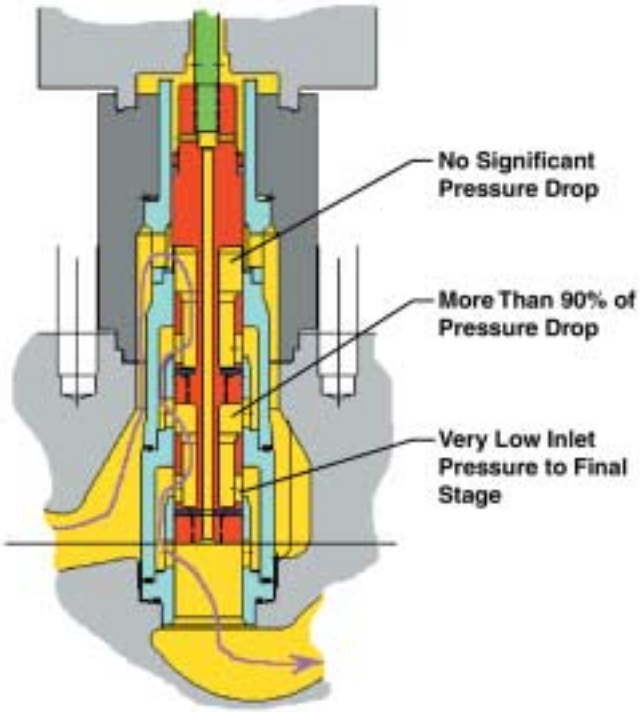
For Severe Service Control Solutions, Turn to Fisher Technology and Innovation

DIRTY SERVICE TRIM PROTECTS RECIRCULATION VALVES FROM PLUGGING AND SEAT EROSION

One of the most common and challenging issues facing a new power plant relates to entrained particulate present during unit startup. Some of it is weld slag that remains after system blowdown. Other particulate is what is removed from the evaporator and preheater sections of a boiler. (The latter, material from the boiler tubes, is especially prevalent in high-cycling, combined-cycle plants.)

Because of this entrained particulate, feedpump recirculation valves with conventional anti-cavitation trim are prone to plugging and premature erosion. Valve plugging can drastically reduce capacity, and expose the pump to minimum flow and cavitation issues. Particulate that does pass through the trim can impinge directly onto the seating surface of the valve plug. Repeated impingement can lead to premature wear of the valve plug, reducing the shutoff-life of the valve.

A Midwest Engineering Contractor charged with designing two 4X1 combined-cycle plants looked to the Fisher Severe Service group for help with this problem. The Severe Service group recommended the proven Dirty Service Trim (DST), especially designed to eliminate the formation of damaging cavitation while allowing particulate up to 3/4-inch in diameter to pass. By utilizing large areas and passage shapes, DST-trim design eliminates the potential for localized high-velocity erosion.



A Fisher® valve with DST trim also incorporates a protected seating feature, ensuring long-lasting, tight shutoff. Unlike conventional, anti-cavitation trims, no pressure drop is taken across the seating surface. Thus, DST trim protects recirculation valves from plugging and minimizes the premature, velocity-induced erosion of the valves' seating surface.

DST has been successfully used in a multitude of recirculation valve applications to address plugged trim and tight shutoff issues. In high-cycling plants, protecting valves and other critical equipment is of the utmost concern. Fisher offers many state-of-the-art technologies, like DST trim, to help plants maximize uptime and efficiency.

For more severe service solutions, see us at www.fishersevereservice.com.

FISHER®

EMERSON™
Process Management

D351128X012 May 2004