

Corrosiveness and Oxidation Stability

Corrosiveness and Oxidation Stability of Hydraulic Oils, Aircraft Turbine Engine Lubricants, and Other Highly Refined Oils

test method

Evaluates the ability of a lubricant to resist oxidation and the formation of corrosive acid compounds by subjecting a sample to accelerated oxidation conditions in a catalytic environment. The sample is maintained at elevated temperature and subjected to a controlled air flow while in the presence of a series of test specimens made of metals commonly found in actual service conditions.

corrosiveness and oxidation stability test apparatus

- Models for ASTM, Federal and IHC test methods
- Six-sample testing capability
- Solid aluminum block design
- Microprocessor temperature control with digital display and overtemperature protection

Constant temperature block baths for corrosivity and oxidation stability determinations on hydraulic oils, aircraft turbine lubricants, transmission fluids and other highly refined oils. Insulated aluminum block provides safe, efficient performance at operating temperatures of up to 750°F (399°C). Microprocessor temperature control has °C/°F switchable digital setpoint and display. Operator and equipment are protected by an overtemperature control circuit which automatically interrupts power to the unit should block temperature exceed a programmed cut-off point. Communications software (RS232, etc.), ramp-to-set and other enhanced features are available as extra cost options. Contact your Koehler representative for information. Air flow is controlled at the specified rate by six individually adjustable flowmeters mounted on a common manifold. Includes inlet valve and outlet fitting for condenser water supply and support rack for glassware.

ordering information

catalog no.	description
K35100	ASTM D4636, D5968 and FTM 791-5307 Model, 220-240V 50/60Hz
K35000	FTM 791-5308 Model, 220-240V 50/60Hz
K35300	IHC BT-10 Model, 220-240V 50/60Hz

accessories

250-000-08F	ASTM 8F Thermometer Range: 30 to 760°F
250-000-08C	ASTM 8C Thermometer Range: -2 to +400°C



K35100 FTM 791-5307 Model
with accessory glassware

specifications

Conforms to the specifications of:

ASTM D4636, D5968, D6594; FTM 791-5307, 791-5308;
IHC BT-10; DIN 51394

Capacity: 6 test cells

Temperature Range: 125 to 750°F (51.7 to 399°C)

Temperature Control Stability: 1°F (0.5°C)

Air Flow Rate: ASTM D4636/FTM 791-5307: 10L/h

FTM 791-5308: 3L/h and 5L/h (dual range flowmeters)

IHC BT-10: 3L/h (50mL/min.)

Electrical Requirements

220-240V 50/60Hz,
Single Phase, 15.9A

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

32 1/2 x 14 1/2 x 41 1/2 (83 x 37 x 105)

Net Weight: 271 lbs (122.9kg)

Shipping Information

Shipping Weight: 375 lbs (170.1kg)

Dimensions: 18.5 Cu. ft.

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Glassware, Test Specimens and Accessories

catalog no.	description	qty
ASTM D4636, D5968, D6594 and FTM 791-5307		
K351-0-1	Sample Tube	6
K351-0-2	Sample Tube Head	6
K351-0-3	Air Tube	6
K351-0-4	Thermocouple Tube	6
K351-0-5	Condenser, Allihn Type	6
K351-0-6	Oil Sampling Tube (for D4636)	6
K351-0-7	Spacer	36
K351-0-8	PTFE Adapter	6
K351-0-13	Oil Sampling Tube (for D5968 and FTM 791-5307)	
K351-0-14	Specimen Hanger (for D6594)	
K293-0-12	Thermocouple, Type J	6
K29319	Digital Thermometer, 220-240V Microprocessor based digital thermocouple thermometer with ten-channel input. Monitors Type J thermocouples from sample tubes.	1
K35090	Test Panel Assembly Fixture Holds square-shaped metal specimens for tying with cord (for ASTM D4636 Alternate Procedure and FTM 791-5308)	1
K35095	Test Panel Assembly Fixture Holds square-shaped metal specimens for tying with cord (for ASTM D5968)	1
FTM 791-5308		
K350-0-23	Test Tube	6
K350-0-24	Air Tube	6
K350-0-25	Condenser	6
K35090	Test Panel Assembly Fixture Holds square-shaped metal specimens for tying with cord.	1
IHC BT-10		
K353-0-1	Test Cell	6
K353-0-2	Condenser	6
K353-0-3	Air Tube	6
K353-0-4	Ring Rod	6

ordering information

Metal Test Specimens

catalog no.	description	qty
Washer Shaped Specimens for ASTM D4636 Standard Procedure and for FTM 791-5307		
K35110	Bronze	6
K35120	Mild Steel	6
K35130	Aluminum Alloy	6
K35140	Magnesium	6
K35150	Steel M50	6
K35160	Silver	6
K35170	Titanium	6
Square Shaped Specimens for ASTM D4636 Alternate Procedure and for FTM 791-5308		
K35010	Copper	6
K35020	Mild Carbon Steel	6
K35030	Aluminum Alloy	6
K35040	Magnesium Alloy	6
K35050	Cadmium Plated Steel	6
K35060	Silver	6
K35070	Solid Cadmium (non standard)	6
K35080	Titanium (non standard)	6
Square Shaped Specimens for ASTM D5968 and D6594		
K35010	Copper	6
K35011	Lead	6
K35012	Tin	6
K35013	Phosphor Bronze	6
Rectangular Shaped Specimens for IHC BT-10		
K353-0-5	Aluminum	6
K353-0-6	Copper	6
K353-0-7	Steel	6
K353-0-8	Brass	6
Polishing Materials		
380-150-001	Silicone Carbide Paper, 150-grit, Pack of 50 sheets	1
380-240-001	Silicone Carbide Paper, 240-grit, Pack of 50 sheets	1
380-150-000	Silicone Carbide Grain, 150-grit, 1 lb package	1