

Air-cooled Heat Exchanger (Oil Cooler and Aftercooler)

**AXH air-coolers****WESTLAND**
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1	Purchaser	COBEY	Ultimate User
2	Inquiry / PO#	16-9976	Destination
3	# Units	1	Model
4	Assembly	PACKAGED	Draft
			Overall Size, Ft
			Est Wt
			LBS

THERMAL & MECHANICAL DESIGN

5	Service	LO	GAS
6	Flow	161GPM	3593#/HR
7	Fluid	VG-100	16.28MW
8	Temp. In / Out, °F	194.0 / 150.0	210.8 / 122.0
9	Pressure, PSI	646.7PSIA	646PSIA
10	Pressure Drop, PSI	9.9	2.8
11	Heat Load, BTU/HR	1525920	194700
12	True LMTD	48.3	31.8
13	Overall Rate, U	56.7	83.8
14	Fouling Factor	.0010	.0020
15	Surface, Tube / Total, Sq Ft	553 / 11824	82 / 1311
16	Sections, #	(1)	(1)
17	Design Temp, °F Max / Min	300 / -20	300 / -20
18	MWP / Test Press, PSIG	700 / 910	700 / 910
19	Pass Arrangement	CROSSFLOW	CROSSFLOW
20	# Tube Rows	3	3
21	# Tube Passes	2	2
22	Tubes, OD x BWG	1X16	5/8X16
23	Material	SA214 STEEL	SA214 STEEL
24	# Per Section / Length, Ft	134 / 16	32 / 16
25	Turbulators	YES	
26	Accelerators		
27	Fins, Type	HI-EFF	HI-EFF
28	Material	AL	AL
29	Nozzles, Rating / Type	600RF	600RF
30	Material	SA105	SA105
31	#-Inlets / Size In	(1) 4	(1) 3
32	#-Outlets / Size In	(1) 4	(1) 3
33	Headers, Type	BOX	BOX
34	Material	SA516-70N	SA516-70N
35	Corrosion Allow, In		
36	Grooved Tubesheet	DBL	DBL
37	Plugs, Type	SHOULDER	SHOULDER
38	Plugs Material	A105 STEEL	A105 STEEL
39	PWHT	NONE	NONE
40	ASME Code & Nat'l Board	YES	YES
41	CRN		
42	Add'l Specs & Options		
43	API	NO	NO
44	Louvers / Hail Screen	/	/

Inspection / NDT

FX= 100% X-Ray of all header seam, attachment & nozzle butt welds. **SX=** Spot X-Ray of 1 long seam & 1 end closure, per header
BX= 100% X-Ray of all nozzle butt welds. **UT=** 100% UT of all header seam, attachment & nozzle butt welds. **H** = Hardness testing.

AIR-SIDE PERFORMANCE		FAN DATA		DRIVER DATA	STRUCTURAL
46	Ambient Air Temp, In °F	112	Fan(s)	(1) MOORE-10K 30HD	Type
47	Elevation, Ft	2600	Blade Material	ALUMINUM	V-BELT DRIVE BY (1) 20HP,
48	Air Flow, SCFM	95,363	HP / Fan	15.6	1800RPM, 460/60/3, TEFC, VFD
49	Outlet Air Temp, °F	128.6	Dia, In / # Blades	108 / 6	COMP. MOTOR
50	Min Air Temp, °F	-18	RPM	354	
51			Tipspeed, FPM	10009	
52	Est. Noise Data:	85 dBA @ 3ft from the side	Pitch, Deg	18.7	

Additional Info.

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