

TAILING FILTER PRESS VALVE SOLUTIONS

How we helped one of the largest beneficiation iron ore plants with ORBINOX HG slurry high pressure knife gate valves

Application: Iron ore tailings

Challenges

- > 6 months valve lifetime
- >12.000 cycles

Solution

- HG Slurry Knife Gate Valve
- First order: 15 HG Valves

Result

- Extraordinary performance after 10 months and 15,000 cycles
- Replacement of all valves with ORBINOX HG valves

One of the largest beneficiation iron ore plants in Brazil relies on our slurry knife gate valves for their filter press process. This mine has its own filtering process where it has multiple filter presses.

Before ORBINOX HG valves were placed in, this mining company was facing some issues with its former valve supplier. Former valves couldn't last more than 6 months. They asked ORBINOX for a solution that could work for at least 8 months and more than 12.000 cycles.

Process Conditions

High filter capacity
 Pressure: 21 barg
 Temperature: ambient
 Solid %: 52-57
 Solid size: fines
 Cycles: 50 times/day

“We need the valves to last at least 8 months, this means more than 12.000 cycles”

ORBINOX Proposal

HG Slurry Knife Gate Valve
 Size: DN 200/8”
 PN25 rating
 Body: Ductil Iron
 Gate: 316SS
 Sleeves: NR
 Actuator: Pneumatic

HG slurry high pressure knife gate valves are still performing well after 10 months. The mining company has decided to replace all existing valves from previous suppliers and place ORBINOX HG knife gate valves in all of their Filter Presses.

