

Corrosion of Lead by Lubricating Oils

test method

Measures the corrosiveness of lubricating oils to lead in the presence of a copper catalyst. Lead and copper test panels are rotated in the test lubricant under specified test conditions, and the degree of corrosion is determined by the change in weight of the lead panel.

lead corrosion test apparatus

- Conforms to FTM 791-5321 specifications
- Six-sample capacity
- Microprocessor programmable high accuracy temperature control

Constant temperature apparatus rotates copper and lead test panels in lubricant samples to determine corrosiveness to lead per FTM specifications. Panels are rotated at 600rpm in samples maintained at 163°C (325°F) and aerated at 0.94L/min. (2.0 Cu. ft./hr.).

Test panel shafts ride on ball bearing spindles driven by a 1/15hp motor. A counterbalanced support bar positions the drive shaft for testing or for mounting and removal of test panels. When the support bar is raised, a safety microswitch automatically stops the drive motor to prevent splashing of hot oil.

Fully insulated bath features double-wall stainless steel construction, with a built-in support rack to suspend test cells vertically at the proper depth. 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 °C/°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. A 1/20hp stirrer thoroughly circulates the bath medium for temperature uniformity. Redundant overtemperature protection is provided by a built-in backup thermostat. Flowmeters and valves mounted on a convenient manifold provide individual air flow control for each test cell.

ordering information

catalog no.	description	
K29900	Lead Corrosion Apparatus 220-240V 60Hz	1
K29990	Lead Corrosion Apparatus. 220-240V 50Hz	

accessories

K29910	Borosilicate Glass Sample Tube	6
250-000-16F	ASTM 16F Thermometer Range: 85 to 392°F	1
250-000-16C	ASTM 16C Thermometer Range: 30 to 200°C	
K29920	Lead Test Panels	
K29930	Copper Test Panels	



K29900 Lead Corrosion Apparatus

specifications

Conforms to the specifications of:

FTM 791-5321

Testing Capacity: 6 lubricant samples

Maximum Temperature: 199°C (390°F)

Temperature Control Stability: $\pm 0.05^{\circ}\text{C}$ ($\pm 0.1^{\circ}\text{F}$)

Air Flow Control: $0.94 \pm 0.047\text{L/min}$.

(2 ± 0.1 Cu. ft./hr) six (6) flowmeters

mounted on a common manifold

Electrical Requirements

220-240V 60Hz, Single Phase, 14.5A

220-240V 50Hz, Single Phase, 14.5A

Included Accessories

Copper Test Panels (6)

Lead Test Panels (6)

Mounting Hardware for Panels

Dimensions l x w x h, in.(cm)

39x25x47 (99x64x119)

Net Weight: 214 lbs (97kg)

Shipping Information

Shipping Weight: 330 lbs (150kg)

Dimensions: 33.5 Cu. ft.