

Model 4005 Automated Twin Cell UCA



Brand: OFI Testing Equipment, Inc.

Product Code: 120-56

Availability: Call for availability

Description

By measuring the change in velocity of an acoustic signal, the Ultrasonic Cement Analyzer (UCA) 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
- 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 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
- Includes laptop computer

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, 2 Amp
 - Heaters: 230 - 240 Volt, 50 - 60 Hz, 8 Amp
- Computer:
 - Windows XP or higher
 - RS-232 Serial Port (or Serial to USB Adapter)
 - 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

Part Number

- 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

Patent No. 9,612,232