SOFTENING POINT OF BITUMEN (RING-AND-BALL APPARATUS)

Test Method

The sample is cast in shouldered rings and heated at a controlled rate under the weight of a steel ball. The softening point is the temperature at which the bitumen disks soften and sag downward a specified distance.

Softening Point Apparatus

· Conforms to ASTM D36 and related specifications

Consists of 800mL beaker, 2 standard balls, shouldered rings, ball centering guides, ring holder, bottom plate and beaker cover with support rods. Order thermometer and heater separately.



Ordering Information		
Catalog No.	Order Qty	
K80000	Softening Point Apparatus1	
	Accessories	
K42000	Powertrol Heater	
	1000W heater with variable stepless control and porcelain	1
	refractory top plate with positioning well for beaker.	
	Enclosed in a stainless steel housing with cooling vents,	
K40000	Shipping Weight: 8 lbs, 14 oz (3.6kg). 115V 60Hz	
K42090	Powertrol Heater, 220-240V 50/60Hz 1 ASTM 15F Thermometer	
250-000-15F	Range: 30 to 180°F	
250-000-15C	ASTM 15C Thermometer	
200 000 100	Range: -2 to $+80^{\circ}$ C 1	
250-000-16F	ASTM 16F Thermometer	
	Range: 85 to 392°F	
250-000-16C	ASTM 16C Thermometer	
	Range: 30 to 200°C	
K80001	Ring. Brass, shouldered ring conforming to	
	ASTM specifications. Pack of 10	
K80002	Ball. Hardened steel, conforming to	
K00002	ASTM specifications. Pack of 10	
K80003	Ball-Centering Guide	

Specifications

Conforms to the specifications of: ASTM D36, E28; AASHTO T53; IP 58, 198; NF T 66-008

Shipping Information

Shipping Weight: 4 lbs (1.8kg)

BREAKING POINT OF BITUMEN, FRAASS METHOD

Test Method

Determines the breaking point of solid and semi-solid bitumens. A thin steel plaque is coated with the sample and flexed in a bending apparatus at descending temperatures until cracks appear in the sample coating.

Breaking Point Apparatus

· Conforms to IP 80 specifications

Consists of two concentric borosilicate glass tubes with movable steel plate holders. A cone-and-peg mechanism moves the inner tube up and down relative to the outer tube, which varies the distance between the plate holders, causing the stainless steel test plate to be flexed. The inner tube accommodates a test thermometer. Supplied with 12 spring stainless steel plaques.

Ordering Information		
Catalog No.	Order Qty	
K28300	Bending Apparatus 1	
K28310	Cooling Apparatus 1	
	Consists of test tubes, cylinder, bungs and thistle tunnel	
K28320	Electric Hotplate, 115V 50/60Hz 1	
K28321	Electric Hotplate, 220-240V 50/60Hz	
250-000-33C	ASTM 33C Thermometer. Range: –38 to + 42°C 1	

Shipping Information

Shipping Weight: 20 lbs (9.1kg) Dimensions: 2.5 Cu. ft.