TUBE SIDE**

9	Fluid Name	GAS		Lethal Service	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	IN	OUT
10	Total Fluid Entering	Lb/Hr	19,830	Density	Lb/FT <sup>3</sup>	2.28	2.62
11		IN	OUT	Specific Heat (Liq/Vap)	BTU/Lb°F	/.648	/.648
12	Temperature	°F	185.0	100.0	Cond. (Liq/Vap)	BTU/HrFt <sup>2</sup> °F	.0200
13	Liquid	Lb/Hr			Pour/Freeze Point	°F	
14	Vapor	Lb/Hr (MW)	19,830 (17.7)	19,830 (17.7)	Bubble Point	°F	
15	Nocond	Lb/Hr (MW)			Latent Heat	BTU/Lb	
16	Steam	Lb/Hr			Pressure	Psia	895.00
17	Water	Lb/Hr			Pressure Drop Allow/Calc	Psi	5.00 / 1.31
18	Viscosity (Liq/Vap)	Cp	/.013	/.013	Fouling resist, Inside	ft <sup>2</sup> hr °F/BTU	0.00200

**PERFORMANCE DATA-AIR SIDE**

20	Air Quantity	SCFM	56,590	Lb/Hr	254,600	Altitude	Ft	900
21	Air Quantity/Fan	ACFM	83,650			Temperature In	°F	90.0
22						Temperature Out	°F	107.8
23								

**DESIGN - MATERIAL - CONSTRUCTION**

25	Design Pressure	1,315	Psig	Test Pressure	1,973	Psig	Design Temperature	300 / MDMT -40	°F
26	<b>TUBE BUNDLE</b>	<b>HEADER, Type PLUG BOX</b>				<b>TUBE Material SA-214 WLD</b>			
27	Size	6.6 x 14.0		Material	SA-516 GR-70				
28	No.	1	No. Tube Rows	4	No. Passes	4	Slope	0.0000	In/Ft
29	Bays	1	In Parallel	In Series	Plug	CS1822		No./Bundle	134
30	Bundles	1	In Parallel	In Series	Gasket	CS1813		Pitch	2.3125
31	Pass Arrangement (Top to Bottom)				Corrosion Allowance	0.1250	In	FIN Type	L-TENSION
32	Rows / Pass	4 / 4		Size In Nozzle (1)	6.00	SCH 160 SA-106B	In	Material	ALUM
33		Size Out Nozzle (1)	6.00	SCH 160 SA-106B	In	OD	2.250	In	Stock Thick
34	Steam Coil	NO		Rating & Facing	600 -RF SA-105		No/in	10	Support Chan. / Staple
35	Hailscreens	YES		Vent (0)	Drain (0)		Code-ASME VIII, Div 1	YES	Stamp
36	Louvers	ALUM (2) JSN D-3153-4		TI	I-3000 PI		Radiograph	N	Heat Treat
37	Frame Finish	CMSB 3 Coat Brand Name Paint		Header Finish	CMSB 3 Coat Brand Name Paint		Tube Hole Grooving	YES	

**MECHANICAL EQUIPMENT**

39	<b>FAN Mfg &amp; Model</b>	MOORE 40 5000		<b>DRIVER Type</b>	ELECTRIC MOTOR		<b>SPEED REDUCER Type</b>	V-BELT	
40	No./Bay	1	RPM	312	S.F.	1.15	Insul/TR	CLASS F / B	
41	Dia.	8.0	Fl.	No. Blades	7	No./Bay	1	Frame	254T HP 15.0
42	Pitch	ADJUSTABLE	Angle°	11.	RPM (1)	1750	Duty	CHEM	
43	Mati, Blade	ALUMINUM		Hub	CASTALUM		Enclosure	EXPL V & D None	
44	HP/Fan, Des.	11.1	DBA	83.	V/P/C	575/3/60		Space Heater	NO

**STRUCTURE**

45	Mounting	GRADE			Inlet Header	in. 30 EXPANDED		
46	Windload - PSF	30.0	Seismic	4	Outlet/Return	in. None		
47	Finish	CMSB 3 Coat Brand Name Paint			Drive Access	in. None		

**WALKWAYS**

**NOTES**

48	Items combined:	AC	CCW
49	Coil Volume (ft <sup>3</sup> ):	12.	
50	Assembled Drive, Structure, Louvers & Bundles		
51			
52			
53			
54			
55	Plot Area	9.0 x 14.0	ft
	Weight Bundle	4,964	Lbs
	Total Shipping	12,190	Lbs