

CTE MODEL 40-600 / 40-600-2 PRESSURIZED CONSISTOMETER



PRESSURIZED CONSISTOMETER

The CTE pressurized consistometer models 40-600 and 40-600-2, are specifically designed to measure cement slurries in compliance with ISO-10426, API Spec 10A and API RP-10B schedules. In addition, the units can be used to prepare slurries for the measurement of free water content, viscosity, fluid loss, and rheological properties.

Both models have wide pressure and temperature operating ranges—up to 40,000 psi (275MPa) and 600° F (315° C). With high temperatures and pressures applied to the cement, it is possible to simulate a variety of conditions found in actual down-hole well cementing. The measured thickening time can then be used to formulate plans for the actual cementing of the well.

STANDARD EQUIPMENT

- State-of-the-Art, user friendly Cementlab® software package with Windows® 7 operating system.
- Large, analog pressure gauge.
- Fully programmable temperature control and digital, graphical on-screen temperature indication.
- Magnetic drive system and 150 rpm pre-set speed.
- Dual oil filters protect critical components and prevent premature failures.
- Classic potentiometer design with Teflon® main body.
- API specification slurry cup design follows the traditional test slurry preparation routine.
- Consistency calibration device with weights.
- Spares and accessories include tools, fuses, slurry cup parts, utility connection hardware, main power cord and printer.
- Customizable graphs and multi-variation data export.

OPERATION

Operation of the pressurized consistometer is simple with all of the operational controls conveniently located on the front panel. The readout indicators for the viscosity, pressure, and temperature, as well as operational instructions, are easily read from the 12-inch color touch-screen.

Safety features include:

- Over-current sensing relay monitors and protects against short circuits.
- Thermocouple detection protects against run-away heater.
- Rupture disc protects system over-pressure.
- Fused circuitry.
- Automated error reporting.

OPTIONAL EQUIPMENT & SERVICES

- Automatic, programmable pressure control and digital, graphical on-screen pressure indication.
- Set point speed control located on the front panel with digital on-screen speed indication.
- 1 year spares kit for normal operation.
- Instrument training and commissioning.
- Scheduled calibrations.
- Re-circulating chiller for improved post-test cooling times.



CEMENT TEST EQUIPMENT, INC.

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WARRANTY

All CTE products are covered by a full one-year warranty against defect in materials and workmanship. A sales terms, conditions, and warranty statement is located on our website; www.ctetulsa.com/support



FEATURES

- Heavy duty, stainless steel cabinet construction.
- Text test files can be transferred to any existing user data base or spread sheet.
- Permanent on-board record of test files.
- Programmable and audible alarms for viscosity and time.
- Fast, automatic, time-programmable pressure vessel and oil reservoir cooling after test.
- High capacity cooling jacket around the pressure vessel permits the circulation of a cooling fluid to cool the pressure vessel quickly.
- Oil reservoir cooling coils used to rapidly cool oil between tests.
- Instrument can be joined into local networks for remote viewing.
- No other PC is required to operate the instrument.
- Most parts are interchangeable with other consistometers, including the magnetic drive, no need for special spares.
- Externally mounted computer control box allows simple access to ports, repair, or future upgrades.
- Simple calibration routines enable users to quickly calibrate the instrument.
- Graphical customization allows the user to change labels, colors, visibility, and scaling.
- Further customization of the testing units and sampling rate.
- Programmable, automatic test shut down by viscosity or time.

SPECIFICATIONS

ELECTRICAL - SINGLE

Input Voltage	230 VAC (±10%)
Input Power	5,500 W
Current	25 A
Input Frequency	50 -60 Hz

ELECTRICAL - DUAL

Input Voltage	230 VAC (±10%)
Input Power	11,000 W
Current	50 A
Input Frequency	50 -60 Hz

ENVIRONMENTAL

Operating Temperature	32 - 105 °F (0 - 40 °C)
Operating Humidity	0 - 95% non-condensing

MECHANICAL - SINGLE

Height	66.5 in. (169 cm)
Width	33 in. (84 cm)
Depth	31 in. (79 cm)
Weight	1,480 lbs. (672 kg)

MECHANICAL - DUAL

Height	66.5 in. (169 cm)
Width	48 in. (122 cm)
Depth	31 in. (79 cm)
Weight	2,200 lbs. (998 kg)

AIR/COOLING CONNECTIONS

Cooling In/Out	1/4 MNPT (2)
Air Input	1/4 MNPT (1) (Max 120psi)