



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 Ultra-sonic 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.

Static Gel Strength Measurement Device

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.



Two SGSM Units on a 20,000 PSI Dual Cell UCA

Features

- Automatically conditions the slurry in-place (1 - 150 RPM)
- Provides a direct mechanical measurement of static gel strength
- Simultaneously measures static gel strength and compressive strength (dual-cell units only)
- Intermittent or continuous measurement under high-temperature, high-pressure conditions
- Data acquisition system with automatic temperature control included
- Simple calibration and system check
- Quick clean up and turn around



A Single SGSM Unit on a 5,000 PSI Twin Cell UCA

Patent No. 9,612,232





Static Gel Strength Measurement Device

Technical Specifications and Requirements

The **High Pressure SGSM (#120-58)** fits in a high-pressure UCA test cell. This configuration is compatible with both the Single Cell UCA (#120-50) and the Dual Cell UCA (#120-52).

- Maximum Temperature: 400°F (204°C)
- Maximum Pressure: 20,000 PSI (138 MPa)
- Size (Including Cell): 20" Tall x 6" Diameter (51 x 15 cm)
- Weight: 50.6 lb (23 kg)

The **Low Pressure SGSM (#120-53)** fits in a low-pressure UCA test cell. This configuration is compatible with the Twin Cell UCA (#120-51).

- Maximum Temperature: 400°F (204°C)
- Max Operating Pressure: 5,000 PSI (138 MPa)
- Size (Including Cell): 18.25" Tall x 6" Diameter (46 x 15 cm)
- Weight: 47.2 lb (21.4 kg)

Requirements

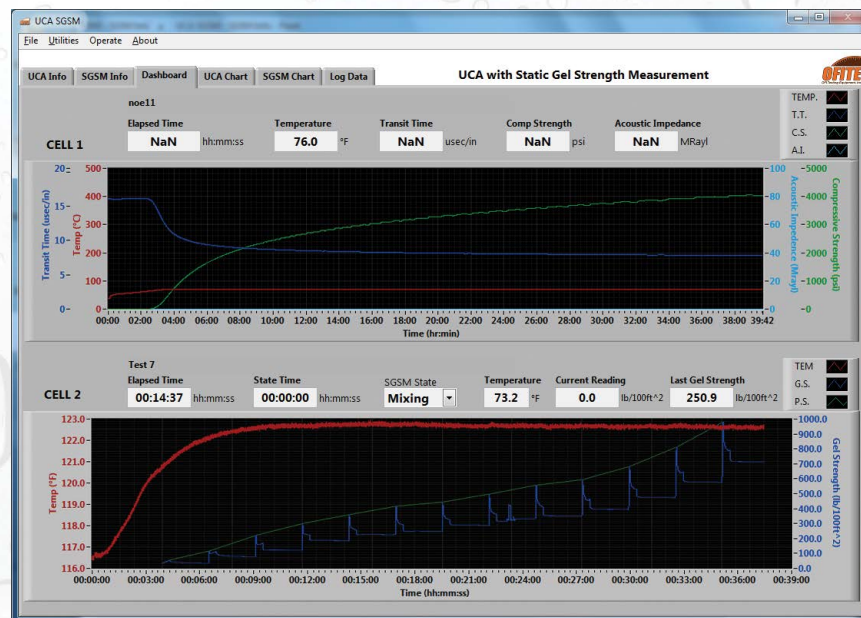
- Power: 100 - 240 Volt, 50 - 60 Hz, 2 Amp
- Computer
 - Windows XP or higher
 - RS-232 Serial Port (or Serial to USB Adapter)
 - Minimum Screen Resolution: 1280 x 680



SGSM Cell Cap Assembly

OFITE 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
- A computer running OFITE software graphs the data from both cells
- Windows®-based software



UCA/SGSM Software