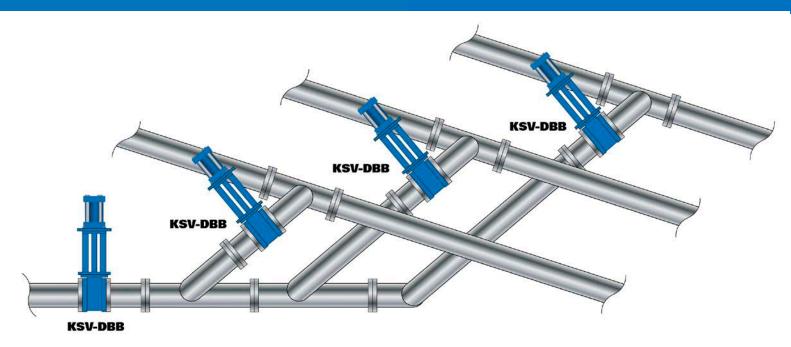


APPLICATION SOLUTION May 2021





## DeZURIK 20" Double Block & Bleed Valve for Hydro Transport Drain Isolation

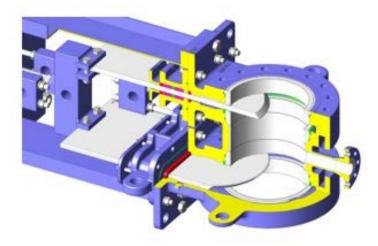
An Oil Sands facility was upgrading their Hydro Transport system. They were streamlining the drain lines on their three-line transport system by re-piping the drains into a common drain header. In addition to the typical severe service requirements of the hydro transport system (highly erosive and corrosive), the customer specified double block and bleed capability for safety. The facility needed the ability to perform maintenance on both the individual hydro transport line or the common drain header if needed.

DeZURIK proposed the KSV-DBB, full ASME rated Severe Service Double Block & Bleed Knife Gate Valve. Valve orientation and slurry characteristics were critical considerations in this valve installation. The piping layout required the valves to be orientated at an angle with the valves lying in a horizontal plane. Although not the most desirable installation, the KSV design is very capable of performing in this orientation without concern.



Typical slurry conditions for hydro transport lines include high concentration of silica sand and fine clay particles, both very abrasive, with generally 60% solids concentration. The slurry process water, having a high concentration of dissolved oxygen, makes the slurry very corrosive as well. Thus, the KSV-DBB was equipped with 17-4 stainless steel gate, Tungsten Carbide overlay on the seat ring, live-loaded packing system with wire scrapers, HNBR (Hydrogenated Nitrile) seat seals, specified drain port location, and customer-specified accessories including hydraulic fittings and transducer position indication.

Hydro Transport Systems are the lifeline between Ore Prep and the Primary Separation Cell. The severe service these lines are subject to requires that the system is maintained regularly without disrupting operation of the site.



Safe, proven, reliable isolation is critical to the success of the preventative maintenance program

that keeps this vital system operating. The proven performance of DeZURIK KSV Severe Service Knife Gate Valves in installations across this customer facility, both in single and double block and bleed applications, along with the attention to detail by the DeZURIK Alberta Team secured the order for the (3) 20" ASME Class 300 Double Block and Bleed valves.