

# OIL WELL CEMENTING



## 8340 HPHT CONSISTOMETER

### A Critical Tool for Oil Well Cementing

The 8340 HPHT Consistometer is designed for laboratories that need to test cement mixtures and additives for use at the hottest temperatures and highest pressures. This instrument is used to test cement thickening behavior under almost any downhole well conditions.

Designed with laboratory efficiency and ease of operation as major goals, the 8340 design minimizes the two largest contributors that affect instrument runtime: the cool-down time between tests and downtime for maintenance needs.

### Engineering Excellence for Long-term Performance

Chandler Engineering renowned manufacturing and field service experience is evident throughout the design of the 8340. The exclusive cooling system shortens the time between tests by as much as 75% as compared with other conventional consistometers.

Maintenance on the hydraulic system is minimized through a design which is easy to clean and uses standard filters. An avionics inspired modular electronics assembly makes unexpected service a snap further minimizing potential downtime. Slurry cup drive reliability is maximized by use of a magnetic coupling system to connect the drive motor to the cup. Consistency is measured with a torsion spring / paddle system.

### Operational Simplicity and Advanced Capabilities

The 8340 Pressurized Consistometer is extremely simple to operate with all of the operational controls conveniently located on the front panel. The Model 8340 accurately controls the system pressure and pressure rate changes. This includes automatic control of hesitation squeeze parameters. Pressure changes are recorded within the test file but can also be captured with the third channel on the chart recorder.

## FEATURES

- ✓ 75% Shorter Cooling Cycle
- ✓ Built-In Chart Recorder
- ✓ Programmable Consistency Alarm
- ✓ Modular Electronics
- ✓ Dramatically Improved Hydraulic System
- ✓ Compatible with Model 5270 Data Acquisition System



## 8340 HPHT CONSISTOMETER

For deep water capabilities, the 8340 can be equipped with an external chiller for performing tests at sub-ambient temperatures. The usefulness of the 8340 is not limited to the standard testing of cement thickening time. It can also be used to prepare slurries for other tests such as measuring free water content, testing for fluid loss or rheological properties and viscosity.

### SPECIFICATIONS

**Max Pressure**

40,000 psi / 275 MPa

**Max Temperature**

600°F / 315°C

**Heater Power**

5000 Watts

**Slurry Cup Rotation Speed**

150 rpm (Adjustable rpm Optional)

**Thickening Time Range**

0 to 100 Bc (Bearden Units)

**Temperature Control**

Programmable Controller w/ Chandler Engineering Algorithms

**Pressure Control**

Manually Controlled Hydraulic System (8340 Standard)  
Dynamic Pressure Controlled System (8340 AUTO)

**Operating Temperature**

32 to 120°F / 0 to 50°C

**Turnaround Time**

20 Mins Typical

**Pressure Medium**

White Mineral Oil

**Data Acquisition**

Built-In Strip Chart Recorder  
Chandler's 5270 Data Acquisition and Control Software for a Stand-Alone Computer (Optional)

**Compliance**

API Spec 10A / ISO 10426-1

**Utilities****Cooling Water**

20-80 psi / 140-550 kPa

**Compressed Air**

75-125 psi / 517-862 kPa

**Power**

220 VAC, ±15%, 50/60 Hz, 7.5 kVA

**Physical Dimensions**

Dimensions (w x d x h)  
23 in. x 35 in. x 77 in.  
57 x 89 x 195 cm.

**Weight**

1150 lb / 522 kg

Manufacturer's specifications subject to change without notice

