



PART ENERGY GROUP

Consistomer model 7716/7720



Features:

- Small, Transportable Size for Field Locations, mobile Labs and Offshore Platforms
- Automatic Shutdown
- Built-In Chart Recorder
- Programmable Consistency Alarm
- Magnetic Drive Coupling
- Optional Pressure Controller
- Optional Data Acquisition System

Specifications

Maximum Temperature: 350°F / 177°C
Maximum Pressure: 16,000 psi / 110 MPa
Slurry Cup Rotation Speed: 150 rpm
Thickening Time Range: 0 to 100 Bc (Bearden Units)
Consistency Resolution: 1 Bc
Temperature Control: Programmable Controller
Pressure Control: Manual / Automatic pressure control is optional
Pressure Medium: White Mineral Oil

Model Comparison

Model	Dimensions (mm)	Weight (kg)	Max. pressure (MPa/psi)	Max. temperature (°C/°F)
TG-7716	670*360*570	89	120/17400	177/350
TG-7720	670*360*570	89	137/19900	204/400

Features

- Two Independently Operated Test Cells
- Automatic temperature and pressure control, variable speed motor (0 - 150 RPM) powered by a magnetic drive
- Computerized Data Acquisition and Control system, provides detailed test data in convenient formats, and can control multiple units from one computer
- Safety Features-adjustable temperature, pressure, and consistency alarms, automatic shutdown
 - Colorful digital LCD recorder
- In compliance with API Specification 10
- An internal-cooling coil inside the oil reservoir for quick cooling of hot oil
 - External Chiller Connections optional
- Indicators for test time, consistency, pressure and temperature are readily visible



Consistomer
model:8040



Max input power 10KW Rotational Speed 150+/-15 rpm
 Maximum Temperature 600 °F (315°C) Input Voltage 220V, 50-60 Hz
 Maximum Pressure 40,000PSI (275MPa) Heater Power 8 KW
 Thickening time range 0-100Bc Size 1220x890x1740mm
 Data Acquisition System TG-5270 Net Weight 980kg

Part Energy Group



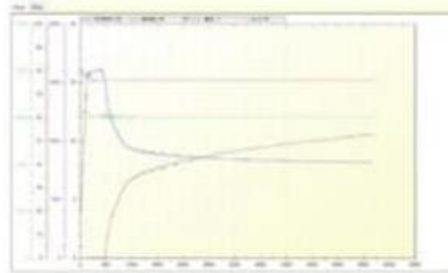
Features

- | Non-destructive method determining relative compressive strength.
- | A single sample is used to gather any desired number of data points for specific test conditions.
- | High-precise brand ultrasonic sensors
- | Programmable temperature control and digital temperature indication
- | Digital and real time display of compressive strength, transit time, temperature and pressure
- | Data Acquisition System provided for PC based database of test results.
- | Date retained during power outages.
- | Rugged and compact electronics withstands lab environment and improves space saving
- | Pressure control maintained with high quality pressure relief valve and air-operated, high pressure pump

**Cement Strength Analyzer
Model-4265**

Specifications

- ☒ Max. curing temperature 204°C(400°F)
- ☒ Max. curing pressure 138MPa(20,000psi)
- ☒ Input voltage: 230+/-10%V, 50/60Hz
- ☒ Dimensions: 550x600x550 mm
- ☒ Net Weight: 56kg



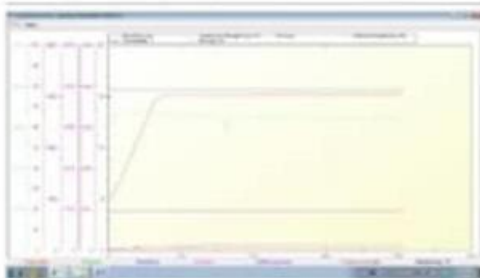
Features

- ☒ Non-destructive method determining relative compressive strength.
- ☒ A single sample is used to gather any desired number of data points for specific test conditions.
 - ☒ High-precise brand ultrasonic sensors
- ☒ Automatic temperature control and digital temperature indication
- ☒ Real time measurement and display of compressive strength, transit time, static gel strength, gel value, temperature and pressure
- ☒ Data Acquisition software produces real-time graphs of the test results.
 - ☒ Date retained during power outages.
- ☒ Rugged and compact electronics withstands lab environment and improves space saving
- ☒ Pressure control maintained with high quality pressure relief valve and air-operated, high pressure pump.
 - ☒ Heating /cooling jacket
 - ☒ Rupture disc protects system over-pressure
 - ☒ Meets API Spec and ISO 10426 requirements
 - ☒ Optional automatic outer pressure control



Specifications

- ☒ Max. curing temperature 204°C(400°F)
- ☒ Max. curing pressure 138MPa(20,000psi)
- ☒ Input voltage: 230+/-10%V, 50/60Hz
- ☒ Dimensions: 550x600x550 mm
- ☒ Net Weight: 56kg



Part Energy Group



Features

- Custom exterior paint and interior decoration
- 6 thermal insulation layers for floors, walls and roofs
- Stainless steel sink, custom worktable, cabinet and wall cabinet
- External door of thermal insulation and anti-theft cold storage, with fixed bolt lock and anti-theft device
- Personally select inspection instrument configuration and internal layout according to the test needs
- Reasonably configure water, electricity, gas pipelines and data acquisition lines as required
- Equipped with fire extinguishers, ventilation fans, emergency exits, air conditioners, air compressors, smoke alarms, lighting, switches and sockets of different powers, distribution boxes, etc

Specifications

- ⊠ Specification and size: 20 feet, 40 feet or non-standard customized
- ⊠ The main skid and upper lifting of the substructure can be moved in two ways, and the design safety factor is >3 .
- ⊠ Applicable ambient temperature: $-30^{\circ}\text{C} - 50^{\circ}\text{C}$.
- ⊠ Seismic capacity: above 10.
- ⊠ Wind and sand resistance: above 12.
- ⊠ Durable life: Level 2, more than 10 years.
- ⊠ Thermal insulation performance: K value is lower than $0.26\text{W}/\text{m}^2 \cdot \text{K}$.
- ⊠ Fire rating: 3.



FEATURES

- ✓ Can Test Multiple Scenarios of Gas Migration (Severe and Less Severe)
- ✓ Simple to Operate
- ✓ Graphical User Interface Software for Control of Experiment, Data Acquisition and Logging Results
- ✓ Unattended Operation of Test
- ✓ Designed to Ensure No Line Plugging and Easy Clean Up After Tests



Specifications

- Max. Temperature $325^{\circ}\text{F}/165^{\circ}\text{C}$
- Max. Pressures: 1000 psi / 6.9 MPa
- Pressure Measurement Accuracy: 0.2 % of Full Scale
- Pressure Measurement Resolution: 0.25 psi / 1.7 kPa
- Pressure Control Accuracy: $\pm 10 - 20$ psi / $70 - 140$ kPa
- Cement Temperature and Cabinet Temperature Measurement Accuracy: $\pm 0.5^{\circ}\text{C}$ Measurement Resolution: 0.1°C
- Oven Temperature Measurement Accuracy: $\pm 1^{\circ}\text{C}$ Measurement Resolution: 0.1°C Temperature Control Stability: $\pm 0.5^{\circ}$
- Gas Injection Flow Rate: 0 - 5 sccm of nitrogen
- Confining Flow Rate: 0 - 5 sccm of nitrogen

Part Energy Group



Features

- ▣ Integrated industrial touch screen control and PLC system
 - ▣ Multi-segment programmable Force.
 - ▣ Pressure rate control per API/ISO specifications.
- ▣ Highly accurate and precise compressive strength measurement
 - ▣ Safe to operate with high strength protective cage for sample.
- ▣ Easy digital display for recording compressive strength results in real time
 - ▣ Automatic and manual mode optional
- ▣ Allows the closed loop control of test force, the control of uniform test force
 - ▣ Real-time display of test force, peak values and test curves
- ▣ Multi-channel saving of parameter documents is used for a simulated representation of test process and reanalysis of test data.
- ▣ Total digital program-controlled amplifier allows automatic reset and shift operations with the aid of a computer.
- ▣ Multiple test curve display function and the overall process test data saving function ensure the reprocessing of test data

Compressive Strength Tester Model: TG-300B

Technical Specifications

- ▣ Max. test force: 300kN;
- ▣ Measurable range of test force: 18kN-300kN;
- ▣ Precision of test force indication: ±1%;
- ▣ Piston diameter: Φ125 mm;
- ▣ Piston stroke: 0 - 45mm;
- ▣ Max.travel speed of piston without load: 35mm/min
- ▣ Compression space: 0 - 80mm
- ▣ Dimensions: 697mm*775mm*1450mm
- ▣ Input power: 230±10% V, 50/60Hz



Features

- ▣ Fluid Loss Measurement Through Standard Screens or Core Samples
- ▣ Safer Approach—No Need to Transfer Hot Slurry
 - ▣ Quick Turnaround for Multiple Tests
 - ▣ Programmable temperature controller
 - ▣ Cooling jacket for cooling slurry cup
- ▣ Stainless Steel Pressure Vessel with heavy duty screw in end caps
 - ▣ Conforms to API RP 10
 - ▣ Simple to use filtrate cooling jacket
- ▣ Internal cooling coils for rapid between-test cooling.



Specifications

- ▣ Cylinder Regulator Pressure: 0 -14 MPa
- ▣ Filter Regulator Pressure: 0 -1.1MPa
- ▣ Programmable Temperature Controller: 0 -232°C
 - ▣ Input Voltage: 230+/-10%V
 - ▣ Heater Power: 700W
- ▣ Max. Pressure of Cooling water: 0.2-0.6MPa
- ▣ Max. Cylinder Pressure: 14MPa/2,000 psi
 - ▣ Slurry Volume: 275ml
 - ▣ Cylinder Volume: 500ml
 - ▣ Filter Press Cylinder Volume: 100ml
 - ▣ Paddle Rotational Speed: 150rpm
- ▣ Marked Measuring Cylinder Volume: 50ml
 - ▣ Size: 500x650x890mm
 - ▣ Weight: 64kg

A Critical Tool for Oil Well Drilling and Cementing
Fluid loss from oilfield muds and cement slurries to a permeable formation can significantly impact their performance or damage the formation. If a cement slurry loses too much fluid, its strength will be compromised and costly remedial well treatments may be needed. The Model 7120 Stirred Fluid Loss Cell measures the fluid loss properties of muds and slurries in accordance with API procedures.

Part Energy Group



Features

- Custom exterior paint and interior decoration
- 6 thermal insulation layers for floors, walls and roofs
- Stainless steel sink, custom worktable, cabinet and wall cabinet
- External door of thermal insulation and anti-theft cold storage, with fixed bolt lock and anti-theft device
- Personally select inspection instrument configuration and internal layout according to the test needs
- Reasonably configure water, electricity, gas pipelines and data acquisition lines as required
- Equipped with fire extinguishers, ventilation fans, emergency exits, air conditioners, air compressors, smoke alarms, lighting, switches and sockets of different powers, distribution boxes, etc

Specifications

- ☒ Specification and size: 20 feet, 40 feet or non-standard customized
- ☒ The main skid and upper lifting of the substructure can be moved in two ways, and the design safety factor is >3 .
- ☒ Applicable ambient temperature: $-30^{\circ}\text{C} - 50^{\circ}\text{C}$.
- ☒ Seismic capacity: above 10.
- ☒ Wind and sand resistance: above 12.
- ☒ Durable life: Level 2, more than 10 years.
- ☒ Thermal insulation performance: K value is lower than $0.26\text{W}/\text{m}^2 \cdot \text{k}$.
- ☒ Fire rating: 3.



FEATURES

- ✓ Can Test Multiple Scenarios of Gas Migration (Severe and Less Severe)
- ✓ Simple to Operate
- ✓ Graphical User Interface Software for Control of Experiment, Data Acquisition and Logging Results
- ✓ Unattended Operation of Test
- ✓ Designed to Ensure No Line Plugging and Easy Clean Up After Tests



Specifications

- Max. Temperature: $325^{\circ}\text{F}/165^{\circ}\text{C}$
- Max. Pressures: 1000 psi / 6.9 MPa
- Pressure Measurement Accuracy: 0.2 % of Full Scale
- Pressure Measurement Resolution: 0.25 psi / 1.7 kPa
- Pressure Control Accuracy: $\pm 10 - 20$ psi / $70 - 140$ kPa
- Cement Temperature and Cabinet Temperature Measurement Accuracy: $\pm 0.5^{\circ}\text{C}$ Measurement Resolution: 0.1°C
- Oven Temperature Measurement Accuracy: $\pm 1^{\circ}\text{C}$ Measurement Resolution: 0.1°C Temperature Control Stability: $\pm 0.5^{\circ}$
- Gas Injection Flow Rate: 0 - 5 sccm of nitrogen
- Confining Flow Rate: 0 - 5 sccm of nitrogen



Thickening and Static Gel Strength Analyzer Model-400RP

Specifications

- ⊞ Maximum operating pressure: 103MPa(15,000psi)
- ⊞ Maximum operating temperature: 204°C(400° F)
- ⊞ Input power: 2000W
- ⊞ Cement slurry thickening test/range: 0-100Bc.
- ⊞ HeaterPower: 1500W
- ⊞ Type Formed heater/cooling coil
- ⊞ Drive speed: 0-1000rpm (variable)
- ⊞ Input voltage: 230VAC (±10%),50-60 Hz
- ⊞ Dimensions: 38x67x38cm , net weight 260kg

Features

- Accurate gel strength test.
- Fast, automatic cooling after test.
- Easy cement ejection system for less cleanup.
- Compact bench-top design with access doors for easy serviceability.
- Pressure, temperature, consistency and gel strength displayed in real time.
- Programmable temperature controller
- Improved magnetic drive system is more robust and longer lasting.
- PC-based data acquisition system
- Combines thickening time and static gel strength testing into one compact, easy to use
- Adjustable audible alarms for consistency & gel strength.
- Over current sensing monitors and protects against shorts circuits.
- Rupture diac protects system overpressure.
- Proven results with unrivaled, direct static gel strength measurement.

400RP Thickening and Static Gel Strength Analyzer is the most precise analyzer, able to test cement slurries at temperature and pressure conditions, and designed to perform both thickening time and static gel strength test in accordance with API specification. The slurry cup assembly uses a rotating paddle and a stationary cylindrical cup assembly. A solid heating/cooling jacket surrounds the slurry cup where a sidewall thermocouple is used for determination of cement slurry temperature.

- #### Features
- ⊞ Automatic Temperature Program Control,digital display
 - ⊞ Multiple temperature control
 - ⊞ Automatic pressure limiting
 - ⊞ High wattage heater
 - ⊞ Metal-to-metal sealing ring
 - ⊞ Sturdy and durable , simple to operate
 - ⊞ Stainless steel enclosure
 - ⊞ Cooling jacket on pressure vessel
 - ⊞ Temperature uniformity in the vessel, ensure the sample uniformity
 - ⊞ Simple to operate, all operational controls are conveniently located on the front panel.
 - ⊞ Temperature and pressure are easily read on the panel gauges and digital indicators.
 - ⊞ Temperature controller may control the cooling rate at the end of the test in conjunction with the application of cooling water.
 - ⊞ Pressure is generated with an air-operated high-pressure pump, and control is maintained with a pressure relief valve.
 - ⊞ In Compliance with API Spec. 10A



HTHP Curing Chambers



Specifications

- Model TG-7370A TG-7370D TG-7370CA
- Maximum Temperature 600 °F (315°C)
- 428 °F(220°C)
- Maximum Pressure 5800PSI(40MPa)
- Number of Cubes 4/8 16 1
- Heater Power 4.5KW 9kw 2.5Kw
- Dimensions 62×66×144cm
- 122x60x144cm 50×42×50cm
- Input Voltage 230+/-10%V, 50/60Hz
- Weight 400Kg 780Kg 88kg



HTHP Fluid Loss Tester MMode-71/71B

Specifications:

Input voltage: 220V, 50Hz
 Heater power : 1000W
 Max. temperature: 500°F (260°C)
 Max. pressure: 1050psi (7.1MPa)
 Cell capacity: 175ml & 475ml
 Cell: grub screws, double capped

Features:

- Fluid loss measurement through standard screens
- Safer cell design with double threaded end caps
 - Dual ended cell
- Over temperature safety circuitry
 - Over pressure pop off valves
- Pressure source: N2 manifold



Features

- ☒ Control panel enables the user to monitor and control the instrument's pressure and temperature from a safe distance
- ☒ Pressurization system safely pressurizes and depressurizes the test cylinder.
- ☒ System includes user-adjustable upper and lower pressure set-points
 - ☒ Test cylinder's pressure is easily set.
- ☒ Pressure control gauge controls a pump and release valve to automatically maintain the preset pressure during operation



HTHP Corrosion Tester
TC-8120

Specifications

- ☒ Effective volume of reactor: 1000mL;
- ☒ Max.pressure: 60MPa/10000psi;
- ☒ Qty of hanging specimen: simultaneously 4 pieces;
- ☒ Max.Working temperature: 260°C/500oF, control temperature precision ±1°C;
- ☒ Rotation speed: 0 -1000 rpm, adjustable;
- ☒ Test solution: sulfuric acid, hydrochloric acid
 - ☒ Metal Specimen size: 50×10×3mm, or customized.
- ☒ Autoclave max. pressure: 32MPa
- ☒ Optional Hastelloy alloy 276 container: 500ml/20MPa

Speed Mixer MModel3062A



Specifications

- ☒ Constant speed: 4.000±200 rpm & 12.000±500 rpm
- ☒ Max.speed: 16000rpm
- ☒ Adjustable Speed Range: 300 rpm to 16.000 rpm
- ☒ Display: Speed is displayed directly in rpm
- ☒ Stainless steel container volume: 1 liter
- ☒ Compliance: API Spec. 10A
- ☒ Dimensions: 22x26x41cm
- ☒ Weight: 12kg

Features

- ☒ Push Button Simplicity
- ☒ Two pre-set speeds and a continuously adjustable speed function
- ☒ Automatically keeps constant shear rate during blending
- ☒ Long-life hardened mixing blade and stainless steel cup
- ☒ Built-in timer with automatic shut-down
- ☒ Rotational speed display
- ☒ Speed Selection: Preset speeds per API mixing procedures, along with user-adjustable, continuously-variable speed

TC-3062A is extremely simple to operate with three speed control selections. API specific speeds are preset and calibrated, and also has a continuously variable speed control function which is adjustable across the entire rpm range.

Features

- ☒ PLC Control and Touchscreen for operational simplicity
- ☒ Mixing speed is stably running, free from voltage and loading changes
- ☒ Hardened stainless steel blade for long life and stable performance
- ☒ Magnetic force drive, easy to fix stainless steel cup
- ☒ High torque motor for stable high speed and low noise
- ☒ Safety protection against overcurrent, overvoltage and overspeed
- ☒ Two preset speeds and a continuously adjustable speed function
- ☒ Stable motor base ensures reliability and operational safety
- ☒ Pre-set mixing speed and time, automatically run



Consistomer
model-3062D

Specifications

- ☒ Maximum Speed 16,000 rpm
- ☒ Constant Speed Selections 4.000±200 rpm & 12.000±500 rpm
- ☒ Adjustable Speed Range 300 rpm to 16.000 rpm
- ☒ Speed Display Speed is displayed directly in RPM
- ☒ Slurry Cup Volume(s) 1 Liter
- ☒ Power Supply 230+/-10%V AC, 50/60Hz
- ☒ Dimensions (W×D×H) 280×140×380 mm
- ☒ Net Weight 12kg

Model TC-3062D Constant Speed Mixer is creative patented instrument powered by Magnetic drive, specially designed to mix cement slurry in accordance with API Specification 10. TC-3062D is equipped with high speed DC motor with low noise and high torque. TC-3062D has PLC controller, is operated and displayed via touch screen, premium performance and is easy maintenance.

Part Energy Group



Features

- The readout indicators for the viscosity, pressure, and temperature, as well as operational instructions, are easily read from color touch-screen
- Pressure generated via an air-driven hydraulic pump
- Slurry cup table is rotated with a magnetic drive
 - Vertical magnetic drive, easy maintenance
- External cooling jacket aids cooling of test cell
 - Custom consistency alarm set
- Servo motor is adopted, and the speed control is accurate
 - Deadweight calibration unit included
 - Safety head with rupture disk are provided
- Fully capable of testing cements in strict accordance to API spec.

Consistomer Model-7728

Specifications

- Maximum Pressure: 19,900 PSI (137 MPa)
- Maximum Temperature: 400°F (204.4°C)
 - Internal Heater: 4,000 Watt
- Rotational Speed of Slurry Cup: 150 +/-1RPM
 - Voltage: 230 +/-10% Volt, 50/60 Hz
 - Size: 67x37x66 cm
- Net Weight: Approx. 200lb (90kg)



Features

- ☒ Programmable Temperature Controller, to increase accuracy and reproducibility
- ☒ Process temperature is displayed digitally, for easy reading
- ☒ Dual container design so that two slurries can be conditioned at one time
- ☒ Stainless steel temperature bath resists corrosion, ensuring long life
- ☒ Digital Timer, custom alarm set
- ☒ Over-heat protection function
- ☒ Meets API Spec 10A and ISO 10426

- TG-1220**
1. Temperature set, digital display
 2. Temperature and time alarm:
 3. Size: 40x43x65cm, net weight: 25kg



Consistomer model-1220

Specifications

- ☒ Max. Pressure: Atmospheric
- ☒ Max. Temperature: 93 °C/200°F
 - ☒ Heater: 2,500 watts
- ☒ Slurry Cup Rotational Speed: 150 rpm
 - ☒ Slurry Cup volume: 470mL
- ☒ Temperature Control: PID controller
- ☒ Temperature Bath Material: Stainless Steel
 - ☒ Display: Digital
- ☒ Input power: 230 +/-10% VAC, 50/60Hz