

The Feedwater System

Boiler Feedwater Startup and Regulator Valve

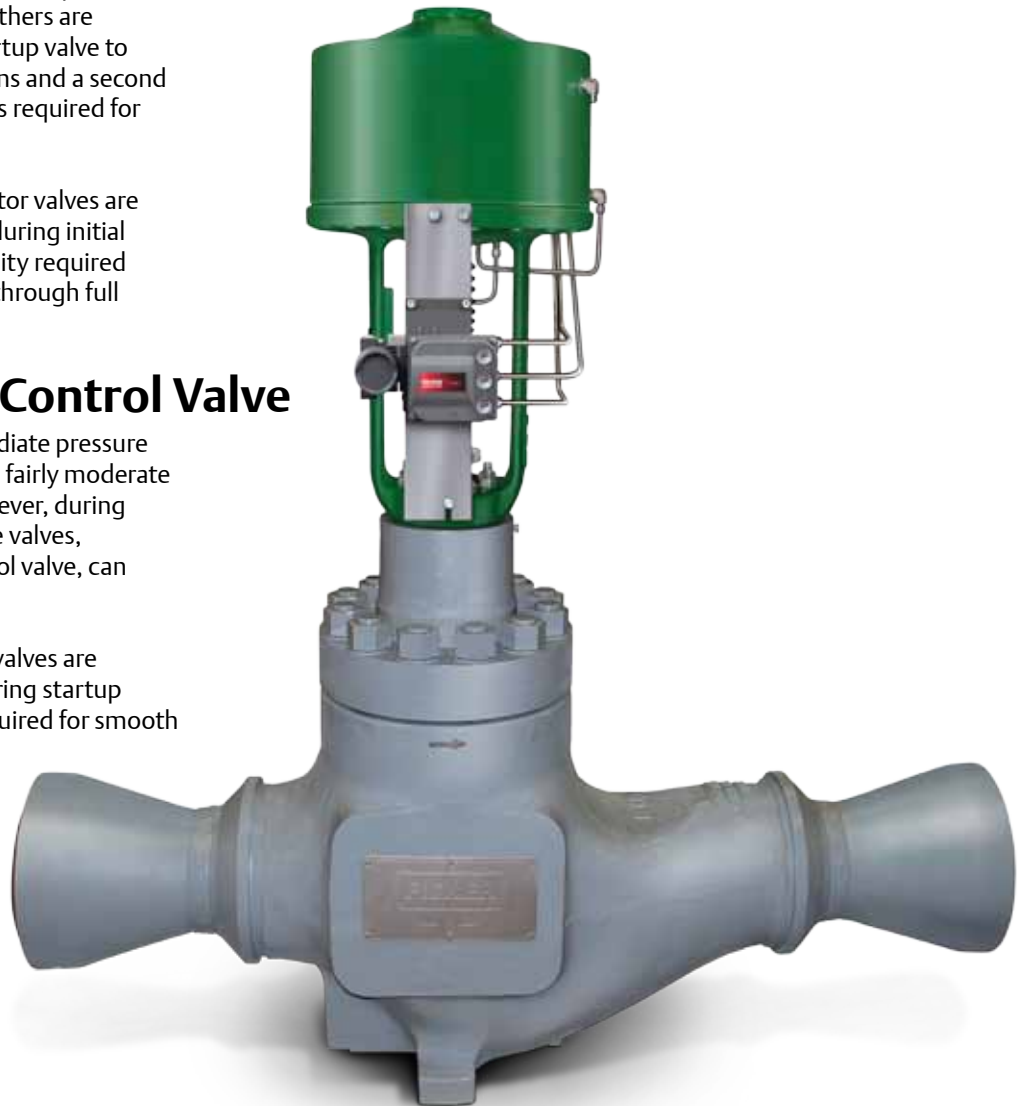
In the normal range of plant operation, the boiler feedwater regulator experiences high flow rates with low differential pressure. However, during startup, this valve experiences low flow rates with very high differential pressure, which can cause severe cavitation damage. Some feedwater systems are designed using one valve to handle startup and normal operating conditions. Others are designed using a separate small startup valve to handle low flow, cavitating conditions and a second larger valve to handle high flow rates required for normal operation.

Fisher feedwater startup and regulator valves are engineered to eliminate cavitation during initial operation and provide the rangeability required for smooth transition from startup through full load operation.

HP/IP Drum Level Control Valve

The high pressure (HP) and intermediate pressure (IP) drum level control application is fairly moderate during typical plant operation. However, during startup the pressure drop across the valves, particularly the HP drum level control valve, can produce damaging cavitation.

Fisher HP and IP drum level control valves are designed to eliminate cavitation during startup while providing the rangeability required for smooth transition to normal operation.



PRODUCT FEATURES

- Advanced sealing technology provides tight shutoff and extends service life.
- High turndown handles extreme flow rates.
- Characterized cage provides low-flow cavitation protection during initial operation and necessary flow as pressure rises.
- Optional trim allows passing of 19 mm (.75 inch) particulate.
- One valve solution: offers anti-cavitation protection during low flow, high pressure drop startup, and unrestricted high flow during low pressure drop, full load conditions.
- Two valve solution: offers a dedicated startup valve to handle cavitating conditions in parallel with a larger standard trim valve, handling full load conditions.
- Pneumatic piston actuator provides highly accurate step positioning and stable valve response.