

HEAT EXCHANGER
AIR COOLED TYPE
Lube Oil Cooler

1	GENERAL									
2	Project: INSTALLATION OF GTC AT GANDHAR					Job: B240				
3	Owner: GAIL (INDIA) LIMITED					Site: GPU GANDHAR				
4	Purchaser:					Unit: NEW COMPR. AREA			Unit No.: 910	
5	Item No.:					Service: Lube Oil Cooler for GTC Package				
6	No. Reqd:		Working:		Standby:					
7	Applicable to: ☒ Proposal ☐ Purchase ☐ As Built									
8	☒ Scope, Option & Information specified by Purchaser. ☐ Information required from and options left to vendor. Vendor to cross ☒ the selected option.									
9	Manufacturer:					Type: ☐ Forced Draft ☐ Induced Draft				
10	Bundle Size: m x m x m		Bundles/Section			Number of Units:				
11	Bundles/Unit:		In Parallel / Series			Section Size:				
12	Surface/Bundle: m ²		Bare Tube: m ²		Section/Unit:					
13	Surface/Unit: m ²		Bare Tube: m ²		Plot Area/Unit:					
14	PERFORMANCE (Of One Unit)									
15	Heat Exchanged: kcal/hr					MTD (Corrected): °C				
16	Transfer Rate: kcal/hr m ² °C					(Finned Surface)		(Bare Surface)		
17	TUBE SIDE									
18	Fluid Circulated					Gravity: Liquid		API SG @ 15.4°C		
19	Total Entering Fluid		Kg/hr		Viscosity: In/Out/Avg.			cP		
20	Vapour		Kg/hr		Mol. Weight: Vapours					
21	Liquid		Kg/hr		Enthalpy / Latent Heat			Kcal/kg		
22	Steam		Kg/hr		Specific Heat			Kcal/kg °C		
23	Non-Condensable		Kg/hr		Conductivity			Kcal/hr m ² °C		
24	Vapour Condensed		Kg/hr		Velocity			M/sec		
25	Steam Condensed		Kg/hr		Pressure Drop			Kg/cm ²		All.: Calc.:
26	Operating Temperature		°C		In: Out:		Fouling Resistance		Hr m ² °C /kcal	
27	Operating Pressure		Kg/cm ²		Passes / Bundle					
28	AIR SIDE									
29	Temperature		°C		In: Out:		Altitude		m	
30	Total Flow/Unit		kg/hr		Static Pressure			kg/cm ²		
31	Quantity/Fan		kg/hr		Power/Fan			kW		
32	Face Velocity		m/sec		Power/Unit			kW		
33	CONSTRUCTION (Each Bundle)									
34	Design Pressure: kg/cm ² g			Test Pressure: kg/cm ² g			Design Temperature: °C			
35	Code Requirements:									
36	Tube	Type of Tubing:			Tube Material:			Fin Material:		
37		Bare Tubes (no's):		No. of rows:		O.D.	BWG/Thk	Length	Pitch:) ☐ ☐ <	
38		Fins: Spacing		/inch.		O.D.	Root Dia	Thickness:		
39	Header	Type: Plug / Cover			No. of Splits:			Material:		Corr. All.: mm
40		Plugs/Gaskets			Side Frame:					
41		Nozzles		In: Out:		Couplings		Vent: Drain:		
42										
43	CONSTRUCTION (Each section)									
44	Structure		Sec./Gr. No.			Design Wind Load: kgf/m				
45	Plenum Chamber					Type:				
46	Fans		No.		Dia.		RPM	Mfr.		
47	Blades		Material:			No./Fan		Pitch Angle(Design):		
48	Hubs		Material:			Pitch: Autovvariable / Adjustable (No.)				
49	Drivers		No.:		Type:			Mfr.		
50	kW (Each):		RPM:		Volts:			Cycles:	Phase:	
51	Coupling		No.:		Type:			Mfr.		
52	Speed Reducers		No.:		Type:			Mfr.		
53			Reduction Ratio:			Service Rating:				
54	Louvers		Material:			Type:		Mfr.		
55	Weights kg		Each Section (Dry):			Full of Water				
56			Each Bundle (Dry):			Full of Water				
57	APPLICABLE SPECIFICATIONS: API Standard 661									
58	REMARKS: (1) Coolers to be Sized for 10% higher flows and Duty. (2). Bidder to furnish this datasheet duly filled-in.									
59	(2). Cooler shall be provided with 100% spare capacity fans.									

16.04.19	A	AS	NK
Date	Rev	Job Engineer	Rev. & Approved By