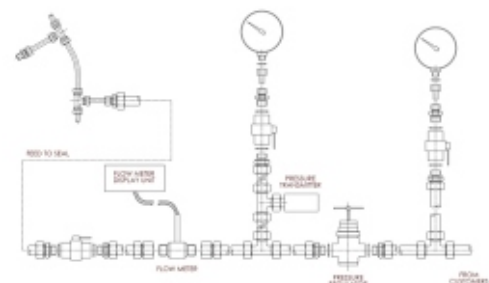


Hydrostatic Feed

Hydrostatic Feed is a method of introducing clean filtered water directly into the seal interface to achieve optimum performance. It can be applied to any of the S M Seals range of shaft seals.

Hydrostatic Feed Fig 1



For effective operation the hydrostatic feed water should be at a higher pressure than the water being sealed. The level of filtration plays an important part in achieving optimum performance and S M Seals can supply a system for filtration of either station cooling water or penstock water.

The sketch (fig 1) shows a typical example of a S M Seals hydrostatic control system, we can also incorporate an automatic hydrocyclone into this system. Alternatively we can advise customers who may wish to provide their own systems.

Benefits

- Longer Life - The injection of a continuous pressurised supply of clean water directly into the centre of the running faces ensures improved lubrication and cooling and also excludes abrasive particles.
- Improved Performance - The use of hydrostatic feed enables higher speeds and pressures to be catered for due to improved lubrication and cooling.
- Effective Air Sealing - Hydrostatic feed water ensures lubrication and cooling of the seal faces on pump turbines when operating in 'Blow Down' condition for pump start or synchronous condenser mode.
- Vacuum Sealing - On turbines subject to either occasional or continuous vacuum conditions hydrostatic feed ensures lubrication and cooling of the seal running faces at all times.
- Energy Saving - Improved lubrication and cooling reduces friction losses in the seal.