



## CTE M22-400-AUTO FULLY AUTOMATIC CONSISTOMETER

### AUTOMATED CONSISTOMETER

CTE introduces the next generation of high temperature, high pressure cement testing instruments. Our new fully automated consistometer requires less space, less training, and less maintenance than anything available on the market.

The CTE automated consistometer is specifically designed to measure the thickening time of cement slurries in strict compliance with ISO-10426, API Spec 10A and API RP-10B Schedules. With high pressures and temperatures 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 FEATURES

- Rated to 22,000 psi (152 MPa) and 400°F (204°C)
- Fully programmable, multi-segment temperature, pressure ramps and hesitation squeeze.
- State-of-the-Art, user friendly Cementlab® software package with Windows 7 operating system.
- X-large touchscreen for total control.
- Powerful magnetic drive technology allows simple component inspection and replacement.
- Dual oil filters protect critical components and prevents premature failures.
- Classic potentiometer design with Teflon main body.
- API specification slurry cup design follows the traditional test slurry preparation routine.
- Consistency calibration device assembly 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

Automated Design – Increased flexibility

- Automated oil fill and pressure release-drain cylinder at the touch of a button
- Simple test setup and execution
- Simplified potentiometer circuit design increases reliability
- Automated error reporting
- No valves to over tighten

Safety Features

- 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

Customizable sample rate, graphs, temperature and pressure units

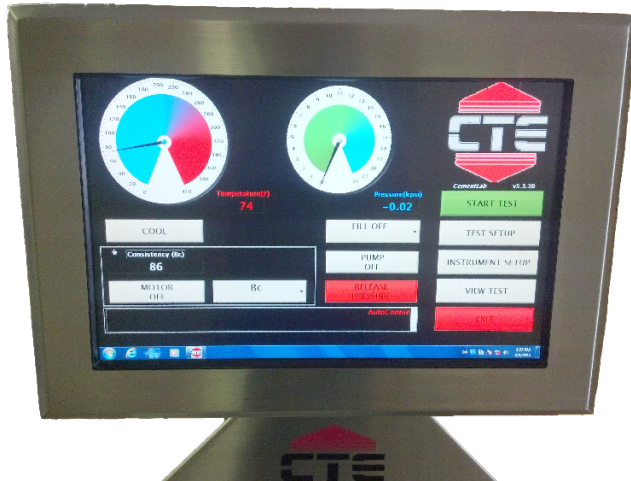
Fast component replacement/repair

Repair and air adjustment times reduced

### 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 included with each quotation or confirmation of order.





## BENEFITS

- 22 inch color touch-screen for input of testing parameters and access to programmable features
- Digital temperature, pressure, and consistency indication
- Windows7, 180GB Hard drive, Intel® Atom™ Processor N270 1.6 GHz
- Maximum operating pressures to 22,000 psi (152 MPa)
- Maximum operating temperatures to 400° F (204° C)
- Standard components interchangeable with competitors' consistometers
- Rugged electronics assure long-time performance
- No external PC required
- Integrated safety controls reduce potential for damage to instrument, slurries, or operators
- Worldwide service and parts delivery for fast replacements, calibrations, training seminars
- CTE annual service package available to reduce downtime, costs
- Replacement Parts IN STOCK, competitively priced and shipped today, WORLD-WIDE!

## FEATURES

- All parts are interchangeable with other consistometers, including the magnetic drive, no need for special spares
- Computer control box separated from instrument to allow simple access to ports, repair, or upgrade
- Fast, automatic, time-programmable pressure vessel and oil reservoir cooling after test.
- Simple calibration routines enable users to fully calibrate instrument in a very short time
- Compact design with access doors for easy serviceability
- Easily export data into text files for import into any database or spreadsheet
- Simple network setup and remote viewing software
- View multiple live tests and compare/print/export data
- Uninterruptable power supply can be installed to protect vital test data during a power outage
- Graphical customization allows the user to change labels, colors, visibility, and scaling
- Adjustable, audible alarms for thickening time
- Extra large oil reservoir with externally viewable sight glass

## ENVIRONMENTAL & UTILITY CONNECTIONS

### ELECTRICAL

Input Voltage 230 VAC (±10%)  
 Input Power 5500 W  
 Current 25 A  
 Input Frequency 50 -60 Hz

### MECHANICAL

Height 66 in. (168 cm)  
 Width 24 in. (61 cm)  
 Depth 34 in. (86 cm)  
 Weight 600 lbs. (272 kg)

### ENVIRONMENTAL

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

### HEATER

Heater Power 5000 W  
 Heater Type Internal Cast Rod

### MAGNETIC DRIVE UNIT

Drive Motor 1/8 Hp, 180VDC  
 Drive Speed 0-250 rpm

### AIR/WATER CONNECTIONS

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