

Required information for selection of shell and tube / plate heat exchanger

Name: _____
Position: _____
Company: _____
Address: _____
E-mail: _____
Phone number: _____

	Dimension	Hot fluid	Cold fluid
Fluid name	-		
Exchanger duty ¹	kW		
Mass flow rate (min/max) ¹	kg / hr		
Inlet temperature ²	°C		
Outlet temperature ²	°C		
Allowed pressure drop	kPa		
Inlet pressure	MPa (gauge)		
Design inlet pressure	MPa (gauge)		
Fouling resistance	m ² K/W		
Specific heat capacity	J/kg-K		
Density	kg/m ³		
Thermal conductivity	W/m-K		
Dynamic viscosity	Pa·s		

¹ – either the exchanger duty or mass flow rate of one of the fluid is specified

² – the input and output temperature of one of the fluid is specified, and, if necessary, the input/output temperature of the second fluid

- The hot stream is located on the
(only for shell and tube exchanges is specified):
☐ tubeside
☐ shellside
- Heat Exchanger Type:
☐ Heater
☐ Cooler
☐ Recuperator
☐ Evaporator
☐ Condenser
- The presence of hydrogen sulfide medium
☐ yes
☐ no

4. Corrosion activity of hot/cold fluid
☐ yes
☐ no
5. Is access to the inner surface of the tubes/shell required for mechanical cleaning?
(only for shell and tube exchanges is specified)
☐ yes
☐ no
6. Required number of heat exchanger _____ pcs.
7. Is the thermal insulation required?
☐ yes
☐ no

8. Hot/cold fluid composition (mass or mole fractions), %
(specified for multicomponent fluids, if known)

Name of component	Fraction

Example of fluid composition (mass fractions, %):

Carbon dioxide	0,9
Water	82,1
Ethanol	16,94
Isopropanol	0,0085
Methanol	0,0073
Diacetyl	0,0051
Propanol	0,0082
Acetone	0,0083
Acrolein	0,0047
Acetic acid	0,0089
Formic acid	0,009

9. Other requirements _____

