

Red Valve Control Pinch Valves Manage Chemicals to Optimize Mining Operations

Many different types of chemicals are used throughout the mining process, from naturally occurring acids brought up with ore, to chemicals introduced during processing to break down minerals and control pH levels. To reduce wear and ensure reliability, the valves used to control these chemicals and tailings must be compatible with the chemicals involved. This can be difficult in many processes because the exact nature and concentration of chemicals is often unknown.

Metal-bodied valves rely on alloy materials that are often exotic and very expensive. Plastics offer a low-cost alternative, but cannot withstand the wear of sand and rocks common in mining slurries. There are also seals, gaskets and packing to consider. These materials must be compatible, as they are the most common site for leaks. Corrosive acids can also react with metals, shortening the life of components such as discs, plugs and gates.

Red Valve Control Pinch Valves do not suffer from these problems because the process is completely isolated from the valve body by a full face-to-face pinch valve sleeve. This elastomer sleeve is the only wetted part of the valve, eliminating the need for expensive metal alloys. The sleeve is also full-port, allowing maximum flow with no obstructions. When throttled, the sleeve maintains a streamlined flow path, with no obstructions or changes in the direction of flow.

Acting as an adjustable pipe for flow rate, Red Valve Pinch Valve Sleeves are the heart of the valve. Available in a variety of rugged elastomer materials and designs, Red Valve's standard sleeves are unmatched for abrasion resistance, consistently outlasting conventional metal valves.

Ideal for throttling control, Red Valve's cone sleeves create a pressure drop designed to match the flow rate of the application. With additional elastomer on the downstream side, Red Valve cone sleeves provide optimal service life with minimized recovery inside the sleeve.



PCV - Series 5200 Control Pinch Valve used for level control in a drying process at a sodium sulfate mine.



PVM - Series 75 Manual Pinch Valves on chemical reactor tanks at a copper mine.