Model 5265 MGSA

MECHANICAL GEL STRENGTH APPARATUS

A Critical Tool for Oil Well Drilling and Cementing

The Model 5265 MGSA Gel Strength Analyzer is an addition to Chandler Engineering’s world leading line of cement testing equipment. The need to measure gel development, gel duration and gel strength are critical in the design of cement slurries. The Model 5265 MGSA measures the onset of gel strength as well as the continued development of gel strength. This data equips the operator with the knowledge required to optimize slurry designs and meet critical requirements of well placement.

The Model 5265 MGSA utilizes a precision motor and paddle coupled to a reaction force transducer to measure the phase change. The instrument is designed to condition the slurry at 150 RPM and set the measurement of gel strength at 0.2 degrees per minute. As an added function, the motor can be run at an intermittent motor rate. The geometry of the paddle is industry specific or may be adapted to other geometries as needed. The instrument comes complete with the Quizix Precision Pump System for stable and accurate pressure control. Precision pressure control is critical for the accuracy of gel strength measurement and maintaining gel structure.

FEATURES

- 0.2 degrees/min or start/stop measurement motor speeds
- Slurry conditioning at 150 RPM
- Reaction torque measurement from 10 lbf/100ft² up to 1500 lbf/100ft²
- Operating temperature up to 450°F (232°C)
- Operating Pressure up to 20,000 psi (138 MPa)
- Utilizes Chandler Engineering Model 5270 Data Acquisition and Control Software
- Quizix Precision Pump System Included
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Specifications
Maximum Temperature: 450°F / 232°C
Maximum Pressure: 20000 psi / 138 MPa

Utilities:
Instrument Power: 230 VAC, ±10%, 50/60 Hz, 1 phase
Water: 20-80 psi / 140-550 kPa
Clean dry compressed air: 50-100 psi / 340-690 kPa
Coolant: Water or Ethylene Glycol Solution
Drain: Suitable for hot water
Environmental: Indoor use, altitude up to 6562 ft / 2000 m
Ambient temperature: 60-122°F / 16-50°C

Measurement Specifications:
Accuracy: ±1% of F.S. or better
Paddle speed range: 0.2 degrees/min - 150 RPM
Pressure control accuracy: ±25 psi of F.S.

Regulatory:
Designed to meet ASME, CE/PED and NRTL Certifications
API RP10B-6 Compliant