

Air-Cooled Heat Exchanger Specification Sheet

1	Client: Red Bud									
2	Location:									
3	Service of Unit: Cooling Wet Natural Gas									
4	Item No.: 260320									
5	Date: 7/20/2026									
6	Size & Type	38	/	13	ft	Type	Forced	Number of Bays	1	
7	Surf/Unit-Finned Tube	44,771 ft²			Bare area/bundle	1,385	ft²	Ratio (Total	16.16	
8	Heat exchanged	5357598 BTU/h			MTD, Eff	38.61 °F				
9	Transfer rate	3.32	Bare, Service			50.09	Clean	60.57	BTU/(h-ft²-F)	
10	PERFORMANCE DATA - TUBE SIDE									
11	Fluid Circulated	Wet Natural gas				In/Out				
12	Total Fluid Entering	lb/h	97,950			Density, Liq	lb/ft³	0	/	58.638
13		MM SCFD	40			Density, Vap	lb/ft³	4.249	/	5.246
14	Temperature	°F	200	/	125	Specific Heat, Liq	BTU/(lb-F)	0	/	1.1454
15	Liquid	lb/h	0	/	746	Specific Heat, Vap	BTU/(lb-F)	0.6231	/	0.6622
16	Vapor	lb/h	1017	/	271	Therm. Cond, Liq	BTU/(ft-h-F)	0	/	0.773
17	Noncondensable	lb/h	96933	/	96933	Therm. Cond, Vap	BTU/(ft-h-F)	0.028	/	0.025
18	Steam	lb/h				Freeze Point	°F	0		
19	Water	lb/h				Bubble / Dew point	°F	-19.96	/	186.04
20	Molecular wt, Vap	22.02 / 22.02			Latent heat	BTU/lb	0			
21	Molecular wt, NC					Inlet pressure (abs)	psi	1,214.7		
22	Viscosity, Liq	cp	0.0000	/	0.5433	Pres Drop, Allow/Calc	psi	20	/	0.37
23	Viscosity, Vap	cp	0.0153	/	0.0147	Fouling resistance	ft²-h-F/BTU	0.001		
24	PERFORMANCE DATA - AIR SIDE									
25	Air Quantity, Total	1,190,000	lb/h	Altitude			2,500	ft		
26	Air Quantity/Fan	154,664	ft³/min	Temperature In			105	°F		
27	Static Pressure	0.72	inH2O	Temperature Out			124	°F		
28	Face Velocity	12.46	ft/s	Bundle velocity	2,875	lb/h/ft²	Design Ambient	105	°F	
29	DESIGN-MATERIALS-CONSTRUCTION									
30	Design/Vac./Test Pres	2,700	/	0	/	0	psi	Design temperature	350	°F
31	TUBE BUNDLE		Header			Tube				
32	Size	38	ft	Type	Box	Material	SS 304			
33	Number/bay	2	Material			Carbon Steel	Specifications			
34	Tube Rows	5	Passes			1	OD	1	Min Thk.	0.065 in
35	Arrangement	Plug Mat.			No./Bun	153	Lng	36	ft	
36	Bundles	2	par	Gasket Mat.			Pitch	2.313 / 2.003	30	deg
37	Bays	1	par	Corr. Allow.	0	in	Fin			
38	Bundle frame	Inlet Nozzle			1	6 in	Type	L-finned		
39	MISCELLANEOUS	Outlet nozzle			1	6 in	Material	Aluminum 1060		
40	Struct. Mount.	Special Nozzles			OD	2	Tks	0.016	in	
41	Surf.Pre	Rating			1500	ANSI	No.	10	#/in	DesTemp
42	Louvers	TI			PI	Code	ASME Code Sec VIII Div 1			
43	Vibration Switches	Chem Cleaning			Stamp	Yes	Specs			
44	MECHANICAL EQUIPMENT									
45	Fan,Mfr., Model	Driver, Type			V-belt	Speed Reducer, Type				
46	No./Bay	2	RPM	Mfr.			Mfr.&Model			
47	Dia.	12	ft	Blade(s)	No./Bay	No./Bay				
48	Pitch	Angle			RPM	Rating				
49	Blade(s)	Hub			Enclosure	Ratio				
50	hp/Fan	30	hp	MinAmb	V/Phase/Hz	Support				
51	Control Action on Air Failure-				Louvers					
52	Degree Control of Outlet Process Temperature									
53	Recirculation				Steam Coil			No		
54	Plot Area	0	ft²	Drawing No.	Wt.Bundle	19,486	Wt. Unit	38,972	lb	
55	Notes:									
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