

AIR COOLED HEAT EXCHANGER SPECIFICATION SHEET

1						Date:	9/1/10	Rev.	0
2	Customer	JR Manufacturing				Item No.	AC1520		
3	Plant Location					Job No.	1595		
4	Service	Amine Still Reflux Condenser				Ref. No.	47410		
5	Size and Type	Model: H156-2-40	FORCED Draft	No. Bays	1	P.O. No.	JR-01035		
6	Surface/Unit - Finned Tube	61930.7	ft2	;Bare Tube	2,592	ft2			
7	Heat Exchanged	2,211,960	Btu/h	MTD, Eff.	55.01	°F			
8	Transfer Rate-Finned Tube	0.649	;Bare Tube, Service	15.514	Clean	85.619	Btu/h.ft2.F		

10	Fluid Name		Reflux	Vapor Ref. Temp.	°F	202.41 / 120.52
11	Total Fluid In	lb/h	12115	Specific Heat	Btu/lb.F	0.2637 / 0.2173
12	Vapor	lb/h	12115	Viscosity	cP	0.01738 / 0.01612
13	Liquid	lb/h	0	Conductivity	Btu/h.ft.F	0.01309 / 0.01086
14	Noncond	lb/h		Molecular Weight		34.8 / 42.1
15	Steam	lb/h		Liquid Ref. Temp.	°F	0.0 / 120.52
16	Water	lb/h		Specific Heat	Btu/lb.F	0.0 / 1.0059
17	Fluid Cond./Vapzd	lb/h	1918	Viscosity	cP	0.0 / 0.54585
18	Temperature In/Out	°F	202.41 / 120.52	Conductivity	Btu/h.ft.F	0.0 / 0.36589
19	Pressure	psia	28.696	Density	lb/ft3	0.0 / 61.696
20	Velocity In/Out	ft/s	66.39 / 47.06			
21	Press. Drop Allow/c	psi	4.0 / 2.682	Fouling resistance	h.ft2.F/Btu	0.001

23	Air Quantity, Total	lb/h	1554654	Altitude above Sea Level	ft	800.0
24	Air Quantity/Far	acfm	187842	Temperature In (Dry Bulb)	°F	100.0
25	Actual Static Press	in H2O	0.450	Temperature Out	°F	106.03
26	Face Velocity	sfm	610.0	Min. Design Ambient	°F	0.0
27	Max Mass Velocity	lb/h.ft2	5,311	Fan Air Temperature	°F	100.0

29	Design Pressure		75.0	psig	Test Pressure		97.5	Design Temperature		300.0	/-20		°F	
30	TUBE BUNDLE				HEADER, Type		Plug Box	TUBE, Material		SA-249 TP304L				
31	Size		13.833 x40.0		Material		SA-516 70			Wld				
32	No./Bay	1	No. Rows	4	No. Passes		2	OD	0.75	Thick	0.06		in	
33	Arrangement				Slope		0.0	in/ft	No./Bundle		330			
34	Bundles	1		Parallel	Plug Material		SA-105	Length		40.0				ft
35	Bays	1		Parallel	Gasket Material		CS	Pitch		2.0				in
36	MISCELLANEOUS				Corrosion Allow		0.125	in	Fin, Type		TWF			
37	Struct. Mount				No. Size In Nozz		2 - 6" 150# RF-WN	Material		Aluminum				
38	Surf Prep	SSPC-2		No. Size Out Nozz		2 - 4" 150# RF-WN		OD	2.0	Thk.	0.015		in	
39	Surf Finish	Galvanize		Vent and Drair		1" 6000#		No./in	10.0	Fin Design Temp				
40	Hail Guards	Integral to louvers		TI		PI		Code -	ASME	Stamp	Yes			
41	Louvers / Actuators Auto/Durastroke 1100				Header Prep		SSPC-SP-5	X-RAY	NO	PWHT	NO			
42	Vibration Switches	Murphy VS2 EX		Header Finish		None		SPECS.	No	API-661	No			

44	Fan Mfg Moore			Driver		Speed Reducer		
45	Model Class 1000C Series 42 SC			Type	Electric motor		Type	V-Belt
46	No./ Bay 2	Rev/Min 239		Mfg.	Siemens		Mfg.	Gates or Equa
47	Dia. ft 13	No. Blades 7		No/Bay 2	NEMA-1.15 SF		Model	4/5VX1320 QD4/5V37.50
48	Pitch 20.48	Manual		hp /Driver	25		No/Bay 2	QD4/5V5.20
49	Mat'l:Blade	AL	Hub AL	Rev/Min	1750 / 850		AGMA Rating, hp	1.4
50	hp/Fan, Design	22.38		Enclosure	TEFC Ins F TR B		Ratio	7.322
51				Volt;Phase;Cycle	460/3/60		Support	Structure
52	Plot Area	40 x 13.895	ft2	Total Weight	29810 lb per bay		Dry	Coil Vol 282 Gal
53	Walkways	Width	Type	Recirculation	None		Wind Load	30 PSF
54	Inlet						Seismic Zone	0
55	Outlet							
56	Drive							
57								
58								
60								