

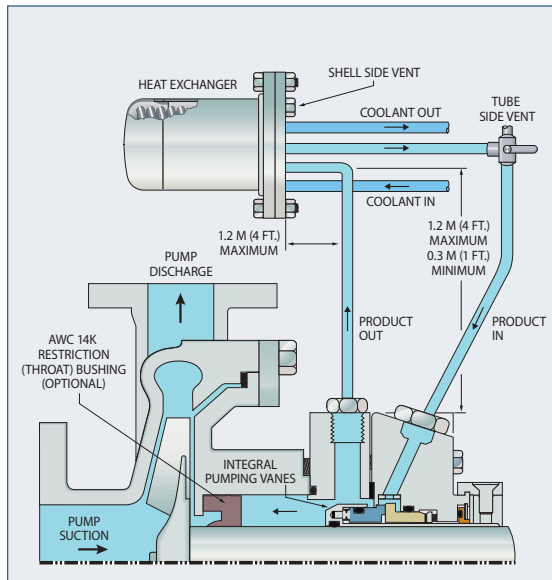
## PLAN 23

### 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.

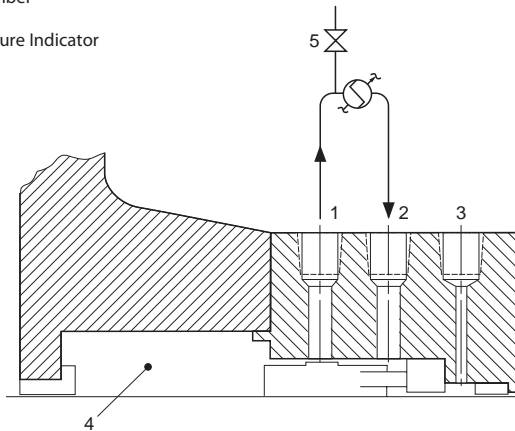
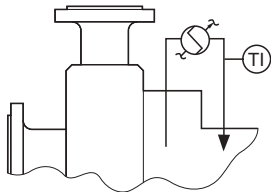
**When** Hot applications that exceed vapor pressure. Better on process fluid with solids compared to Plan 21.



**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.*