Heat Exchanger Specification Sheet

1	CLIENT NIT RAIPUR	CLIENTS'S REF NO. C05/2020		JOB NO. XYZ
2	PLANT LOCATION	RAIPUR		DOCUMENT NO. XYZ
3	SERVICE			ITEM NO. DC56
4	SIZE	TYPE	1-2 STHE	NO. OF UNITS: 3
5	SHELLS PER UNIT	CONNCECTED IN	SERIES 1	PARALLEL : 0
6	SURFACE PER UNIT	SURFACE PER SHELL		
7				

PERFORMANCE OF ONE UNIT

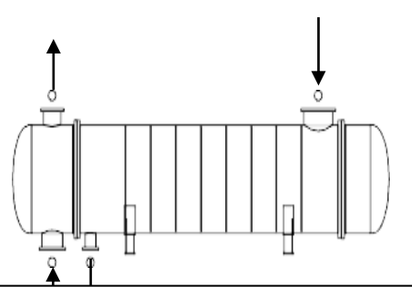
8	FLUID ALLOCATION		SHELL SIDE		TUBE SIDE	
9	FLUID NAME		56° API GASOLINE		42° API KEROSENE	
10	TOTAL FLUID ENTERING	lb/h	20000		83571	
11	56 ° API GASOLINE	lb/h	20000		-	
12	42° API KEROSENE	lb/h	-		83571	
13	TEMPERATURE (IN/OUT)	°F	250 / 120		85 / 120	
14	Bubble / Dew point	°F	-		-	
15	DENSITY VAPOUR/LIQUID	lb/ft³	-		-	
16	VISCOSITY	cP	At T_c = 168 °F μ = 0.46 cP	At T_w = 124 °F μ = 0.5P	At T_c = 98 °F μ = 1.2 cP	At T_w = 107 °F μ = 1. 1cP
17	SPECIFIC HEAT	BTU/(lb-F)	0.53		1	
18	THERMAL CONDUCTIVITY	BTU/(ft-h-F)	0.086		0.081	
19	PRESSURE (abs)	psi				
20	MASS VELOCITY	lb/(hr.ft²)	119760.47		781037.38	
21	PRESSURE DROP, allow./calc.	psi	10 / 0.5863		10 / 5.74	
22	FOULING RESISTANCE (MIN)	ft²-h-F/BTU	0.002			

23	HEAT EXCHANGED	BTU/h	1404000	L MTD CORRECTED (°F)	61.54
24	TRANSFER RATE - SERVICE	DIRTY	75.48	CLEAN 87.54	BTU/(h-ft²-F)

CONSTRUCTION OF ONE SHELL

SKETCH

			SHELL SIDE	TUBE SIDE
25	DESIGN/TEST/VACCUM PRESSURE	psi	10	10
26	DESIGN TEMPERATURE	°F		
27	NUMBER PASSES PER SHELL		1	4
28	CORROSION ALLOWANCE	in		
29	CONNECTIONS	in	/ -	/ - / -
30	SIZE/RATING	Out	/ -	
31	NOMINAL		/ -	/ -



Sketch: Shell and tube heat exchanger

32	TUBES	NO. 204	OD: 0.75 in	LENGTH: 16 ft	PITCH: 1 in	TUBE PATTERN : SQUARE PITCH	
33	TUBE TYPE: SET DEFAULT	INSERT : SET DEFAULT	FIN#:	#/in	MATERIAL: CARBON STEEL		

34	SHELL	ID 19.25 in	SHELL COVER	
35	CHANNEL OR BONNET		CHANNEL COVER	
36	TUBE SHEET - STATIONARY		TUBE SHEET - FLOATING	
37	FLOATING HEAD		IMPINGEMENT PROTECTION	
38	BAFFLE CROSS	TYPE SINGLE SEGMENTAL	CUT(%d)	HORIZONTAL SPACING in
39	BAFFLE LONG	SEAL TYPE		INLET in
40	SUPPORTS - BEND U-BEND	0	TYPE	
41	BYPASS SEAL	TUBE SHEET JOINTS		
42	EXPANSION JOINTS	TYPE SET DEFAULT		
43	GASKETS – SHELL SIDE	TUBE SIDE		
44	FLOATING HEAD			
45	CODE REQUIREMENT	ASME Code Sec VIII Div 1	TEMA CLASS	
46	Remarks			

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