

API Plan 21 Seal Support System (Cooled Flush from Pump Discharge)

TYPE : API PLAN 21

Cooler Coil :

- SS 316 / SS 316L / Duplex SS / Hastelloy

Shell / Vessel :

- Carbon Steel / SS 316 / Coated CS

Piping & Orifice :

- SS 316 / SS 304 / SS 316L / Duplex SS / Hastelloy

Operating Limits :

Size : On request

Speed : Seal / pump dependent

Pressure : Up to 62 bars (899 psi)

Temperature : Up to +180 °C (+356 °F)

Application :

- Oil & Gas Process Units with Volatile Fluids
- Refinery Hot Hydrocarbon Pumps
- High-Temperature Single Mechanical Seals
- Power Plant & Auxiliary Process Systems
- Petrochemical Pumps Requiring Cooled Flush
- Chemical Process Pumps with Hot Clean Fluids
- Services Where Process Dilution Is Not Acceptable



Illustrative rendering

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Features :

- **Cooled Flush** supplied from pump discharge for hot process services.
- **Heat Exchanger** lowers flush temperature before it enters the seal chamber.
- **Restriction Orifice** controls flush flow and reduces pressure before cooling.
- **Improved Lubricity** and reduced vaporization risk at the seal faces.
- **No Product Dilution**; the seal is lubricated by the process fluid itself.
- **Dismantlable Heat Exchanger** for cleaning of the cooling-water side.
- **Cooling Capacity** up to 10.5 kW (14.1 hp) at up to 62 bars and +180 °C.

➤ **DIMENSIONS AND CONNECTIONS ON REQUEST**