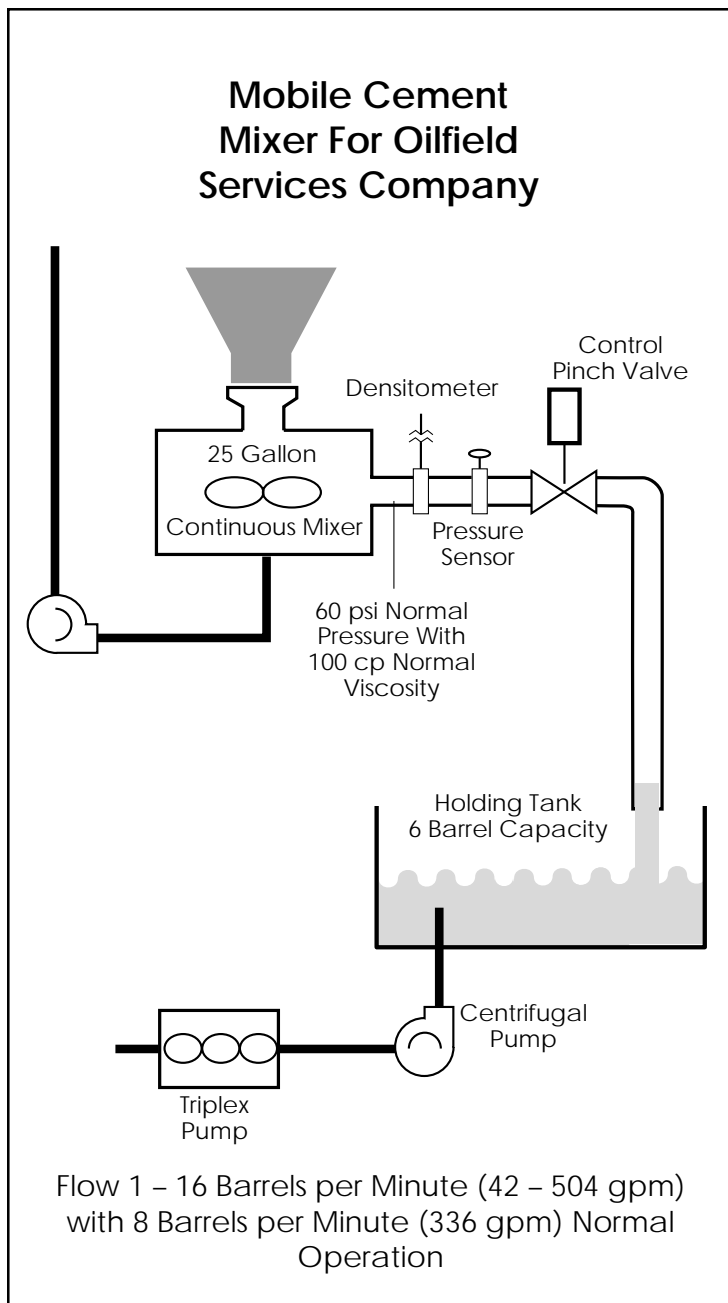


# Application Data

Oilfield ♦ Cement Mixing ♦ Control Valves



This application was designed by an oil field services equipment manufacturer who produces truck mounted mobile cement mixing and pumping systems. This equipment is used for solidifying and encasing oil well pipe heads in the ground. Prior to using Red Valve Series 5400 Control Valves, the manufacturer was using butterfly valves as final control elements. Service life of the butterfly valves was only twenty hours. Since these units operate at an average of six hours per week, the user needed to shutdown and perform a valve replacement every three weeks. Changing to the 5400 Series Control Valve increased throttling control valve service life to more than 200 hours with no noticeable signs of wear.

The Red Valve Series 40 is used to indicate pressure between the mixer and the control valve. This provides a visual check for density mixture under pressure.

In this application, cement powder is fed through a hopper into a mixer, water is added through bottom injection to the mixing tank to make cement. The slurry is determined to have a density controlled mixture of 12 to 22 pounds per gallon. After mixing, it is pumped, under pressure, down the well head to the bottom of the shaft, and forced up around the well head pipe. The cement is then allowed to set and anchors the well head in place.

