

TEMA Heat Exchanger Specification Sheet



1			Job No.	
2	Customer:		PO No.	
3	Address:		Proposal No.	
4	Plant Location:		Date: Rev.	
5	Service of Unit:		Item No.	
6	Size: / mm	TEMA Type:	Hor./Vert:	Connected in: parallel series
7	Surf/unit(eff.): m ²	Shells/unit	Surf/shell (eff.)	m ²
8	PERFORMANCE OF ONE UNIT			
9	Fluid Allocation:	Shell Side		Tube Side
10		Inlet	Outlet	Inlet Outlet
11	Fluid Name:			
12	Fluid Quantity, Total:	kg/hr		
13	Vapor:	kg/hr		
14	Liquid:	kg/hr		
15	Steam:	kg/hr		
16	Water:	kg/hr		
17	Noncondensable:	kg/hr		
18	Temperature:	°C		
19	Density (Vapor / Liquid):	kg/m ³	/	/
20	Viscosity (Vapor / Liquid):	mPa·s	/	/
21	Specific Heat (Vapor / Liquid):	kJ/(kg·°C)	/	/
22	Thermal Conductivity:	W/(m·°C)	/	/
23	Latent Heat:	kJ/kg @ °C	@	@
24	Inlet Pressure (abs):	kPa(abs)		
25	Velocity:	m/s		
26	Pressure Drop, allowable/calculated:	kPa	/	/
27	Fouling Resistance (Min.):	(m ² ·°C)/kW		
28	Average Film Coefficient:	W/(m ² ·°C)		
29	Heat exchanged:	kW	Mean Temperature Difference (MTD) °C	
30	Transfer Rate, Required:	Fouled:	Clean:	W/(m ² ·°C)
31	CONSTRUCTION OF ONE SHELL			
32		Shell Side		Tube Side
33	Design Internal/External/Test pressure:	kPa(g)	/ /	/ /
34	Design Temperature / MDMT:	°C	/	/
35	Number of passes:			
36	Corrosion allowance:	mm		
37	Future Machining Allowance (Tubesheet, Flange, Cover):	mm		
38	Minimum Radiography:			
39	Special Service (Lethal, Sour, etc.):			
40	Post-weld Heat Treatment (PWHT) required:			
41	Connections:	In		
42	Number/Size/Rating	Out		
43	Type and Facing	Intermediate		
44		Vent		
45		Drain		
46		Other		
47				
48	EXCHANGER CONFIGURATION PER SHELL			
49	Number of Tubes:	Tube OD (mm):	Tube thk. (mm):	(BWG):
50	Tube type (plain/finned/other):	Tube Pitch (mm):	Tube min. or avg. wall:	
51	Tube Length (m):	Tube Layout:	◁ 30 ▷ 60 ▢ 90 ◇ 45	
52	Tube to Tubesheet Joint:	Shell Diameter (mm):	ID/OD:	Girth Flange Type:
53	Cross Baffle Type:	Number of Cross Baffles:	Baffle Spacing (mm):	
54	Baffle Cut (% of Dia.)	Vert. or Horiz. Cut:	Inlet Spacing (mm):	
55	Long. Baffle Seal Type:	Tube Support Type:	U-bend Support Type:	
56	Expansion Joint Req. (Y/N):	Expansion Joint Type:	Bypass Seal Type:	
57	Impingement Protection Req. (Y/N):	Impng. Protection Type:	Sets of Spare Gaskets req'd:	
58	Support Type:	Number of Supports:		
59	ρV ² Inlet Nozzle (kg/(m·s ²)):	ρV ² Bundle Ent. (kg/(m·s ²)):	ρV ² Bundle Exit (kg/(m·s ²)):	
60	Total Weight/Shell Empty (kg):	Full of Water (kg):	Bundle Weight (kg):	
61	Remarks:			
62				
63				
64				

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