

Heat Exchanger Specification Sheet

1	Company:									
2	Location:									
3	Service of Unit:					Our Reference:				
4	Item No.:					Your Reference:				
5	Date:	Rev No.:	Job No.:							
6	Size	949--4150	mm	Type	BEM	Hor	Connected in	1 parallel	1 series	
7	Surf/unit(eff.)	268.5	m ²	Shells/unit	1		Surf/shell (eff.)	268.5	m ²	
8	PERFORMANCE OF ONE UNIT									
9	Fluid allocation			Shell Side			Tube Side			
10	Fluid name			Overheads			Cooling Water			
11	Fluid quantity, Total			12.5075			105.1389			
12	Vapor (In/Out)			kg/s			kg/s			
13	Liquid			kg/s			kg/s			
14	Noncondensable			kg/s			kg/s			
15										
16	Temperature (In/Out)			°C			°C			
17	Dew / Bubble point			°C			°C			
18	Density Vapor/Liquid			kg/m ³			kg/m ³			
19	Viscosity			mPa s			mPa s			
20	Molecular wt, Vap			58.6						
21	Molecular wt, NC									
22	Specific heat			kJ/(kg K)			kJ/(kg K)			
23	Thermal conductivity			W/(m K)			W/(m K)			
24	Latent heat			kJ/kg			kJ/kg			
25	Pressure (abs)			bar			bar			
26	Velocity			m/s			m/s			
27	Pressure drop, allow./calc.			bar			bar			
28	Fouling resist. (min)			m ² K/W			m ² K/W			
29	Heat exchanged			4300 kW			MTD corrected			19.9 °C
30	Transfer rate, Service			804.8 Dirty			930.7 Clean			1273.8 W/(m ² K)
31	CONSTRUCTION OF ONE SHELL						Sketch			
32				Shell Side			Tube Side			
33	Design/vac/test pressure:g			bar			bar			
34	Design temperature			°C			°C			
35	Number passes per shell			1			2			
36	Corrosion allowance			mm			mm			
37	Connections			In			mm			
38	Size/rating			Out			mm			
39	ID			Intermediate			mm			
40	Tube No. 1108		OD	19.05	Tks-Avg	1.2	mm	Length	4150	mm
41	Tube type Plain		#/m		Material	Carbon Steel	Tube pattern	60		
42	Shell Carbon Steel		ID	950	OD	974	mm	Shell cover	-	
43	Channel or bonnet Carbon Steel						Channel cover	-		
44	Tubesheet-stationary Carbon Steel						Tubesheet-floating	-		
45	Floating head cover -						Impingement protection	None		
46	Baffle-crossing Carbon Steel		Type	Single segmental	Cut(%d)	34.96	V	Spacing: c/c	395 mm	
47	Baffle-long -		Seal type				Inlet	570	mm	
48	Supports-tube		U-bend		Type					
49	Bypass seal				Tube-tubesheet joint	Exp.				
50	Expansion joint -		Type	None						
51	RhoV2-Inlet nozzle		637	Bundle entrance	1346	Bundle exit	17	kg/(m s ²)		
52	Gaskets - Shell side -			Tube Side		Flat Metal Jacket Fibe				
53	Floating head -									
54	Code requirements		ASME Code Sec VIII Div 1		TEMA class	R - refinery service				
55	Weight/Shell		5266.6	Filled with water	8719.6	Bundle	3044.3	kg		
56	Remarks									
57										
58										

