



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

ADDRESSING DAMAGED WATER INJECTION VALVES WITH DIRTY SERVICE TRIM ELIMINATES CAVITATION

Water injection service can be one of the most difficult applications on an offshore platform. High pressure water is injected into the well to dispose of water recovered from processing or to help facilitate product flow by displacing depleted product. The water injected into the well contains residual components such as sand and other suspended solids. These entrained particles combined with the high pressure drops associated with this application increase the potential for damaging cavitation and erosion.

Control valves commonly used in this application utilize some manner of anti-cavitation trim. Most of these trims, however, utilize small passages that can be exposed to plugging and erosive effects. The injection valves used in an offshore platform in Thailand, for example, utilized a torturous path construction to address the cavitation potential. The valve trims were not designed to pass entrained particulate, however, or to withstand the erosion inherent in the process. Needless to say, in a short time, the damaged trim rendered the valves useless.

To address these severe-service issues, maintenance personnel on the platform installed Dirty Service Trim (DST) from the Fisher Valve Division. DST is specially designed to eliminate the formation of damaging cavitation while allowing particulate up to 3/4-inch in diameter to pass through. By utilizing large-diameter holes and passage shapes, DST eliminates the potential for localized, high-velocity erosion. Fisher® valves with DST trim also incorporate a protected seating feature to promote long-lasting tight shutoff.



DST has been used successfully on hundreds of water-injection applications. Because of its proven success, the Fisher-DST solution would be an excellent choice for other platforms with recurring cavitation or erosion issues.

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



Severe Service