



DRILLING FLUIDS EQUIPMENT

For over 30 years OFI Testing Equipment (OFITE) has provided instruments and reagents for testing drilling fluids, well cements, completion fluids, and wastewater. In addition to these product lines we also offer a range of instruments for core analysis. From our manufacturing facility in Houston, TX we provide customers all over the world with quality products and exceptional service.

Our drilling fluids product line includes innovative designs such as the Model 900 Viscometer, which showcases our ability to develop new technology to meet customer and industry demands. We also offer Retorts, Aging Cells, Roller Ovens, Mud Balances, Filter Presses, and all other instruments required to evaluate drilling fluid properties according to API Recommended Practice 13B-1 and 13B-2.

As an independent manufacturer and supplier, OFITE has one priority, our customers.

Shear History Simulator

The rheology of a fracturing fluid is highly dependent upon the composition/concentration of the polymer and crosslinker, temperature, pH, magnitude of shear, and the duration of shear. To minimize parasitic frictional pressure losses, an optimal fracturing fluid would have only sufficient viscosity to fully transport the proppant from the well head, through the tubulars and perforations, and into the formation. Achieving an optimal fluid design is difficult due to down hole fluid temperature changes and the variability of the magnitude and duration of the shear the fluid is exposed to. Fortunately, the use of delayed crosslinkers makes it possible to control the rheology of a fracturing fluid as a function of a time, pH, temperature, and/or shear. Under ideal circumstances, the polymer would fully crosslink just before entering the perforations of the well. The increase in viscosity allows the fluid to effectively transport the proppant through the perforations and into the formation. OFITE's Shear History Simulator makes it possible to analyze the effects of shear and temperature upon a fracturing fluid and serves as an invaluable tool in the optimization of a fluid design.



Features

- Operating Pressure: 3,000 psi (20.7 mPa)
- Maximum Shear Length: 225 ft Capillary Tubing, 1/8" OD
- Circulation Pump : 0 - 40 mL/min
- Injection Pump - 0.002 - 2.5 mL/min provides precise control of cross linker injection
- Transfer test fluid under pressure directly to the OFITE Model 1100 Viscometer
- Individual temperature control for each loop





Technical Specifications and Requirements

- #700-200-60

Specifications

- Pressure Relief Settings: 3,000 PSI (20.7 mPa)
- Three Capillaries: 0.125" (3.175 mm) OD × 75' (22.86 m) long, 316 Stainless Steel
- Gel Pump: 0 - 40 mL/min
- Additive Pump: 0.002 – 2.5 mL/min
- Dimensions: 39.6" W × 22" H × 24" D (101 × 56 × 61 cm)
- Shipping Dimensions: 48" W × 52" H × 48" D (122 × 132 × 122 cm)
- Net Weight: 420 lb (190.5 kg)
- Shipping Weight: 705 lb (320 kg) approximate

Requirements

- Input Voltage: 230 VAC, 50/60 Hz, Single Phase
- Input Air: 100 - 200 psi (689.5 - 1,379 kPa)
- Water Source: 40 psi, 10 GPM
- Drain

Data Acquisition Features

- Displays pump status, each capillary tube temperature and differential pressure, drive pressure, accumulator volume, and more
- Controls the pumps

