



CEMENT TESTING 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 cement product line includes innovative designs such as the Static Gel Strength Measurement Device (SGSM) which showcases our ability to develop new technology to meet customer and industry demands. We also offer Ultrasonic Cement Analyzers (UCA), Constant Speed Blenders, Automated HTHP Consistometers, and all other instruments required to evaluate cement properties according to API Specification 10.

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



Model 4005 Automated Twin Cell UCA

By measuring the change in velocity of an acoustic signal, the Ultrasonic Cement Analyzer provides a continuous non-destructive method of determining compressive strength of a well cement as a function of time while at temperature and pressure. The Model 4005 Automated Twin Cell UCA automatically controls the temperature and pressure during the test and features a touch-screen display as well as PC software.

An optional Static Gel Strength Measurement device can be added to measure the static gel strength of the cement sample over time.



Features

- Automatic temperature (up to 400°F) and pressure control (up to 5,000 PSI) simulate down-hole conditions
- Non-destructive testing
- Operates as standalone or with a computer (laptop included)
- Interactive display for each cell provides full test control
- Independent temperature and pressure control for each cell
- Indicator light makes machine status easy to see
- Pressure control for both SGSM and UCA to within ± 10 psi
- Test data saved on the instrument and exported via USB
- Total test recovery after a power failure
- Connectivity options: Serial, Ethernet, USB
- Calibration data is stored on the machine
- Meets criteria in API Spec 10A, RP 10B-2, and RP 10B-6

Patent No. 9,612,232



Technical Specifications and Requirements

- #120-56 Model 4005 Automated UCA, with Two UCA Cells
- #120-56-C Model 4005 Automated UCA/SGSM, with Two UCA Cells and One SGSM Cell

Specifications

- Maximum Temperature: 400°F (204.4°C)
- Maximum Pressure: 5,000 PSI (34.47 MPa)
- Size: 25" × 21" × 13" (64 × 53 × 33 cm)
- Weight: Approx. 100 lb (45 kg)

Requirements

- Air Supply: 100 PSI (690 kPa) Recommended, 150 PSI (1,035 kPa) Maximum, ¼" NPT Connector
- Water Supply: 40 - 100 PSI, 40° - 100°F, ¼" NPT Connector
- Coolant Supply: ¼" NPT Connector
- Power Supply:
 - Electronics: 230 - 240 Volt, 50 - 60 Hz, 5 Amp
 - Heaters: 230 - 240 Volt, 50 - 60 Hz, 8 Amp
- Computer:
 - Windows 7 or higher
 - RS-232 Serial Port, USB Port, or Ethernet Port
 - Minimum Screen Resolution: 1280 × 680

Software Features

- Reports real-time data that can be exported as a spreadsheet
- Enables you to program multiple temperature and pressure ramps
- Operates multiple units with one computer

