

DeZURIK KUL URETHANE LINED KNIFE GATE VALVES IN HYDROCYCLONES (PRIMARY SEPARATION CELL)



Ten 10" (250mm) DeZURIK KUL Urethane Lined Knife Gate Valves are installed in a hydrocyclone nest at a copper mine. These valves lasted two times longer than the competitor's valves in this service.

DeZURIK KUL URETHANE LINED KNIFE GATE VALVES IN A HYDROCYCLONE NEST (PRIMARY SEPARATION CELL)

DeZURIK KUL Urethane Lined Knife Gate Valves are ideally suited for abrasive slurry and dry abrasive applications in the mining, chemical, food and other industries. The hydrocyclone nest application in mining is hard on valves due to the high solids slurry that is turbulent and abrasive. The turbulent slurry would quickly abrade the liner of competitor's valves and reduce the valve's ability to seal, thereby reducing its cycle life.

The hydrocyclone nest application typically consists of a number of valves connected to each hydrocyclone. The mine slurry enters the hydrocyclone tangentially, creating a centrifugal force that forces the larger particles toward the cyclone wall and separates them from the smaller particles. The larger particles exit the bottom of the hydrocyclone as underflow discharge and are recirculated to the mills for further grinding. The smaller particles are forced upwards from the vortex as overflow discharge. The overflow discharge passes through the valves to the leach/adsorption tanks.

The DeZURIK KUL is well suited for the hydrocyclone nest application because the 100% port area reduces turbulence, the one piece cast-in-place urethane liner handles abrasion, and the bi-directional drip-tight shutoff prevents damage from wiredraw. Service life is extended with the option of a 17-4 stainless steel gate coated with a hardened nickel-based non-stick coating and high-tensile strength, abrasion-resistant packing. Rounded gate, packing chamber and long-life packing assure a reliable tight seal.

The KUL valves installed in a hydrocyclone nest application at this copper mine lasted two times longer than the competitor's valves. The competitor's valves showed deep wear on the seal and gate after



- 100% Port Area for reduced turbulence
- Cast-in-place one-piece liner for abrasion resistance
- Bi-directional driptight shutoff to prevent wiredraw damage
- 17-4 stainless steel hardened gate with a hardened nickel-based non-stick coating for extended service life
- Rounded gate, packing chamber and long-life packing assure a reliable tight seal

6 months while DeZURIK's KUL showed minimal wear on the seal and gate after more than one year.

For complete information on KUL Urethane Lined Knife Gate Valves or any of DeZURIK's other products, visit www.dezurik.com or contact your DeZURIK representative.