# Water and Sediment Determination by Automatic Centrifuge

#### test method

Centrifugation provides a convenient means of determining sediment and water content in crude oil, fuel oils, middle distillate fuels, and biodiesel. Also used in determining the precipitation number, demulsibility characteristics, trace sediments, and insolubles in used lubricating oils.

### automatic heated oil test centrifuge

- Choice of long, short, pear, or finger rotor assembly to accommodate corresponding centrifuge tubes
- Accommodates four (4) centrifuge tubes of 6 or 8" conical ASTM types, long, short, pear or finger tubes
- Automatic control of acceleration ramp, centrifugation speed, and timing functions.
- 41/2" LCD Touch Screen Control Panel
- Substantial Insulation for Reduced Heat Loss
- Precise balancing, Quiet Operation
- Large, clear, top opening lid
- Class 1, Division 2 explosion resistant rating

Fully automatic bench top centrifuge designed expressly for petroleum testing applications. Features a 41/2" LCD touch screen control panel. This integrated touch screen can be used to turn the heat on and off, set the duration of the test, set the RCF/RPM values and choose the type of rotor assembly and corresponding glassware to be used during the test. The motor speed mechanism allows the user to simply set the desired speed and the instrument will attain that speed. This mechanism calculates RPM based on the given RCF and type of Rotor selected. The large, clear, top opening lid provides for easy access to the rotor and tube holders and for cleaning of the unit. The lid has a 181/2" diameter viewing window allowing the operator to view inside the chamber for checking the status of the rotor and checking for possible spillage of the centrifuge tubes. Molded PTFE cushions provide for maximum protection and easy positioning of the tubes.

Safety Features - The Centrifuge comes equipped with a Safety Lockout Mechanism. Upon emergency shutdown the door is locked and cannot be unlocked until the unit comes to a complete stop, the unit is turned back on, and the stop/unlock key is pressed on the touch screen display. Furthermore, the centrifuge cannot start while the door of the chamber is open and the latch is not engaged. The "Nitrogen Purge" feature allows for a slow release of Nitrogen into the bowl of the centrifuge. This feature requires an external Nitrogen Gas source and can easily connect to an Inlet port located at the back of the unit.

# specifications

Conforms to the specifications of:

ASTM D91, D96, D893, D1796, D1966, D2273, D2709, D2711, D4007, D5546; IP 75, 145, 359; API MPMS Chapter 10.4, API 2542, 2548; ISO 3734; DIN 51793; NF M 07-020

Capacity: Four (4) oil test centrifuge tubes: long (100mL), short (100mL),

pear (100mL), or finger tubes (12.5mL)

Maximum Speed: 2200 RPM

Maximum RCF: 1327 (long); 1170 (short); 865 (pear-shaped)

Timer: 0 to 999 min

Set Speed: 200 - 2200 RPM Speed Readout: 0 - 2200 RPM

Temperature Control: ambient to 93°C (200°F)

Temperature Readout: Digital Brake: Automatic Dynamic

Electrical Requirements 115V 60Hz, 10A 230V 50/60Hz, 5A

Dimensions Ixwxh,in.(cm) 23x30x131/2 (51x76x34) Net Weight: 93 lbs (42 kg) K60002-FT-1 Rotor Assembly for Finger Tubes Shipping Information Shipping Weight: 110 lbs (50 kg) Dimensions: 11.2 Cu. ft. K61141



# ordering information

catalog no. description

Automatic Heated Oil Test Centrifuge, 115V 60Hz K60002

with Long Tube Rotor Assembly

K60092 Automatic Heated Oil Test Centrifuge, 230V 50/60Hz

with Long Tube Rotor Assembly

K60002-ST Automatic Heated Oil Test Centrifuge, 115V 60Hz.

Short Tube Rotor Assembly

K60092-ST Automatic Heated Oil Test Centrifuge, 230V 50/60Hz

with Short Tube Rotor Assembly

K60002-PT Automatic Heated Oil Test Centrifuge, 115V 60Hz

Pear Tube Rotor Assembly

K60092-PT Automatic Heated Oil Test Centrifuge, 230V 50/60Hz

with Pear Tube Rotor Assembly

K60002-FT Automatic Heated Oil Test Centrifuge, 115V 60Hz

Finger Tube Rotor Assembly

K60092-FT Automatic Heated Oil Test Centrifuge, 230V 50/60Hz

with Finger Tube Rotor Assembly

#### accessories

K60002-LT-1 Rotor Assembly for Long Tubes

K61101 Centrifuge Tube, Long, 100mL, 8", marked in mL

(ASTM D91, D96, D893, D1796, D4007)

K61106 Centrifuge Tube, Long, 100mL, 8", marked in 200 parts (ASTM D96)

K61110 Centrifuge Tube, Long, 100mL, 8", marked in mL every

1mL above 10mi (ASTM D96, D4007)

K61112 Centrifuge Tube, Long, 100mL, 8", marked in 200 parts

every 2 parts above 20 parts (ASTM D96)

K61109 Centrifuge Tube, Cone-Shaped, 100mL with capillary tip capable

of measuring 0.01 mL and readable by estimation to 0.005% (ASTM D2273, D2709) (K61153 cushion required for each tube)

PTFE cushion for Long Tubes w/capillary tip K61153

(Req. for K61109 tubes)

K60002-ST-1 Rotor Assembly for Short Tubes

K61102 Centrifuge Tube, Short, 100mL, 6", marked in 200 parts

every 4 parts above 20mL (ASTM D96)

K61105 Centrifuge Tube, Short, 100mL, 6", marked in mL (ASTM D96)

K61107 Centrifuge Tube, Short, 100mL, 6", marked in mL every

2mL above 10mL (ASTM D96)

Centrifuge Tube, Short, 100mL, 6", marked in 200 parts (ASTM D96) K61108

K60002-PT-1 Rotor Assembly for Pear Tubes

K61104 Centrifuge Tube, Pear, 100mL, marked in mL (ASTM D1966) K61152 Centrifuge Tube, Pear, 100mL, with tube tip having graduations

of 0.01mL over the range 0 to 0.2mL (ASTM D2709)

Cork Stopper for Centrifuge Tubes

Centrifuge Tube, Finger Tube (API 2542)

