Lubricity Tester

Brand: OFI Testing Equipment, Inc.
Product Code: 112-00
Availability: Call for availability

Description
The EP and Lubricity tester from OFITE is a high-quality instrument used to measure the lubricating quality of drilling fluids, provide data to evaluate the type and quantity of lubricating additives that may be required, and predict wear rates of mechanical parts in known fluid systems.

EP (Extreme Pressure Test)

This test produces an indication of the film strength of the fluid being tested by applying a measured force to a torque-sensitive bearing cup with the torque arm. The EP test is typically run at a high shear rate, 1,000 RPM, with fluid pressures ranging from 5,000 to 100,000 PSI between the steel surfaces.

Lubricity (Surface to Surface Drag Test)

The more common lubricity test measures fluid resistance of various lubricating additives. For the standard lubricity coefficient test, 150 in-pounds of force (the equivalent of 5,000 to 10,000 PSI pressure on the intermediate fluid) is applied between two hardened steel surfaces, a block, and a ring rotating at 60 RPM.

Features

- Digital Control - The digital control board provides more accurate data than older, analog methods.
- Automatic Speed Control - The motor automatically increases torque to

maintain a constant speed when force is applied to the ring and block. Manual speed adjustments are unnecessary.
- User-Friendly Interface - The simple, intuitive interface makes testing quick and easy. Functions include pre-set speeds (60, 200, 600, and 1000 RPM), manual speed control, and torque zeroing.
- Optional software* records torque reading and temperature with respect to time.
- Maximum Speed - 1,000 RPM
- Maximum Torque - 600 inch-pounds

Specifications

- Belt-Driven Motor: ½ horsepower, 90 Volt DC, 5.5 Amps
- Maximum 600 inch-pounds of torque
- Shear rate: 1,000 RPM Maximum
- Fluid Pressure Range: 5,000 to 10,000 PSI (34,500-69,000 kPa)
- Size: 19" × 15" × 14" (48.3 × 38.1 × 35.6 cm)
- Weight: 56 lb. (25.4 kg)
- Crated Size: 22" × 20" × 21" (56 × 51 × 53 cm)
- Crated Weight: 95 lb. (43 kg)
- Power Requirement: 115 / 230 VAC, 50/60 Hz

Components

- #121-016: Fuse, 7 Amp, 1/4" × 1 1/4"
- #111-02-01: Test Ring for Lubricity Test
- #111-04-01: Test Block for EP Test
- #111-06-01: Test Ring for EP Test
- #111-08-01: Test Block for Lubricity Test
- #111-09: Sample Cup
- #111-10: Torque Wrench
- #111-16: Service Wrench, 3/4"
- #111-17: Service Wrench, 1 1/4"
- #111-18: Combination Wrench, 15/16"
- #111-19: Grinding Compound, Fine and Coarse, 2 oz each

Optional

- #111-00-SP: Spare Parts Kit
- #111-01: Padded Transport Case
- #111-11: Measuring Magnifier with Inch Scale, 7×

- #111-13: Grinding Compound, Silicon Carbide, Abrasive Paste, Grit 280, Fine, 16 oz can
- #111-14: Grinding Compound, Silicon Carbide, Abrasive Paste , Grit 120, Coarse, 16 oz can
- #112-50: Heat Cup
- #152-59: Ultrasonic Cleaner
- #153-95: Disposable Latex gloves
- #206-06: Deionized Water 1 gal (3.785 L)
- #280-31: Acetone UN1090 (UN1090), 16 oz (500 mL)

Part Numbers

- #112-00: 115 Volt
- #112-00-1: 230 Volt
- #112-00-T: With Thermocouple and Data Acquisition, 115 Volt
- #112-00-T: With Thermocouple and Data Acquisition, 230 Volt
- #112-00-C: With Thermocouple, Heat Cup, Ultrasonic Cleaner, Data Acquisition, and Carrying Case, 115 Volt
- #112-00-1-C: With Thermocouple, Heat Cup, Ultrasonic Cleaner, Data Acquisition, and Carrying Case, 230 Volt

[*]*Software available on #112-00-T, #112-00-1-T, #112-00-C, and #112-00-1-C only.*