



Red Valve Company Case Study

Red Valves help turn FGD waste into profit



Series 5200s accurately control the flow of lime.

A Pittsburgh, PA-based supplier of lime and lime products was ready to construct a new manufacturing plant. The plant would use an innovative flue gas desulfurization technology to produce calcium sulfate as a solid byproduct. The calcium sulfate is sold as commercial-grade synthetic gypsum for use in wall-board manufacturing.



Calcium sulfate slurry is very difficult to control accurately with traditional quarter-turn valves, and the abrasive nature of the material wears metal surfaces quickly.

Additionally, calcium sulfate has a tendency to

The full-port opening of Series 75 Manual Pinch Valves keeps them from clogging, even when used as isolation valves on dewatered lime.

scale, de-water and bridge inside pipes and valves, causing them to plug.

The design team specified Red Valve manual and automated pinch valves, sizes one to six inches. The Red Valve pinch valve features an isolating elastomer sleeve that protects the valve body from the process fluid and resists erosion far better than metal surfaces. As the heart of the pinch valve, the sleeve can achieve full-ported operation, drop-tight shutoff or precise throttling control.

Red Valve's automated control valves are self-cleaning, making them ideal for this application. Each time the valve cycles, the flexing action of the sleeve breaks apart solidified materials, even dewatered lime. For highly abrasive applications, Red Valve control valves are available with thicker, more resilient sleeves that extend their useful service lives and lower maintenance requirements.

For pipe movement in this application, 18 Red Valve Redflex® Expansion Joints, sizes 12 to 20 inches, were specified.

