



# Model 7716

## ***BENCH-TOP PRESSURIZED CONSISTOMETER***

### **A Critical Tool for Oil Well Drilling and Cementing**

The Model 7716 Bench-Top Consistometer enables mobile and remote cement testing laboratories with very limited space to perform the fundamentally necessary testing of cement thickening time. This instrument is capable of testing cement thickening behavior in accordance with most API Spec 10A testing schedules.

### **Engineering Excellence for Long-term Performance**

Chandler Engineering renowned manufacturing and field service experience is evident throughout the design of the Model 7716. This small, rugged instrument employs many of the design features of our full-sized consistometers in order to provide years of reliable service.

### **Operational Simplicity**

The Model 7716 Bench-Top Consistometer is simple to operate with all of the operational controls conveniently located on the front panel alongside visible indications of thickening time, pressure and temperature. The slurry cup is designed so that closure, heating and pressurization can be achieved quickly.

The programmable temperature controller is equipped with proprietary Chandler Engineering firmware that accurately controls the rate of temperature rise of the slurry. Throughout the test, the built-in chart recorder tracks the temperature and cement consistency.

Once the user-set consistency is reached, an alarm will sound to alert the operator when the test is completed. The automatic shutdown feature of the instrument will turn off the motor, heater and timer as well as turn on the cooling water.



### ***FEATURES***

- ✓ Small, Transportable Size for Field Locations, Mobile Labs and Offshore Platforms
- ✓ Automatic Shutdown
- ✓ Built-In Chart Recorder
- ✓ Programmable Consistency Alarm
- ✓ Magnetic Drive Coupling
- ✓ Optional Pressure Controller
- ✓ Optional Data Acquisition System

Operation can be further simplified by addition of the optional Model 5270 Data Acquisition and Control System which consists of interface electronics and custom software. To maximize system reliability, the software is purposefully designed to run on a stand-alone computer. The Model 5270 software can acquire test data as well as upload test protocols to multiple compatible Chandler Engineering instruments.

The usefulness of the Model 7716 Consistometer is not limited to the 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

Maximum Temperature	350°F / 177°C
Maximum Pressure	16,000 psi / 110 MPa
Slurry Cup Rotation Speed	150 rpm
Thickening Time Range	0 to 100 Bc (Bearden Units)
Consistency Resolution	1 Bc
Temperature Control	Programmable Controller
Pressure Control	Manual. Automatic pressure control is optional
Pressure Medium	White Mineral Oil
Data Acquisition	Two channel strip chart recorder (temp. & consistency) Chandler Engineering Model 5270 Data Acquisition and Control System for a stand-alone computer (optional)
Operating Temperature	32 to 120°F / 0 to 50°C
Compliance	API Spec 10A / ISO 10426-1

### Utilities

Power Supply (optional)	220 VAC $\pm$ 15% 50/60 Hz, 3kVA or 110 VAC $\pm$ 10% 50/60Hz, 3 kVA
Cooling Water	20-80 psi / 140 – 550 kPa
Compressed Air	50-100 psi / 345 – 690 kPa

### Physical Dimensions

Dimensions (w x d x h):	26 in. x 14 in. x 21.5 in. / 66 x 36 x 55 cm
Weight:	220 lb / 100 kg

### Shipping Information

Dimensions	39 in. x 19 in. x 29 in. / 91 x 54 x 74 cm
Weight	300 lb / 136 kg

*Manufacturer's specifications subject to change without notice*



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