

KNIFE GATE VALVES ON SAG MILLS

ORBINOX proves once again the exceptional performance of WG knife gate valves in heavy-duty applications

Application

- Cyclone Fed Sump

Challenges

- Large percentage of solids
- Large-size solids
- Very erosive-abrasive media

Solution

- WG heavy duty slurry knife gate valves

Result

- Extraordinary performance for 17 months and still in operation

The WG knife gate valves are still in operation perfectly after 17 months despite the severe conditions in this part of the primary milling process

The copper mine needed a robust, long lasting solution for its SAG mill outlets. These valves are used around once a month for pump inspections or plant shutdown. Given the process conditions, ORBINOX recommended the installation of WG DN500 knife gate valves with pneumatic actuation.

Process Conditions

Pressure: 3 barg
Temperature: ambient
Percentage of solids: 60-70%
Solid size: up to 16 mm
Solid density: 3 g/cm³
Flow: 2445 m³/h
Cycles: 1 cycles/month

ORBINOX Proposal

WG Slurry Knife Gate Valve for severe conditions
Size: DN 500/20"
Flanges: 150#
Body: ductile iron
Gate: 316SS
Sleeves: natural rubber
Actuator: pneumatic cylinder

