

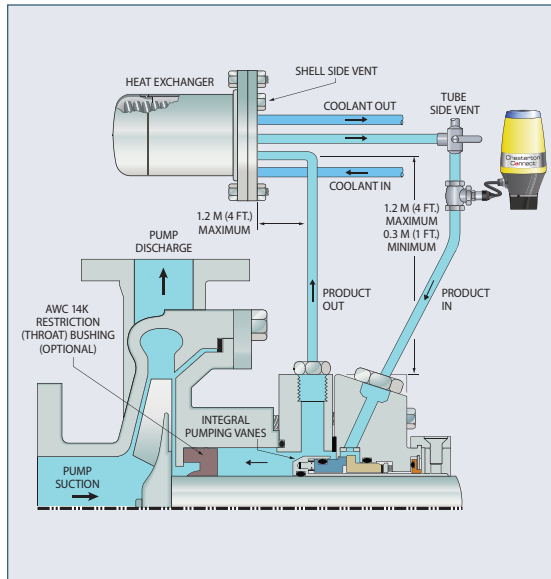
PLAN 23

Cooled Seal Recirculation

What Cooling provided to the seal chamber using an internal pumping device on a single seal. The fluid passes through a heat exchanger and returns to the seal gland. Considered a closed-loop system.

Why To lower the sealing temperature at the seal faces without increasing pressure. Limits vaporization at the seal faces.

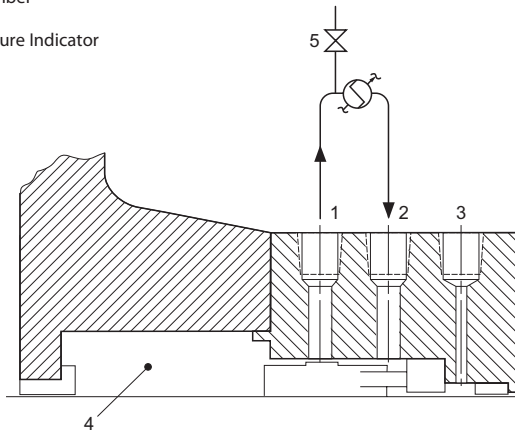
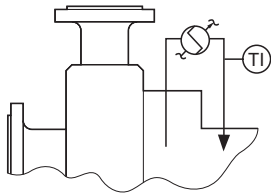
When Hot applications that exceed vapor pressure. Better on process fluid with solids compared to Plan 21.



KEY

- 1 — Flush Outlet (FO)
- 2 — Flush Inlet (FI)
- 3 — Quench/Drain (Q/D)

- 4 — Seal Chamber
- 5 — Vent
- TI — Temperature Indicator



Drawing reproduced from ANSI/API Standard 682, Third Edition, September 2004, courtesy of the American Petroleum Institute.