

PMI ADVANCED

CONSISTOMETER

PMI-CM-40K



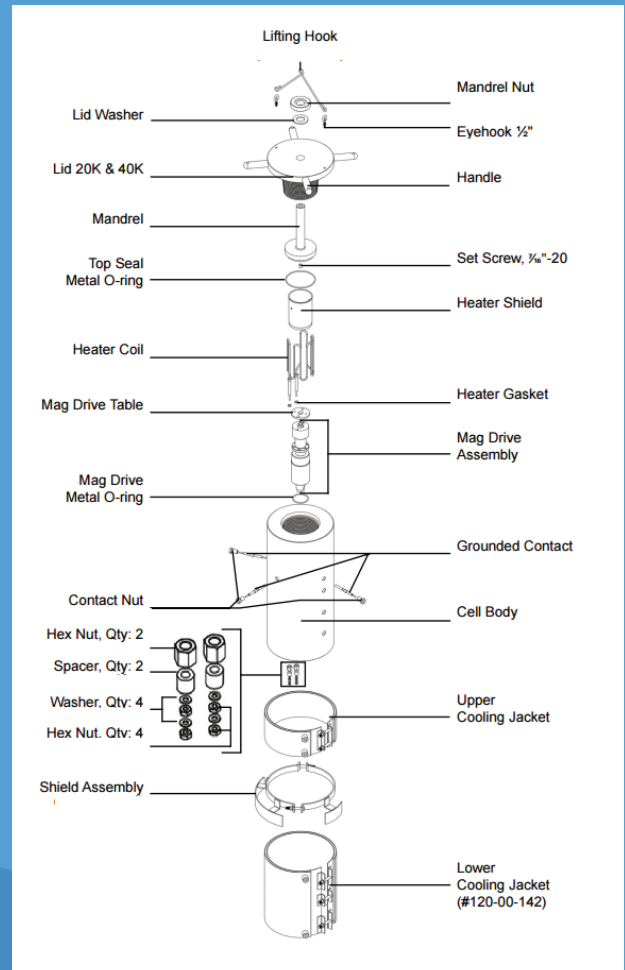
Not just products... Solutions !

CONSISTOMETER DESCRIPTION

The PMI Computer Controlled HPHT Consistometer Model PMI-CM-40K, is designed to measures the cement slurry viscosity under high pressure and temperature. The instrument features a rotating slurry cup that turns at speeds up to 150 rpm and a stationary paddle-style sensor. User-specified conditions of temperature and pressure are applied to the test chamber as the magnetically-driven cup rotates and the slurry flows against the paddle. The torque applied to the paddle as the slurry cup revolves is used to determine the slurry consistency. This instrument is used to test cement thickening behavior under almost any down hole well conditions. The instrument is designed for Easy Operation via computer Control, enabling the operator to perform accurate, dependable test operations with minimal preparation time. The innovative hardware design makes the instrument easy to set up, easy to use and easy to clean. The custom PC software included with each unit allows the user to construct test sequences, run tests, and interpret test results quickly with efficiency...

CONSISTOMETER OPERATION

Cement is mixed and poured into the slurry cup assembly. The slurry cup is placed into the test vessel and pressure is increased via an air-driven hydraulic pump. A PID temperature controller governs an internal heater, which maintains the necessary temperature profile, while a magnetic drive mechanism rotates the slurry cup assembly. A potentiometer controls an output voltage, which is directly proportional to the amount of torque the cement exerts upon an API-approved paddle. The included software controls the instrument and records temperature, pressure, and cement consistency as a function of time.



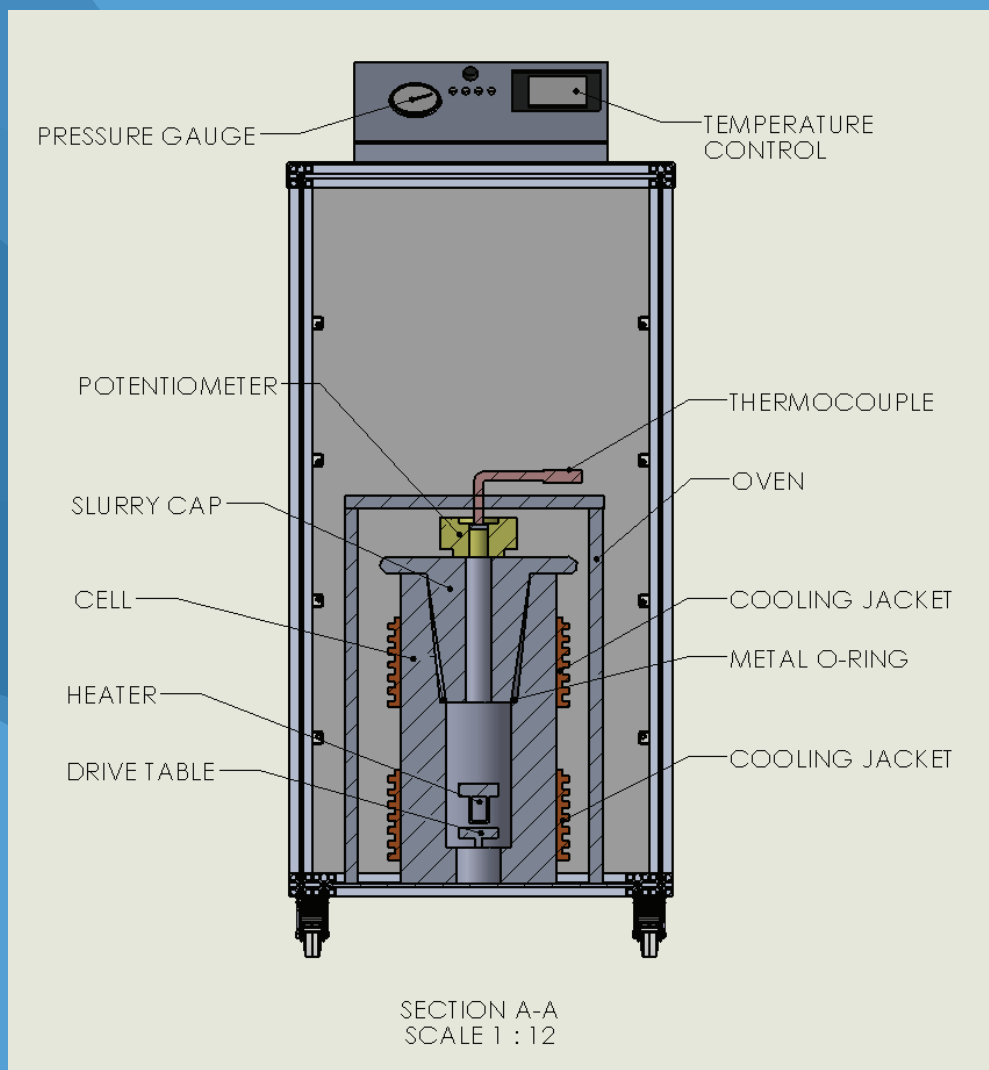
Cell Schematic

CONSISTOMETER

KEY FEATURES & SPECS

Computer Controlled PMI Consistometer Model PMI-CM-40K with:

- *Temperature: up to 315°C*
- *Pressure: 40,000 PSI*
- *Dimension: 53"x26"x26"*
- *Power Supply: 220-240, 50/60 Hz, 25 Amp electrical power supply*
- *Automatic Operation*
- *Computerized Data Acquisition and Control System with Advanced PMI Software*



CONSISTOMETER

UNIQUE FEATURES

- Computer controlled system; Computerized Data Acquisition and Control system provides detailed test information in convenient formats and can control multiple units from one PC
- RS-232 and Ethernet connections available
- Automatic temperature and pressure control with digital display
- Integrated cooling system
- Metal-to-Metal pressure chamber closure - ease of operation, less maintenance
- Slurry cup rotation 150rpm as per API specification
- Thickening time range 0-100BC (Bearden Units)
- External cooling jacket aids cooling of test cell
- Automatic, programmable speed motor (0–300 RPM) powered by a magnetic drive, Easy-to-use two-piece lift-off cap for pressure cell
- Convenient oil reservoir features a cap with built-in funnel to help prevent spills, a removable top and bottom that make cleaning easy, and a sloping bottom that collects sediment for easy removal
- Classic potentiometer design with Teflon main body
- Visual indicator provides an at-a-glance status update during testing
- Touch Screen with user Friendly Interface
- Temperature, Pressure, and Consistency alarms provide automatic shutdown for safety
- User Friendly Software package with windows Operating system with customizable graphs and multi-variation data export
- Material of construction: SS steel, Corrosion Resistant
- The data is automatically recorded to a database for future analysis to help predict the cement slurry's down-hole performance(Optional)
- Spares and accessories include tools, fuses, slurry cup parts, connection hardware, power cord and printer

PMI

SALES & SERVICE



Our sales team is dedicated to helping our customers find the machine that is right for their situation. We also offer custom machines for customers with unique needs. We are committed to customer support, including continued technical support for our products, short response times and customer specific solutions. To find out what we can do for you, contact us today.

Customize your machine today!

Disclaimer: **We are continuously improving our products, Design & Specification are subject to change without prior notice.*

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