

CTE MODEL 2-450 STIRRED FLUID LOSS TESTER



2-450 STIRRING FLUID LOSS TESTER

Cements are a critical element in the drilling, completion, workover, and abandonment of wells. A stirred fluid loss tester is used to determine the quantity of fluid that can be lost from a given slurry during placement in the well. The Model 2-450 allows the slurry to be mixed, or stirred under simulated downhole high temperature and high pressure well conditions. The ensuing testing per API recommended practices is performed in a single instrument, eliminating the need to transfer the slurry from a potentially dangerous hot consistometer to a fluid loss tester. It has been proven by comparative testing, that the use of a single instrument for fluid loss testing will result in more predictable and reproducible results, as well as a safer testing environment for the operator.

The CTE stirred fluid loss tester consists of a pressure vessel that is capable of achieving pressures up to 2,000 psig / 13.8 Mpa and temperatures up to 450°F / 232°C. Pressure for the instrument is provided using high pressure gas (nitrogen is preferred). Heat is applied to the cylinder using a heating/cooling jacket and temperature is controlled within 1 degree Celsius. The vessel can be rapidly cooled by circulating cooling water through the jacket after completion of a test. The pressure vessel contains a stirring paddle that rotates at 150 rpm. A standard 325 mesh screen is used as the filter medium to determine the amount of fluid that can be lost from the slurry. A filtrate cooling jacket is included for tests above 200°F / 95°C.

API RP-10b / ISO 10426
Recommended Testing Procedure

More accurate well simulation =
More accurate fluid loss results

Used to verify static fluid loss results

Industry Leading Design

No Stand-Pipe = Less Maintenance

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

- Stirring is done through flexible drive shaft.
- Easily programmable PID temperature control.
- Replaceable Bearings and Packing.
- Stainless Steel Pressure Vessel.
- Conforms to API RP 10.
- Simple to use filtrate cooling jacket.
- Internal cooling coils for rapid between-test cooling.
- Unique backflow preventer eliminates need for messy, hard to clean stand pipe.
- Unique filtrate cooling system to ensure filtrate will not boil off at high temperatures.

OPTIONS / FEATURES

- OPTIONAL Digital Balance for accurate fluid loss display
- OPTIONAL CementLab V5 Software interface with Digital Balance to store fluid loss data
- Combine with CTE Model 15-400GS Static Gel Strength Measurement to accurately predict gas migration and design better cement systems
- Combine with CTE Model 300 Gas Migration Apparatus
- Uses industry standard 325 mesh screen

ENVIRONMENTAL & UTILITY CONNECTIONS

ELECTRICAL

Input Voltage 230 VAC (±10%)
 Current 7A
 Input Frequency 50-60Hz

ENVIRONMENTAL

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

DRIVE UNIT

Drive Motor .016 Hp, 36VDC
 Drive Speed 150 rpm

MECHANICAL

Height 34 in. (38 cm)
 Width 28 in. (67 cm)
 Depth 23 in. (38 cm)
 Weight 150 lbs. (68 kg)

HEATER

Heater Power 1500 W
 Input Power Cast Heater w/
 Cooling Coils
 Heater Control SS Relay
 PID Controller

WATER/N2 CONNECTIONS

Water In/Out 1/4 MNPT (2)
 Nitrogen 3,000psig Max