

DeZURIK KSV Severe Service Knife Gate Valves: DESIGNED FOR HARSH TAILINGS SLURRY

Challenge

A North American mining customer's push through style valves were lasting three months in their tailings slurry application. The process media was 55% solids at over 350 psi and ambient temperature. The valves were isolating their pump station. During maintenance it was determined the valve seats were quickly wearing away due to turbulence generated by a nearby 45-degree angle pipe. This created more media leakage to atmosphere than was normal and flooded the entire pump station with slurry over a foot deep. A new valve design was desperately needed to handle these process conditions.

Solution

DeZURIK recommended the KSV Severe Service Knife Gate valve with hard faced overlay metal seats to handle the turbulent application. KSV valves are specifically designed to handle highly erosive slurry applications. The valve is bi-directional, drip-tight and suitable for dead-end service without a mating flange. KSV valves are designed for safety with a full-force lockout system to handle the full actuator force plus safety factor. The enclosed design KSV valves have not failed to atmosphere and are lasting 3.5 years. That is 14 times the service life of the push through style valve. In addition to the extended service life, the identical dual seats provide increased flexibility for maintenance to address unscheduled shutdowns.



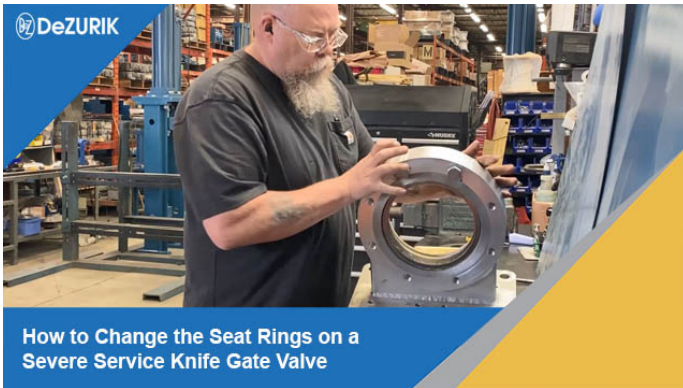
DeZURIK KSV Severe Service Knife Gate Valves installed in a tailings slurry pump isolation application. The KSV valves lasted 14 times longer than the push through style valves in this challenging service.

DeZURIK KSV Severe Service Knife Gate Valves

The hard faced seats can be easily rotated and interchanged as the seat surface wears down. Depending on the wear pattern on the seat it is possible to get four times the seat life with one set of seats which greatly minimizes inventory. When the seats are no longer viable they can be easily replaced during preventative maintenance.

Dual Seat Ring Design Benefits

A key feature of the DeZURIK Severe Service Knife Gate Valve is the identical seat ring design. Watch the YouTube video on how to disassemble, rotate and reassemble the seat rings to get maximum service life out of your seats.



See YouTube video: [How to Change the Seat Rings on a Severe Service Knife Gate Valve](#).

For additional information on KSV Severe Service Knife Gate Valves or any of DeZURIK's other products, visit DeZURIK.com or contact your local DeZURIK representative



DeZURIK KSV Severe Service Knife Gate Valve seat rings can be specified with tungsten carbide or chrome carbide welded overlays in 2 thickness options to maximize service life.

SALES AND SERVICE

For more information, contact DeZURIK

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