

Heat Exchanger (Standard Type)

Product Code | SHE-S

Features

- Internal tubing coil for effluent flow inside pressurised steam outer shell
- Automatic temperature control
- Choke between inlet and outlet to allow preheating of effluent
- Bypass manifold to avoid erosion in coils during well clean-up
- Steam trap with steam condensate outlet
- Rock-wool insulation on outer shell with aluminium jacket
- Spares toolbox mounted in skid

Benefits

- Improved separation efficiency through viscosity reduction and breaking emulsions
- Avoiding flow restriction from gas hydrate formation
- Enabling well test operations where indirect-fired heaters are not permitted

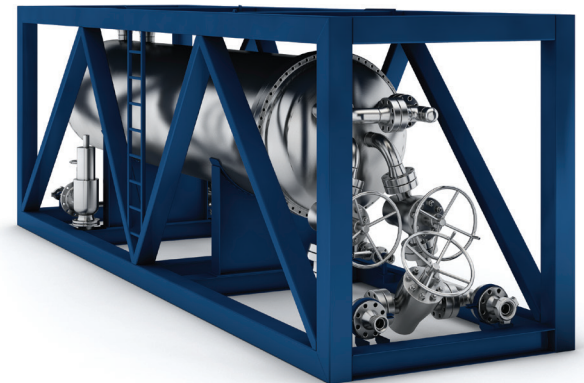
The Heat Exchanger (Standard Type) is a skid-mounted steam vessel which contains a high pressure coil and choke through which the well stream can be diverted upstream of the separator.

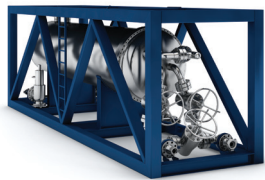
A separate steam generator supplies a constant flow of steam in contact with the coil to raise the temperature of the well effluent to prevent hydrate formation from plugging or restricting the flow and to improve separation and burner efficiency by reducing fluid viscosity and breaking down emulsions.

Hunting provides a customised design, taking account of thermal design features, high/low pressure limits, temperature range, product mix and fluid flow capacity. Hunting's manufacturing flexibility enables them to supply heat exchangers for a variety of volume requirements.

The temperature of the well effluent downstream of the heat exchanger is monitored through a control-valve which then varies the steam flow into the vessel to maintain a pre-set temperature.

→ See overleaf for technical information



TECHNICAL INFORMATION				
<h1>Heat Exchanger (Standard Type)</h1>				
PRODUCT CODE	SHE-S			
Model	Hunting SHE-S 5K	Hunting SHE-S 10K 3" bore	Hunting SHE-S 10K 4" bore	Hunting SHE-S 15K
Service	H2S	H2S	H2S	H2S
Fluid Class	DD	DD	DD	DD
Coil	4" XXS	4" XXS	5" XXS	5"x3"
Working Pressure, psi [bar]				
Coil	5,000 [345]	10,000 [690]	10,000 [690]	15,000 [1035]
Steam Vessel	150 [10,3]	150 [10,3]	150 [10,3]	150 [10,3]
Working Temperature - °C [°F]	-20 [0] up to 180 [350]	-20 [0] up to 180 [350]	-20 [0] up to 180 [350]	-20 [0] up to 180 [350]
Heating Capacity ⁽¹⁾ - MMBtu/h	4,2	4,2	4,2	4,2
Standard Connections⁽²⁾				
Gas / Oil Inlet	API Flange 3-1/8" 5K	API Flange 3-1/16" 10K	API Flange 4-1/16" 10K	API Flange 3-1/16" 15K
Gas / Oil Outlet	API Flange 3-1/8" 5K	API Flange 3-1/16" 10K	API Flange 4-1/16" 10K	API Flange 3-1/16" 15K
Steam Inlet	Union 2" Fig.206	Union 2" Fig.206	Union 2" Fig.206	Union 2" Fig.206
Steam outlet	Union 2" Fig.206	Union 2" Fig.206	Union 2" Fig.206	Union 2" Fig.206
Operational Footprint LxB cm	719 x 198	719 x 198	719 x 198	790 x 220
Transport Size LxBxH cm	719 x 198 x 259 cm	719 x 198 x 259	719 x 198 x 259	790 x 220 x 263
Weight, kg [lbm]	12.000 [26,445]	12.000 [26,445]	12.000 [26,445]	16.000 [35,273]
Certifications				
Design	Type Approval	Type Approval	Type Approval	Type Approval
Manufacturing	Declaration of Conformity	Declaration of Conformity	Declaration of Conformity	Declaration of Conformity
Documentation	Quality File	Quality File	Quality File	Quality File
Applicable Codes	PED 2014/68/EU	PED 2014/68/EU	PED 2014/68/EU	PED 2014/68/EU
	ASME B31.3	ASME B31.3	ASME B31.3	ASME B31.3
	ASME VIII div.1	ASME VIII div.1	ASME VIII div.1	ASME VIII div.1
	API 6A	API 6A	API 6A	API 6A
	NACE MR 01-75 (ISO 15156-1,-2)	NACE MR 01-75 (ISO 15156-1,-2)	NACE MR 01-75 (ISO 15156-1,-2)	NACE MR 01-75 (ISO 15156-1,-2)
	DNV 2.7-1	DNV 2.7-1	DNV 2.7-1	DNV 2.7-1
NOTES				
(1) Heating capacity is dependant on many factors. Please contact Hunting for advice.				
(2) Connections cross-overs can be added as per customer requirements.				