



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

Cavitrol® TRIM SOLUTION ELIMINATES FEEDWATER VALVE EROSION

The powerhouse at an Alabama pulp and paper mill had experienced repeated erosion and washing issues with a feedwater control valve. These valve problems kept plant maintenance personnel busy, performing repeated weld repairs and trim replacements. Each correction meant bringing the valve off-line – more often and for more time than desired.

When the valve was initially installed, it was not supplied with the benefits of any anti-cavitation trim, which was part of the reason for the washing. A non-Fisher vendor proposed that adding anti-cavitation trim to the existing valve would eliminate the erosion problem. This proposed retrofit addressed cavitation only during startup, however, and failed to solve the valve's other control and maintenance problems. Because the anti-cavitation trim was an “extra”, not originally specified with the valve, the cost of repair and trim-replacement increased.

The Fisher Severe Service group reviewed the application and determined that much of the valve body erosion was due to what is called an erosion/corrosion phenomena. In pulp and paper mills, it is common to find carbon-steel valve bodies experiencing a fair amount of corrosion over time. This corrosion can be repeatedly washed away in localized areas. This phenomenon, not the cavitation present during startup, was the major cause of valve-body erosion in this application.



The Fisher Severe Service group replaced the eroded valve with a new valve incorporating a characterized Cavitrol® III trim. The three-stage trim was designed to meet both the initial startup demands (when there is potential for cavitation) as well as capacity requirements. The new valve body was made of WC9 chrome-moly material to enhance its corrosion resistance.

Since its installation, the Fisher® valve has been performing as expected with no maintenance required. This success story illustrates why it is critical to involve valve-application experts and fully understand all of the issues surrounding valve control and preventive maintenance. Fisher's Severe Service group will help ensure that the correct solution is applied.

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

