



Case History 1.900" MX Mill Motor/CT TIW Ball Valve

Bill, The 1.90" mill worked perfect on milling out the ball in the TIW valve. As you know we used a KLX CTU with KLX 1-11/16" motor. The sheared off ball in the TIW valve was at 112" below our upper master valve and below the tubing hanger with 2200 psi under the ball. We started out with running about 300# weight on the mill at 30 gpm/250 RPM thru the motor, milled on the ball for 3-1/2 hours with making an inch or so thru the valve ball. We did have a magnet in our return fluid at a sample port, we were getting very fine metal on the magnet like metal powder. We decided to take a look at the mill. Pulled up closed in. Inspected the mill, showed we were still milling on the upper convex of the ball with 1.50" mill circle in the middle of the mill face. Set back on the well, retagged the ball face, added a little more weight to 450# on mill, increased pump rate to 40 gpm/350 RPM, milled for another 1-1/2 hours, making more metal on the magnet. Shut down for the day, pulled mill and inspected, showed we were now milling the full 1.90" of the mill face. The next morning started milling ops again, went in tagged the TIW ball, milled for a few minutes and fell thru the ball, made several passes up and down thru the TIW valve to ensure full 1.90" path. Guess we should have stayed milling a bit longer the night before,,, wanted to see how the mill was doing with the weight and motor speed changes were working.

Case History
1.900" MX Mill
Motor/CT
TIW Ball Valve

