

Cement Static Gel Strength Measurement Device, 20,000 PSI



Brand: OFI Testing Equipment, Inc.
Product Code: 120-58
Availability: Call for availability

Description

The Static Gel Strength Measurement (SGSM) device is an accessory component to the OFITE Ultrasonic Cement Analyzers (UCA), as shown in the picture. It 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.

[U.S. Patent No. 9,612,232](#)

For more information, [click here](#).

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

Specifications

- 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 × 6" Diameter (51 × 15 cm)
- Weight: 50.6 lb (23 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 × 680

Software 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

Components

- #120-51-020: Thermocouple Assembly
- #120-50-21A: Cell Body
- #120-50-021B: Cell Cap, Bottom
- #120-50-026: Retaining Ring
- #120-50-027-1: Seal Ring
- #120-53-01: Vane Assembly
- #120-53-25: Cable, 25 Pin, Male to Male, 10 Feet
- #120-53-31: O-ring for Mounting Adapter, Lower
- #120-53-32: O-ring for Mounting Adapter, Upper
- #120-53-33: Spring
- #120-53-34: Load Cell
- #120-53-42: Bushing, Graphite
- #120-53-58: Backup Ring, Upper
- #120-53-59: Backup Ring, Lower

- #120-53-60: Retaining Ring, Internal
- #120-53-80: Electronics Box
- #120-53-81: Wrench, Combination, 3/16"
- #120-58-05: Retaining Ring, External
- #120-58-23: Diaphragm
- #120-58-38: Retaining Ring, Internal
- #120-75-10: Weight Set
- #122-073: Fuse, 2 Amp, 5 mm × 20 mm
- #130-79-15: Serial Cable
- #152-37: AC Power Cord, 115 Volt
- #220-10A-EURO: Power Cord, 230V/10A European Plug
- #220-15A-EURO: Power Cord, 230V/15A European Plug
- #220-15A-USA: Power Cord, 230V/15A USA Plug
- #220-20A-USA: Power Cord, 230V/20A USA Plug

Part Number

- #120-58