ORBINOX PA PINCH VALVES DELIVER 6 TIMES LONGER SERVICE LIFE THAN COMPETING SOLUTIONS

The ORBINOX PA pinch valve (Series 78) delivers a service life six times longer than the previous solution in the feed column of the flotation lines.

Application
- Flotation feed column
- Continuous slurry flow regulation

Challenge
- Withstand abrasive slurry conditions and continuous modulation
- Installed in vertical position
- Control application operating between 30 % and 70 % open
- Full opening and closing cycles

Solution
- Pinch PA (Ser. 78) valve

Outcome
- Optimal performance after **13 months** of operation

The world's largest copper producer located in Chile was using pinch valves with a service life of only two months. This short lifespan resulted in operational inefficiencies and increased maintenance and replacement costs.

The flotation feed columns required a more reliable valve solution. ORBINOX proposed installing its PA (Ser. 78) Pinch valves, specifically designed for severe slurry applications. After 13 months in service, the valves continue to operate with optimal performance.

Working conditions

Medium: copper concentrate
Pressure: 1 Bar
Temperature: 8 - 25 ºC
% solids: 40 %
Solids size: fine

ORBINOX proposal

Pinch PA (Ser. 78) valve
Size: 12"
Body: ductile iron
Seat: natural rubber
Actuator: pneumatic with 4-20 mA positioner. Supported by a support roller

The customer achieved a sixfold increase in service life compared to the previous valve and remains in successful operation.





