

Rust Preventing Characteristics

Rust Preventing Characteristics of Inhibited Mineral Oil in the Presence of Water (Standard and Horizontal Disc Methods)

test method

Determines a lubricant's ability to prevent rusting of metal surfaces. Suitable for steam turbine oils, gear oils, hydraulic oils and other types of inhibited mineral oils. A steel test specimen is immersed in a heated mixture of sample oil and water which is stirred continuously during the test. After the test period the specimen is examined for rusting. The standard (ASTM D665) method uses a vertical specimen; the 'horizontal disc method' (ASTM D3603) uses both horizontal and vertical test surfaces.

rust preventing characteristics oil bath

- Conforms to ASTM D665, D3603 and NACE TM-01-72* specifications
- Accommodates six sample beakers
- Microprocessor programmable high accuracy temperature control

Constant temperature bath with stirrers for rust preventing characteristics tests. Stirs sample-water mixtures at 1000rpm and controls temperature with $\pm 0.5^{\circ}\text{C}$ ($\pm 1^{\circ}\text{F}$) stability. Immerses test beakers at the proper depth per ASTM specifications.

Microprocessor PID control provides quick temperature stabilization without overshoot, and the bath is protected by an overtemperature control circuit that interrupts power should bath temperature exceed a programmed cut-off point. Dual LED displays provide actual and setpoint temperature values in $^{\circ}\text{C}/^{\circ}\text{F}$ format. Communications software (RS232, etc.), ramp-to-set and other enhanced features are available as extra cost options. Contact your Koehler representative for information.

Stainless steel stirrer paddles are driven by a ball bearing type motor through an improved pulley drive-roller bearing arrangement. Paddles can be raised and lowered for placement of sample beakers in the bath. Includes test specimens, holders and beaker covers for ASTM D665 or D3603 testing (see specifications and ordering information). Stainless steel bath includes perforated support shelf for beakers and two-position cover plate that adjusts for either ASTM D665 or D3603 testing. Long-lasting polyester drive belt improves reliability. Drive train components are protected by a removable steel guard. All exterior surfaces have stainless steel or chemical resistant polyurethane enamel finishes.

ordering information

catalog no. description

Rust Preventing Characteristics Oil Bath

For ASTM D665

- K30160** Rust Preventing Characteristics Oil Bath, 115V 60Hz
K30165 Rust Preventing Characteristics Oil Bath, 220-240V 50Hz
K30166 Rust Preventing Characteristics Oil Bath, 220-240V 60Hz

For ASTM D3603

- K30161** Rust Preventing Characteristics Oil Bath, 115V 60Hz
K30167 Rust Preventing Characteristics Oil Bath, 220-240V 50Hz
K30168 Rust Preventing Characteristics Oil Bath, 220-240V 60Hz



K30160 Rust Preventing Characteristics Bath

specifications

Conforms to the specifications of:

ASTM D665, D3603, D6158; NACE TM-01-72*; IP 135; ISO 7120; DIN 51355**, DIN 51585; FTM 791-4011, 791-5315**; NF T 60-151

Testing Capacity: Six (6) 400mL sample beakers

Maximum Temperature: 104°C (220°F)

Temperature Control Stability: $\pm 0.5^{\circ}\text{C}$ ($\pm 1^{\circ}\text{F}$)

Drive Motor: 1/12hp induction motor

Bath Medium: 11 gal (41.6L) white technical oil

Electrical Requirements:

115V 60Hz, Single Phase, 13.0A

220-240V 50 or 60Hz, Single Phase, 6.8A

Included Accessories

ASTM D665 Models (K30160, K30165, K30166)

Steel Test Specimens (6)

Type 2 Plastic Specimen Holders (6)

Plastic Beaker Covers (6)

ASTM D3603 Models (K30161, K30167, K30168)

Horizontal Disc Test Assembly (6) consisting of:

plastic beaker cover

horizontal test specimen

vertical test specimen

fluorocarbon washer

plastic cap

stainless steel support rods and hardware

Dimensions lwxhxh,in.(cm)

32.75x14.25x27 (83x36x69)

Net Weight: 79 lbs (35.8kg)

Shipping Information

Shipping Weight: 150 lbs (68kg)

Dimensions: 16.2 Cu. ft.

**Accessories for these test methods are available upon request.

Rust Preventing Characteristics



K30800 Horizontal Disk Assembly



K30101 Specimen with Holder



K30130 Chuck

accessories

catalog no.	description	
332-002-006	Test Beaker, 400mL for ASTM D665 & D3603	6
250-000-09F	ASTM 9F Thermometer Range: 20 to 230°F	7
250-000-09C	ASTM 9C Thermometer Range: -5 to +110°C	
K30130	Chuck for polishing test specimens Includes locknut and shaft for mounting on accessory drive motor.	1
K30150	Drive Motor Drives K30130 Chuck. Mounted on base. 115V 60Hz	1
K30180	Drive Motor Similar to K30150 but for operation on 220-240V 50Hz	
380-150-002	Aluminum Oxide Cloth, 150-grit for preliminary grinding of test specimens. Pack of 50	
380-240-002	Aluminum Oxide Cloth, 240-grit for final polishing of test specimens. Pack of 50	
K30140	Auxiliary Stirrer Blade - Attaches to stirrer shaft - for testing heavier than water samples - ASTM D665. Procedure C.	

test specimens

catalog no.	description
K30110	Steel Test Specimen for ASTM D665 Machined to ASTM specifications. Without Holder
K30100	Test Specimen with Type 2 Plastic Holder for ASTM D665
K30119	Test Specimen with Type 1 Plastic Holder for ASTM D665
K30101	Test Specimen with Type 2 PTFE Holder
K30810	Horizontal Test Specimen for ASTM D3603
K30820	Vertical Test Specimen for ASTM D3603
K30800	Horizontal Disc Rust Test Assembly for ASTM D3603. Includes polycarbonate beaker cover, two stainless steel support rods, disc carrier and one each horizontal and vertical test specimens.