



Model 5265

STATIC GEL STRENGTH ANALYZER

A Breakthrough Tool for Oil Well Cement Testing

Gas migration and water flows through cement are two of the biggest problems facing the petroleum industry. One of the critical measurements required to evaluate the potential for fluid inflow migration problems is the determination of the static gel strength development of the cement slurry.

A breakthrough instrument, the Model 5265 SGSA simultaneously measures both a slurry's compressive

strength development and its static gel strength development while it is cured under downhole temperature and pressure conditions.

A Powerful, Proven Technique

Similar to a standard ultrasonic cement analyzer, the cement's properties are inferred by measuring the change in the energy level of an ultrasonic signal transmitted through the cement specimen as it cures. Proven through actual laboratory testing, the proprietary algorithms developed by Chandler Engineering for static gel strength measurement are applicable to a wide range of cement slurry densities and compositions including light weight, heavy weight and latex slurries.

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.



- ✓ Real-Time Measurement of Gel Strength Development
- ✓ Real-Time Measurement of Compressive Strength Development
- ✓ Used to predict WOC time
- Used to predict gas & water migration susceptibility
- ✓ Non-Destructive Method
- ✓ Uses Proven Algorithms
- Chandler Engineering Model 5720 Data Acquisition Software



The acoustic measurements are read by a unique system of sensors and electronics which automatically perform the complex calculations. All test data and results are then transferred to a computer that is running the Chandler Engineering Model 5270 Data Acquisition software. The software produces real-time graphs of the test results which can be printed at any point during the testing.

Specifications

Maximum Temperature 400°F / 204°C

Maximum Pressure 20,000 psi / 137 MPa

Utilities

Power 220 ±10% VAC, 50/60 Hz, 15 A - Heater/solenoid valves

90 - 220 VAC, 50/60 Hz, 1 A - Instrumentation power

Water Clean pressurizing water, 20-80 psi / 140-550 kPa

Coolant Clean water or Ethylene glycol solution

Air Clean, dry compressed air; 50-100 psi / 340-690 kPa

Drain Suitable for hot water

Shipping Information

Dimensions (wxdxh) 29 in. x 20 in. x 29 in. / 74 x 51 x 74 cm

Weight 205 lb / 93 kg

Manufacturer's specifications subject to change without notice



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