Ductility and Elastic Recovery of Bituminous Materials

K80060 Constant Temperature Ductility Machine with Circulator

Test Method

Determines the ductility of a bituminous material by measuring the distancein which a sample will elongate before breaking when two ends of a briquetspecimen of the test material are pulled apart at a specified speed and temperature. Elastic Recovery is determined by pulling the briquet specimen to a specified distance at a specified speed and temperature. The briquet is then cut and the distance in which it takes for the two halves to reconnect is used to determine the elastic recovery of the test sample.

Semi-Automatic Ductility Testing Machine

- Conforms to ASTM D113, D6084 and related specifications
- Standard and Constant Temperature Models available
- Capable of testing up to 3 samples simultaneously
- 6" LCD Touch Screen Control Panel
- Pre-programmed with Ductility, Recovery, and Custom test methods
- Maximum travel length of 150 cm
- Variable traction speed from 0.25 to 7.0 cm/min
- Constant Temperature model equipped with Lexan Cover for enhanced temperature stability

Semi-Automatic Ductility Testing Machine designed explicitly for testing the ductility and elastic recovery of bituminous materials. Features a 6" LCD touch screen control panel. This integrated touch screen allows the user to choose between the ductility or recovery test methods. The custom menu allows for the input of desired speed and time parameters. During testing, the distance traveled by the specimen is displayed and a simple touch of the screen can record the distance traveled upon breakage of the briquet. A motor jogging feature permits locking of the sample carriage without additional movement after briquet sample is loaded into the machine.

Specifications

Conforms to the specifications of:
ASTM D113, D5892, D6084, P226; IP 32, 516; DIN 52013, EN 13398; NF T 66-006; AASHTO T 51, T 301; JIS K2207; ANS A37.11; Federal Specification SS-R-406C; USDA Method 5 (BUL 12-16)
Capacity: 3 molds with samples
Maximum Travel Length: 150 cm
Standard Traction Speed: 5 cm/min
Variable Traction Speed: 0.25 to 7.0 cm/min
Timer: 1-999 min

Included Accessories

Standard Model:
Standard Mold (3)
Base Plate

Constant Temperature Model:
Circulation Bath
Remote Temp. Probe, 10 ft. length
Connection Tubing
Standard Mold (3)
Base Plate
Lexan Cover

Dimensions lxwxh,in.(cm)

Standard Model:
86¼x19x16 (219.1 x 48.3 x 40.6)
Net Weight: 200 lbs (91.7kg)

Constant Temperature Model:
86¼x19x16 (219.1 x 48.3 x 40.6)
Net Weight: 217 lbs (98.5 kg)

Circulation Bath:
15¾x8¼x22½ (219.1 x 48.3 x 40.6)
Net Weight: 50 lbs (22.7 kg)

Electrical Requirements CE

115V 60Hz
220-240V 50Hz
220-240V 60Hz

Shipping Information

Standard Model:
Shipping Weight: 350 lbs (159kg)
Dimensions: 92¾x 25¼x 23¼" (235.6 x 64.1 x 59.1cm)
Constant Temperature Model:
Shipping Weight: 368 lbs (167kg)
Dimensions: 92¾x 25¼x 23¼" (235.6 x 64.1 x 59.1cm)
Circulation Bath:
Shipping Weight: 74 lbs (34kg)
Dimensions: 22 x 10½ x 26½" (55.9 x 26.7 x 67.3 cm)

For NIST traceable certified thermometers, please refer to the ASTM Thermometer section on pages 180 through 187.

Ordering Information

Catalog No.	
K80050	Semi-Automatic Standard Ductility Testing Machine, 115V/220-240V 50/60Hz
K80060	Semi-Automatic Constant Temperature Ductility Testing Machine, 115V 60Hz
K80068	Semi-Automatic Constant Temperature Ductility Testing Machine, 220-240V 60Hz
K80069	Semi-Automatic Constant Temperature Ductility Testing Machine, 220-240V 50Hz

Accessories

K80012	Standard Mold
K80041	Recovery Mold
K80013	Base Plate
250-000-63F	ASTM 63F Thermometer, Range: 18 to 89°F
250-000-63C	ASTM 63C Thermometer, Range: -8 to 32°C
K80050-SFW	Semi-Automatic Ductility Software

Get it from your authorized distributor: www.labequip.com Labequip ask@labequip.com