

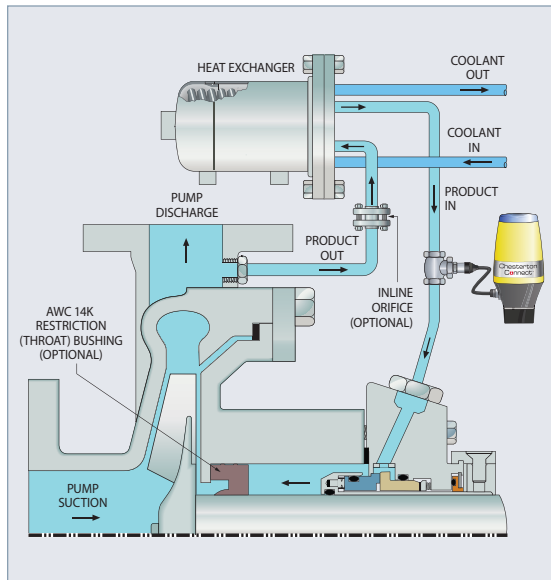
# PLAN 21

## Cooled Discharge Recirculation

**What** Discharge recirculation through an orifice and a heat exchanger to the flush port of the seal. A temperature indicator can be installed when specified.

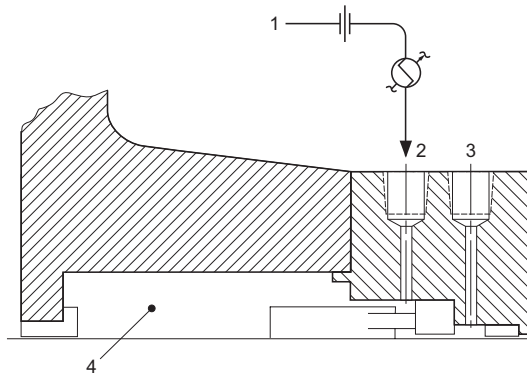
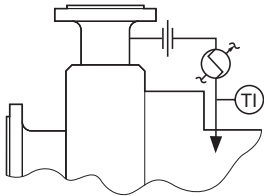
**Why** To raise the pressure in the seal chamber to limit flashing at the seal faces; to lower the temperature at the seal faces by using cooled product to remove heat from the seal faces.

**When** Use with clean fluids. High-velocity solids may cause seal abrasion and score the seal faces if directed by the flush port.



**KEY**

- 1 — From Pump Discharge
- 2 — Flush (F)
- 3 — Quench/Drain (Q/D)
- 4 — Seal Chamber
- TI — Temperature Indicator



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