Series 5400 Control Valves are being used to regulate the flow of taconite slurry from a distribution tank to a Filter Press, which separates the water from the taconite sediment. Process level in the filters must be maintained to prevent overburdening the Filter Press. Water in the Press is drawn from the sediment with suction.

The taconite slurry is very abrasive; it is a very fine-grained, powder like liquid composed of 75 - 80% solids; the slurry concentrate has a specific gravity of 4.8. The ambient temperature of the process is 75°F; the valve functions effectively at the minimum temperature of the process, 50°F. Pressure of the slurry is 5 ft. Head.

Eveleth Mines uses 6" Red Valve Series 5400 Control Valves for this same application. The valves are performing well. Because of their satisfaction, Eveleth Mines chose to purchase 9 8" Series 5400 Control Valves for a new Filter Press line they are installing.