

# VISCOSITY

## 7550 HPHT VISCOSIMETER

### The Smallest Footprint 30,000 psi Viscometer For Drilling And Completion Fluids

The search for deeper reservoirs in harsher environments is testing the limits of drilling and completion fluids. Testing requirements have now exceeded the limits of most traditional instruments. Viscosity measurements are no exception. The Chandler Engineering design team lead the industry with the introduction of the 7600 Ultra High Pressure High Temperature Viscometer in 2005.

The same design expertise has taken that robust technology and developed a more compact version of the viscometer. The 7550 HPHT Viscometer has many of the same features as the 7600. However, in order to satisfy the greater need of the industry, the instrument design was made to be extremely user friendly with only slightly lowered limits. Additionally the 7550 was designed to comply with US and European safety standards, an industry first.

The 7550 boasts shear rate accuracy and a magnetically coupled optically encoded torque measurement which enables sensitive, precise viscosity measurement in spite of the harsh temperatures and pressures. The small size and light-weight design of the system is as remarkable as its superb performance. Through new technology, the combined weight of the instruments vessel plug and sample cup has been kept to 12 pounds for easier, safer handling and cleaning.

The 7550 is a fully automated viscometer. The associated software is a powerful data acquisition and analysis tool designed to be operator friendly. Through the software (which can run on almost any computer), virtually any test cycle can be programmed and run. It can be set-up to automatically capture peak gel strength as well as 10 second and 10 minute gel values.

## FEATURES

- ✓ User Friendly
- ✓ Compact Size
- ✓ Ergonomically Designed
- ✓ Designed For Safety
- ✓ Automated With Data Acquisition
- ✓ Meets API/ISO Standards
- ✓ Optically Encoded Torque Measurement



## 7550 HPHT VISCOMETER

Designed to provide users with as much flexibility as possible, the control software allows for a test cycle to be edited during testing. Test cycles can be easily paused and resumed or profile steps skipped. The software even has the capability to run automatic calibration cycles using your calibration fluids.

Once testing is completed, the results can be displayed in user-configurable graphs. Sharing test results with other programs and colleagues is very easy as all test data is stored in a universal spreadsheet file format.

### SPECIFICATIONS

**Temperature, Maximum**  
500°F / 260°C

**Pressure, Maximum**  
30,000 psi / 13.9 MPa

**Shear Rate Range\*\***  
0.0017 to 1021 sec<sup>-1</sup>

**Shear Rate Accuracy**  
±0.025% of F.S.

**Motor Speed Range**  
0.001 to 600 rpm

**Shear Stress, Maximum**  
0-6000 dyne / cm<sup>2</sup> ±0.05% of F.S.

Other ranges are available with alternate spring assemblies.

**Tech Standards**  
Pressure Equipment Directive  
(PED 97/23/EC) compliant

**Power Requirements**  
208-240 VAC 11A, 50/60 Hz, 10A Max.

**Instrument Air or N2**  
150 psi, 1034 kPa ±10%  
(filtered and dry)

Coolant: Water or Chiller Accessory

**Physical Dimensions (w x d x h)**  
28 in. x 18 in. x 17 in. / 71 x 46 x 43 cm

**Weight**  
200 lbm / 91 kg



7550 Rotor Assembly on Stand



7550 Open View

Manufacturer's specifications subject to change without notice.

