

Customer	Job No.
Address	Reference No.
Plant Location	Proposal No.
Service of Unit	Date 14.05.2019 Rev
Item No.	
Size 620 x 2380 mm Type BEU Vertical	Connected In 1 Parallel 1 Series
Surf/Unit (Gross/Eff) 31,126 / 29,537 m2	Surf/Shell (Gross/Eff) 31,126 / 29,537 m2

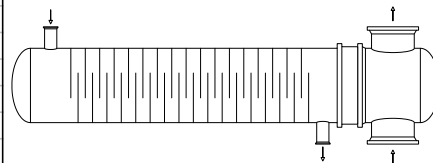
## PERFORMANCE OF ONE UNIT

Fluid Allocation	Shell Side	Tube Side
Fluid Name	Water	Gas
Fluid Quantity, Total kg/hr	34452	90000
Vapor (In/Out)		90000
Liquid	34452	
Steam		
Water		
Noncondensables		
Temperature (In/Out)	90,00	10,00
Specific Gravity	0,9659	0,9838
Viscosity mN-s/m2	0,3145	0,0139
Molecular Weight, Vapor		
Molecular Weight, Noncondensables		
Specific Heat kJ/kg-C	4,2041	3,1982
Thermal Conductivity W/m-C	0,6732	0,0455
Latent Heat kJ/kg		
Inlet Pressure kPa	500,00	9800,0
Velocity m/s	0,71	6,53
Pressure Drop, Allow/Calc kPa	0,000	0,000
Fouling Resistance (min) m2-K/W	0,000090	0,000180
Heat Exchanged 1204109 W	MTD (Corrected) 54,5 C	
Transfer Rate, Service 747,74 W/m2-K	Clean 1041,1 W/m2-K	Actual 795,30 W/m2-K

## CONSTRUCTION OF ONE SHELL

## Sketch (Bundle/Nozzle Orientation)

	Shell Side	Tube Side
Design/Test Pressure kPaG	517,11 /	10687 /
Design Temperature C	121,11	37,78
No Passes per Shell	1	2
Corrosion Allowance mm	3,175	3,175
Connections In mm	1 @ 76,660	1 @ 291,60
Size & Rating Out mm	1 @ 76,660	1 @ 291,60
Intermediate	@	@
Tube No. 48U	OD 40,000 mm	Thk(Avg) 2,600 mm
Tube Type Plain	Material Carbon steel	Length 2,380 m
Shell Carbon steel	ID 620,00 OD 670,00 mm	Pitch 50,000 mm
Channel or Bonnet	Shell Cover (Integ.)	Tube pattern 30
Tubesheet-Stationary	Channel Cover	
Floating Head Cover	Tubesheet-Floating	
Baffles-Cross	Impingement Plate Circular plate	
Baffles-Long	Type Single-Seg. %Cut (Diam) 33,34	Spacing(c/c) 60,000
Supports-Tube	Seal Type None	Inlet 335,41 mm
Bypass Seal Arrangement 1 pairs seal strips	U-Bend	Type None
Expansion Joint	Tube-Tubesheet Joint Expanded (No groove)	
Rho-V2-Inlet Nozzle 4452,5 kg/m-s2	Type	
Gaskets-Shell Side	Bundle Entrance 132,55	Bundle Exit 177,31 kg/m-s2
-Floating Head	Tube Side	
Code Requirements	TEMA Class R	
Weight/Shell 4454,3 kg	Filled with Water 5940,3 kg	Bundle 1218,1 kg



Remarks:

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