



Model 4265

ULTRASONIC CEMENT ANALYZER

A Critical Tool for Cement Laboratories

Testing the strength of standard cement cubes only provides information about cured strength. To accurately and effectively schedule a cementing job with a minimum WOC time, you need to determine how a slurry develops strength over time during curing. The Model 4265 Ultrasonic Cement Analyzer (UCA) provides a determination of the strength development of a cement sample while it is being cured under downhole temperature and pressure conditions.

A Proven, Reliable Technique

Cement strength is determined by measuring the change in velocity of an ultrasonic signal transmitted through the cement specimen as it hardens. As the strength of the cement specimen increases, the ultrasonic signal's transit time through the sample decreases. Using proprietary algorithms that have been proven throughout the industry, the relative strength is calculated.

Operational Simplicity

The cement slurry to be tested is prepared in accordance with API recommendations, then placed in the unit's temperature and pressure-controlled cell which simulates the curing conditions that are expected downhole. During testing, temperature is automatically controlled while pressure is manually set. For dynamic, precise pressure control, an automatic pressure system is available.

The acoustic measurements are read by an internal computer which automatically performs the complex strength calculations. All test data including the compressive strength results are then transferred to a Windows® based computer running Chandler Engineering Model 5270 Data Acquisition software. The software produces real-time graphs of the calculated strength, measured temperature and transit time.



FEATURES

- ✓ Real-Time Observation of Strength Development
- ✓ Used to Predict WOC Time
- ✓ Non-Destructive Method
- ✓ Uses Proven Industry Standard Algorithms
- ✓ Chiller Option for Simulating Low Temperature Cementing
- ✓ Chandler's 5720 Data Acquisition Software
- ✓ Optional Automatic Pressure Controller
- ✓ Optional Model 4268ES Cement Expansion Shrinkage cell



Specifications

Maximum Temperature 400°F / 204°C
Maximum Pressure 20,000 psi / 140 MPa

Utilities

Power 220 VAC, ±15%, 50/60 Hz, 15A Heater & solenoid valves
90—240 VAC 50/60 Hz, 1A Instrumentation power
Compressed air 50— 100 psi / 350 – 700 kPa
Water 20 - 80 psi / 150—600 kPa
Drain Suitable for hot water

Manufacturer's specifications subject to change without notice



CHANDLER ENGINEERING

2001 North Indianwood Avenue, Broken Arrow, OK 74012
Tel: +1 918-250-7200 Fax: +1 918-459-0165
e-mail: chandler.sales@ametek.com www.chandlereng.com

Houston Sales and Service

4903 W. Sam Houston Parkway, N., Suite A-400, Houston, TX 77041
Tel: +1 713-466-4900 Fax: +1 713-849-1924