



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 4020-SG Automated UCA/SGSM

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 Static Gel Strength Measurement (SGSM) device uses a vaned bob to condition a cement slurry inside a pressurized test cell and intermittently measure static gel strength at down-hole conditions. By directly measuring the forces required to initiate movement in the sample, the SGSM provides an accurate way of determining the static gel strength.



Features

- Data acquisition system with **automatic temperature and pressure control** included
- Data is available instantly on-screen and is automatically downloaded to a Microsoft Excel spreadsheet for easy analysis
- UCA and SGSM combined in a single unit

UCA

- Cement samples are not destroyed at time intervals
- Unique technology results in a cleaner signal, so transit times and data are more accurate

SGSM

- Automatically conditions the slurry in-place (1 - 150 RPM)
- Provides a direct, mechanical measurement of static gel strength
- Intermittent or continuous measurement under high-temperature, high-pressure conditions
- Simple calibration and system check
- Quick clean up and turn around



Technical Specifications and Requirements

- # 120-59 - Model 4020-SG Automated UCA/SGSM

Specification

- Maximum Temperature: 400°F (204.4°C)
- Maximum Pressure: 20,000 PSI (137.9 MPa)
- Size: 15" × 24" × 18" (38 × 61 × 46 cm)
- Weight: 85 lb (39 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: 230 - 240 Volt, 50 - 60 Hz, 10 Amps
- Fuse: T 10A L 250V

Computer

- Windows XP or higher
- RS-232 Serial Port (or Serial to USB Adapter)
- Minimum Screen Resolution: 1280 × 680



SGSM Cell Cap Assembly

Data Acquisition Features

- Data is available in real time on-screen and is also stored in an Excel® spreadsheet for easy graphical viewing and printing
- Enables you to program multiple temperature ramps
- Operates multiple units with one computer
- Windows®-based software

