

Chart Cooler Service Company

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AIR COOLED HEAT EXCHANGER
SPECIFICATION SHEET

190484
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1				Date:	1/3/2015	Rev. 1
2	Customer	Ventech XTL Oklahoma City, LLC		Item No.	AE-802	
3	Plant Location	Oklahoma City, OK	Ref.No	GTL Project(004084)	Job. No.	45214
4	Service	Diesel Fractionator Air Cooler		P.O. No.	4777010-14-03105	
5	Size and Type	FORCED		No. Bays	1	
6	Surface/Unit - Finned Tube	2680.5 ft ²	Bare Tube	124 ft ²		
7	Heat Exchanged	94953 Btu/h	MTD, Eff.	66.8 °F		
8	Transfer Rate-Finned Tube	0.567 ;Bare Tube, Service	12.17	Clean	12.78 Btu/h.ft ² .F	
PERFORMANCE DATA - TUBE SIDE						
10	Fluid Name	B14-Diesel		Vapor Ref. Temp.	°F	
11	Total Fluid In	lb/h	1204.1	Specific Heat	Btu/lb.F	
12	Vapor	lb/h	0	Viscosity	cP	
13	Liquid	lb/h	1204.1	Conductivity	Btu/h.ft.F	
14	Noncond	lb/h		Molecular Weight		
15	Steam	lb/h		Liquid Ref. Temp.	°F	
16	Water	lb/h		Specific Heat	Btu/lb.F	
17	Fluid Cond./Vapzd.	lb/h		Viscosity	cP	
18	Temperature In/Out	°F	259.01 / 119.98	Conductivity	Btu/h.ft.F	
19	Pressure	psia	49.896	Density	lb/ft ³	
20	Velocity In/Out	ft/s	0.17 / 0.17			
21	Press. Drop Allow/C	psi	6.000 / 0.012	Fouling resistance	h.ft ² .F/Btu	
PERFORMANCE DATA - AIR SIDE (AIR)						
23	Air Quantity, Total	lb/h	67587.411	Altitude above Sea Level	ft	
24	Air Quantity/Fan	acfm	16573	Temperature In (Dry Bulb)	°F	
25	Actual Static Press	in H2O	0.508	Temperature Out	°F	
26	Face Velocity	fpm	802	Min. Design Ambient	°F	
27	Max Mass Velocity	lb/h.ft ²	5618	Fan Air Temperature	°F	
DESIGN - MATERIALS - CONSTRUCTION						
29	Design Pressure	75.000 psig	Test Pressure	97.5	Design Temperature	300.00 / -20 °F
30	TUBE BUNDLE	HEADER, Type		Plug Box	TUBE, Material	SA-214
31	Size	2.755 X 9.000	Material	SA-518 70	Wtd	
32	No./Bay 1	No./Rows 4	No. Passes 4		1 Thick	0.109 in
33	Arrangement	Slope		In/ft	No./Bundle	54
34	Bundles	Parallel	Plug Material	SA-105	Length	9 ft
35	Bays	Parallel	Gasket Material	SS	Pitch	2.3125 in
36	MISCELLANEOUS	Corrosion Allow.		0.0625 in	Fin, Type	TWF
37	Struct. Mount	Grade c/c	No. Size In Nozz.	1 - 2" 150# RF-WN	Material	Aluminum 1100-annealed
38	Surf Prep	SSPC-2	No. Size Out Nozz.	1 - 2" 150# RF-WN	OD	2.25 Thk 0.0115 in
39	Surf Finish	Galvanize	Vent and Drain	1" 8000#	No./In	10 Fin Design Temp
40	Hall Guards	None	TI	PI	Code -	Stamp Yes
41	Louvers / Actuators Manual	Header Prep		SSPC 5	X-RAY	API Spot PWHT Yes
42	Vibration Switches	Metrbx 5550-121-021	Header Finish	Metallize	SPECS.	API-661 Yes
MECHANICAL EQUIPMENT						
44	Fan Mfg	Driver		Speed Reducer		
45		Type		Type		
46	No./Bay	Rev/Min		Mfg.		
47		No. Blades		Model		
48		Manual		hp /Driver		
49	Mat'l:Blade	Rev/Min		AGMA Rating, hp		
50	hp/Fan, Design	Enclosure		Ratio		
51	hp/Fan, Min Amb	Volt;Phase;Cycle		Support Structure		
52	Plot Area	ft ²		Dry		
53	Walkways	Width	Type	Recirculation	Coil Vol	21 Gal
54	Inlet			Wind Load		
55	Outlet			Seismic Zone		
56	Drive					
57	Design Includes 20% margin on flow and duty					
58	The AE-802 aircooler shares the same structure with AE-801					
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