

Air-Cooled Heat Exchanger Specification Sheet

1	Client: Aggreko									
2	Location: Denver, CO									
3	Service of Unit: Water Cooling									
4	Item No.: 241011									
5	Date: 1/17/2025									
6	Size & Type	37	/	12	ft	Type	Forced	Number of Bays	1	
7	Surf/Unit-Finned Tube	44,010 ft ²			Bare area/bundle	2,046	ft ²	Ratio (Total	21.51	
8	Heat exchanged	7004208 BTU/h			MTD, Eff	39.5 °F				
9	Transfer rate	4.43	Bare, Service	86.69		Clean	119.78	BTU/(h-ft ² -F)		
10	PERFORMANCE DATA - TUBE SIDE									
11	Fluid Circulated	Water				In/Out				
12	Total Fluid Entering	lb/h	233,567		Density, Liq	lb/ft ³	61.131	/	61.71	
13		GPM	467		Density, Vap	lb/ft ³	0	/	0	
14	Temperature	°F	160	/	130	Specific Heat, Liq	BTU/(lb-F)		0.9998 / 0.9997	
15	Liquid	lb/h	233567	/	233567	Specific Heat, Vap	BTU/(lb-F)		0 / 0	
16	Vapor	lb/h	0	/	0	Therm. Cond, Liq	BTU/(ft-h-F)		0.378 / 0.368	
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	0.4042	/	0.5148	Pres Drop, Allow/Calc	psi		20 / 0.15	
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	1,080,000	lb/h	Altitude		5,280		ft		
26	Air Quantity/Fan	153,178	ft ³ /min	Temperature In		90		°F		
27	Static Pressure	0.73	inH2O	Temperature Out		117		°F		
28	Face Velocity	13.07	ft/s	Bundle velocity	2,765	lb/h/ft ²	Design Ambient	90 °F		
29	DESIGN-MATERIALS-CONSTRUCTION									
30	Design/Vac./Test Pres	100	/	0	/	0	psi	Design temperature	250 °F	
31	TUBE BUNDLE		Header			Tube				
32	Size	37	ft	Type	Box	Material		Carbon Steel		
33	Number/bay	1	Material		Carbon Steel		Specifications			
34	Tube Rows	4	Passes	1		OD	1	Min Thk.	0.065 in	
35	Arrangement	Plug Mat.		No./Bun	238	Lng	34 ft			
36	Bundles	1	par	Gasket Mat.	Pitch		2.375 / 2.057	30 deg		
37	Bays	1	par	Corr. Allow.	0	in	Fin			
38	Bundle frame	Inlet Nozzle		1	11	in	Type	L-finned		
39	MISCELLANEOUS		Outlet nozzle		1	11	in	Material Aluminum 1060		
40	Struct. Mount.	Special Nozzles		OD	2.25	Tks	0.016 in			
41	Surf.Prepare	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.	10	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	ft ²	Drawing No.	Wt.Bundle	19,950	Wt. Unit	19,950	lb	
55	Notes:									
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