



## Model 6265 MPRO

### *MECHANICAL PROPERTIES ANALYZER (MPRO®)*

#### A Critical Tool for Oil Well Cement Testing

Recent research into the long-term performance of oilfield cement has made it clear that the cement's mechanical properties, not just its compressive strength, are critical to the long-term integrity of the well. With a technological breakthrough (US patent #6941819), Chandler Engineering has developed the first high-pressure, high-temperature instrument designed specifically to measure the mechanical properties of oil field cements.

The Model 6265 Mechanical Properties Analyzer (MPRO) continuously measures the elastic mechanical properties (Poisson's ratio, Young's modulus, Bulk Modulus) and compressive strength of API cement as it cures under high-temperature and high-pressure conditions. These results enable the optimization of the cement's formulation for long-term performance.

#### A Proven, Reliable Technique

Ultrasonic cement analyzers (UCA) are widely used to determine compressive strength during curing. The Model 6265 MPRO is a unique, specialized UCA that uses proven, proprietary ultrasonic analysis techniques to perform its measurements. The instrument's single vessel curing technique preserves the sample conditions and testing integrity throughout the test thereby eliminating damage to the sample from handling or from unrealistic induced stresses caused by cooling and depressurization.



#### FEATURES

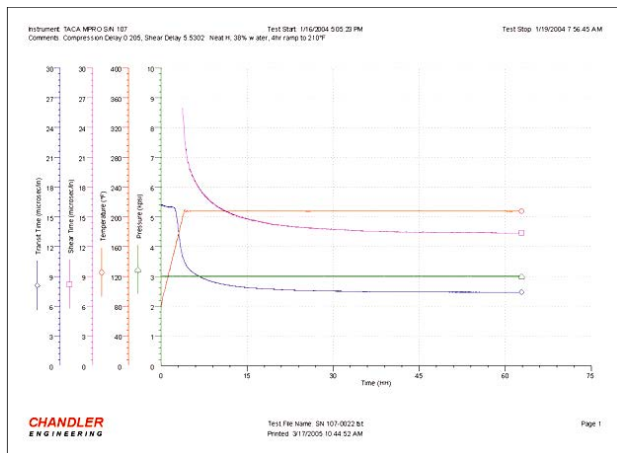
- ✓ Real-Time Observation of Mechanical Properties Development
- ✓ Used To Predict WOC Time
- ✓ Non-Destructive Method
- ✓ Uses Proven Industry-Standard Algorithms



## Operational Simplicity

The various acoustic measurements are read by an internal computer which automatically performs the numerous complex calculations. All test data including the mechanical property results are then transferred to a computer which is running Chandler's Model 5270 Data Acquisition Software.

The software produces real-time graphs of the test parameters and the measured mechanical properties. These graphs can be printed at any point during testing. All test data is recorded on the computer's disk drive as the test progresses so that data is not lost in the event of a power failure. The Model 5270 software is capable of monitoring multiple Chandler Engineering instruments so only one computer is needed in the lab thereby saving valuable space.



## Specifications

Measurements  
Maximum Temperature  
Maximum Pressure

Poisson's Ratio, Young's Modulus, Bulk Modulus, Compressive Strength  
400°F / 204°C  
7,500 psi / 52 MPa

### Utilities

Power  
Compressed air  
Water  
Coolant  
Drain

220 VAC,  $\pm 15\%$ , 50/60 Hz, 0.75 kVA  
75-125 psi intermittent flow with five gallon (20 liter) reservoir tank  
Clean water 5-150 psi  
Clean water or Ethylene glycol solution  
Suitable for hot water temperatures that may exceed 200°F / 93°C

### Dimensional Information

6265 MPRO (w x d x h)  
6265-I Intensifier

18 in. x 17 in. x 16 in. / 46 x 43 x 41 cm—57 lb / 26 kg  
9 in. x 19 in. x 25 in. / 23 x 48 x 64 cm - 118 lb / 54 kg

### Shipping Information

(w x d x h)

36 in. x 36 in. x 49 in. / 91 x 91 x 124 cm—243 lb / 110 kg

*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](mailto:chandler.sales@ametek.com) [www.chandlereng.com](http://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