HEF

HEF HEAT EXCHANGERS FOR API PLAN 21, PLAN 23 OF MECHANICAL SEAL





PRODUCT FEATURES

- The HEF series heat exchangers adopt a fixed tube-sheet tubular heat exchange method with convective heat transfer. The cross-flow area of the tube side is larger, and the tube resistance is lower, resulting in a greater flow rate.
- The shell side adopts a multi-plate baffled deflector design to fully utilize the heat exchange area and achieve higher heat exchange efficiency.
- The structure is more compact and compact.
- It is suitable for both horizontal and vertical installation methods, and can simultaneously meet the requirements for liquid discharge and exhaust.

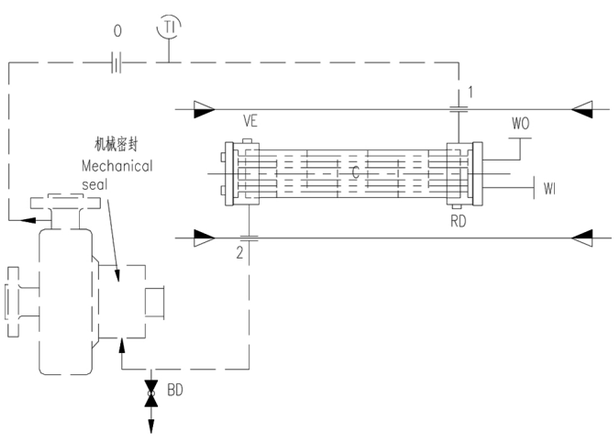
SYSTEM MATERIALS

Storage tank	Carbon steel / Stainless steel
Heat exchange tubes	304SS / 316L

PRODUCT APPLICATION

For API Plan 21

1. HE series heat exchange system can be used for single seals alone or combined with THS series thermosiphon system for double seals.
2.After the pumped fluid is cooled by the cooler, meet secondary sealing element temperature limits to reduce coking or polymerizing.
3.Improve the lubrication performance of the seal end face.
4.Provide enough differential pressure to achieve a good flush flow rate.



ITEM	SERVICE
RD	Cooler Drain
BD	Piping Fluid Drain
O	Flow control orifice
1	Flush From Seal
2	Flush To Seal
WI	Cooling Water Inlet
WO	Cooling Water Outlet
VE	Cooler Vent
V	Vent Valve
TI	Temperature Gauge

SYSTEM PARAMETERS

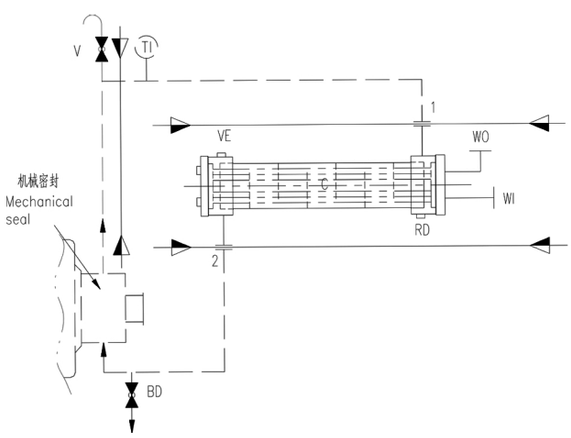
Temperature	-20°C~ +360°C
Pressure	150Bar
Pressure	16bar
heat exchange area	0.4m², 0.7m², 1.0m²

APPLICABLE INDUSTRIES

- Process pumps
- Mixer and agitators
- Elevated pressure and heat dissipation requirements
- Wide range of applications requiring high reliability across oil and gas, chemical and general Industry, and high-purity and organics

For API Plan 23

1.HE series heat exchange system cools only that fluid in which the seal operates, and this cool fluid does not enter the process, This results in high energy efficiency. Lessening the duty is very desirable because it extends the life of the cooler.
2.HE series heat exchange system is only used to remove the friction heat generated by the seal end face and the heat absorption of the process medium, which can effectively reduce the heat load of the cooler. Compared with Plan21 and 22, the heat load is lower, thus prolonging the life of the cooler.
3.Piping Plan 23 is the plan of choice for all hot water services, particularly boiler feed water, and many hydrocarbon services. This plan is the standard selection for hot water at 80 °C (180 °F) and above, and boiler feed water.



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RD	Cooler Drain
BD	Piping Fluid Drain
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2	Flush To Seal
WI	Cooling Watar Inlet
WO	Cooling Water Outlet
VE	Cooler Vent
V	Vent Valve
TI	Temperature Gauge

FBU SEALING TECHNOLOGY（SUZHOU）CO.,LTD

No.183, Yinhe Road, High Tech Industrial Development Zone Changshu Suzhou, Jiangsu, 215533

+86-512-57011188

sale@fbuseals.com

www.fbuseals.com

FBU is certified to API Q1, ISO 9001, ISO 14001