

EVAPORATION LOSS OF LUBRICATING GREASES AND OILS



K29500 Evaporation Test Cell with Grease Cup

Specifications

Conforms to the specifications of:

ASTM D972, D2878; IP 183; FTM 791-351

Capacity: 2 oil or grease samples

Maximum Temperature: 350°F (177°C)

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

Circulation: $\frac{1}{2}$ hp stainless steel impeller

Bath Medium: 5.3 gal (20L) high temperature transfer fluid

Electrical Requirements:

115V 60Hz, Single Phase, 8.6A

220-240V 50/60Hz, Single Phase, 4.5A

Included Accessories

Support Clamps (2)

Thermometer Holder

Dimensions

33w" x 25½"h (84x65cm)

Maximum width with two evaporation cells inserted

Net Weight: 62 lbs (28.1kg)

Shipping Information

Shipping Weight: 90 lbs (40.8kg)

Dimensions: 14.2 Cu. ft.

For NIST traceable certified thermometers, please refer to the ASTM Thermometer section on pages 184 through 191.

Test Method

Evaluates the potential for evaporation loss of lubricant components in high temperature service. A controlled flow of heated air is passed over the sample for a specified period. Evaporation loss is measured by the change in sample weight during the test. The Evaporation Loss test can also be used for Estimating Apparent Vapor Pressures and Molecular Weights of Lubricating Oils (ASTM D2878). A high temperature version of the Evaporation Loss test is available (See ASTM D2595).

Evaporation Loss Tester

- Conforms to ASTM D972, D2878 and related specifications
- Two-sample testing capability

Evaporation Cell—Suitable for evaporation loss tests on lubricating greases and oils in the temperature range of 210 to 300°F (99 to 149°C). Passes heated air over the sample at the required flow rate. Consists of stainless steel body, cover, eduction tube and hood. Calibrated flowmeter with needle valve maintains 2L/min. air flow at standard temperature and pressure. Supplied with stainless steel grease or oil sample cup. Sample cups are interchangeable. Entire assembly mounts in Evaporation Loss Test Bath.

Evaporation Loss Test Bath—Constant temperature oil bath mounts two Evaporation Cells in an upright position at the proper immersion level. Maintains test temperature within $\pm 1^\circ\text{F}$ ($\pm 0.5^\circ\text{C}$). 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. Fully insulated, double-wall construction, with stainless steel tank and polyurethane-finished steel exterior.

*Also available—special bath to accommodate both ASTM D972 and D942 (Oxidation Stability of Greases on page 152) test methods. Please contact Koehler for additional information.

Ordering Information

Catalog No.		Order Qty
K29400	Evaporation Loss Test Bath, 115V 60Hz	1
K29490	Evaporation Loss Test Bath, 220-240V 50/60Hz	
K29500	Evaporation Test Cell with Grease Cup	2
K29550	Evaporation Test Cell with Oil Cup	

Accessories

250-000-22F	ASTM 22F Thermometer Range: 204 to 218°F
250-000-22C	ASTM 22C Thermometer Range: 95 to 103°C
250-000-67F	ASTM 67F Thermometer Range: 203 to 311°F
250-000-67C	ASTM 67C Thermometer Range: 95 to 155°C
K29530	Oil Sample Cup with Hood
K29540	Grease Sample Cup with Hood