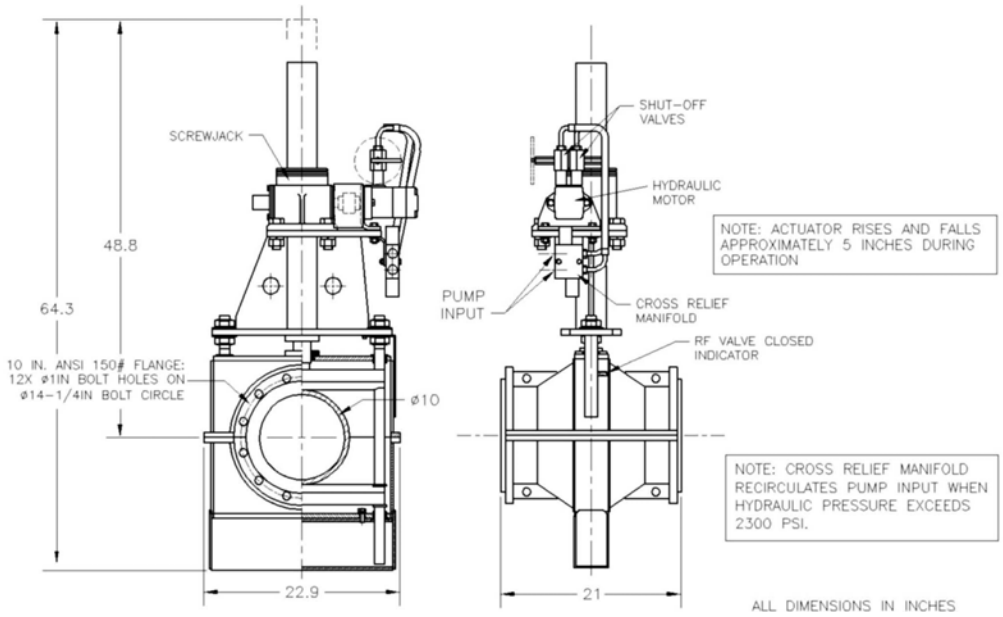
CUSTOMER: Copper Mine Tailings System Upgrade in Western U.S.

Flow Media: High Pressure (25 bar) Copper Tailings
Service: On-Off, 10" ID pipeline, ANSI #150 flanges – Tailings Distribution & Isolation

PROBLEM: Wear of knife gate and ball valves in abrasive tailings service resulted in high annual operation and maintenance costs. Customer interested to install pinch valves, but requested an alternative to hydraulic cylinder actuation due to concern that seal or other hydraulic leaks could allow pressure to open valve compromising system integrity.

Requirement: Remote location and large quantity of valves required valves be operable in a quick and efficient fashion utilizing a mobile hydraulic unit. Valves must isolate/ distribute tailings reliably over extended periods, provide bubble tight shut-off, and fail-in-place.



SOLUTION: RF Valve BE10 HM300-524X - hydraulic motor drives gear reducer open and closed, and remains in place once hydraulic pump is disconnected from Chicago couplings. Fail-In-Place, zero leakage shut-off.

Results: Operating since 2004, cycles 3x /day/365 days year **without interruption**.

Value: More reliable operation and lower acquisition cost compared to other alternatives evaluated.

Hydraulic motor driven screw jack