

Air-Cooled Heat Exchanger Specifica Sheet

1	Client: Aggreko									
2	Location:									
3	Service of Unit: Cooling Water									
4	Item No.: 191062									
5	Date: 5/10/2024									
6	Size & Type	26	/	10	ft	Type	Induced	Number of Bays	1	
7	Surf/Unit-Finned Tube	20,190			ft ²	Bare area/bundle	1,249	ft ²	Ratio (Total	16.16
8	Heat exchanged	2380863			BTU/h	MTD, Eff	53.67 °F			
9	Transfer rate	6.44		Bare, Service		35.51	Clean	134.17 BTU/(h-ft ² -F)		
10	PERFORMANCE DATA - TUBE SIDE									
11	Fluid Circulated	Water				In/Out				
12	Total Fluid Entering	lb/h	79,353			Density, Liq	lb/ft ³	61.022	/	61.623
13		BPD	5,300			Density, Vap	lb/ft ³	0	/	0
14	Temperature	°F	165	/	135	Specific Heat, Liq	BTU/(lb-F)	0.9999	/	0.9997
15	Liquid	lb/h	79353	/	79353	Specific Heat, Vap	BTU/(lb-F)	0	/	0
16	Vapor	lb/h	0	/	0	Therm. Cond, Liq	BTU/(ft-h-F)	0.38	/	0.37
17	Noncondensable	lb/h	0	/	0	Therm. Cond, Vap	BTU/(ft-h-F)	0	/	0
18	Steam	lb/h	/			Freeze Point	°F	0		
19	Water	lb/h	/			Bubble / Dew point	°F	0 / 0		
20	Molecular wt, Vap	/			Latent heat	BTU/lb	0			
21	Molecular wt, NC					Inlet pressure (abs)	psi	89.7		
22	Viscosity, Liq	cp	0.3882	/	0.4940	Pres Drop, Allow/Calc	psi	15	/	0.89
23	Viscosity, Vap	cp	0.0000	/	0.0000	Fouling resistance	ft ² -h-F/BTU	0.001		
24	PERFORMANCE DATA - AIR SIDE									
25	Air Quantity, Total	850,000	lb/h	Altitude			1,388	ft		
26	Air Quantity/Fan	106,421	ft ³ /min	Temperature In			90	°F		
27	Static Pressure	0.7	inH2O	Temperature Out			101	°F		
28	Face Velocity	15.38	ft/s	Bundle velocity	3,763	lb/h/ft ²	Design Ambient	90	°F	
29	DESIGN-MATERIALS-CONSTRUCTION									
30	Design/Vac./Test Pres	100	/	0	/	0	psi	Design temperature	200	°F
31	TUBE BUNDLE		Header				Tube			
32	Size	26 ft		Type	Box		Material	Carbon Steel		
33	Number/bay	1		Material	Carbon Steel		Specifications			
34	Tube Rows	4		Passes	4		OD	1	Min Thk.	0.065 in
35	Arrangement	Plug Mat.				No./Bun	206	Lng	24 ft	
36	Bundles	1 par		Gasket Mat.			Pitch	2.25	/	1.949 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 Nozzies				OD	2	Tks	0.016 in	
41	Surf.Preap			Rating	150 ANSI		No. 10 #/in	DesTemp	0 °F	
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.	9	ft	Blade(s)	No./Bay			No./Bay		
48	Pitch	Angle			RPM			Rating		
49	Blade(s)	Hub			Enclosure			Ratio		
50	hp/Fan	20	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	ft ²	Drawing No.	Wt.Bundle		10,810	Wt. Unit	10,810 lb	
55	Notes:									
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