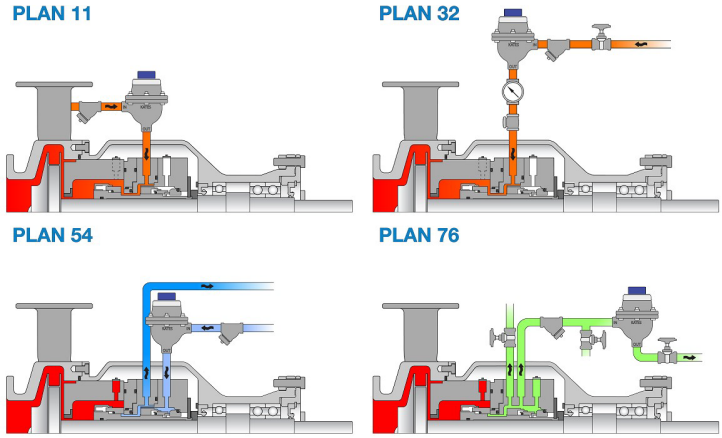
MECHANICAL PUMP SEALS

APPLICATION SHEET

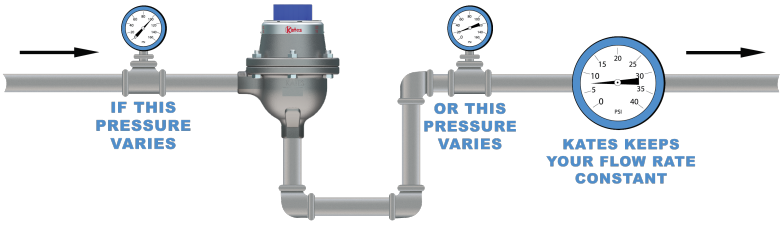
APPLICATION OVERVIEW

Standards for mechanical seals by ISO, ASME and API (examples illustrated below) are designed to ensure high reliability, long life and low total cost of ownership, as well as, environmental safety. Many Mechanical Seal Plans require flow control and identify an orifice plate or flow control valve in the system. Optimal flow is necessary to create the proper hydrostatic support, lubrication and cooling between seal faces. As flow varies because of pressure fluctuations either upstream or downstream, fluid is either wasted or the system is starved. If flow is less than required, the seals can overheat causing premature failure. If the pump seal fails, the pump could incur severe damage causing production downtime and significant repair cost. Orifice plates and adjustable valves alone are not sufficient to guarantee constant flow and prevent premature seal failure. Constantly changing or unreliable pressure sources, especially those that are distant to the application require accurate flow control using multiple devices to both control and monitor.



KATES SOLUTION

Kates Automatic Flow Controllers are self-contained units that respond to pressure changes up and downstream to maintain the optimized set flow for efficient lubrication and heat dissipation. Kates is a cost-effective and low maintenance solution that replaces a traditional multiple component flow control loop. Turndown ratios averaging 30:1 and pressure classes from 150# to 2500# ANSI make Kates versatile for demanding and complicated applications. Kates Flow Controllers are also applicable for gas lubricated, dry running seals. Kates combines an internal regulating valve and adjustable orifice into one unit that self-adjusts to pressure fluctuations to maintain the set flow. Orifice plates and valves alone are insufficient to maintain flow when system pressure changes occur and may require operator adjustments. Kates Flow Controllers are cost effective and have a history of long service life.



31651 Research Park Drive; Madison Heights, MI 48071
Ph. 248-597-8999 Fx. 248-597-8998 info@customvalveconcepts.com www.customvalveconcepts.com