

## Koehler Manual Flash Point Testers

Get excellent accuracy with adjustable heater

### Pensky-Martens Closed-Cup Flash Testers

- Easily determine flash points of fuels, lubricating oils, liquids with suspended solids, and liquids that form a surface film
- Shutter slides open, test flame is applied, and end point determined
- Choose either electric or gas powered units
- Order stirring motor separately



Pensky-Martens flash tester 59871-00 shown with motor 59871-50

### Tag Closed-Cup Flash Testers

- Determine flash point of liquids with viscosity below 5.5 cSt at 104°F (40°C) or below 9.5 cSt at 77°F (25°C), and flash point below 200°F (93°C)
- Do not use with cut-back asphalts, liquids that form a film under testing, and materials with suspended solids

### Cleveland Open-Cup Flash Testers

- Ideal for measuring flash and fire points of all petroleum products, except fuel oils and those having an open cup flash below 175°F (79°C)
- Get easier placement and removal of testing cup with raisable thermometer support

### Tag Open-Cup Flash Testers

- Get flash and fire points of liquids up to 325°F (163°C) and flash points of cutback asphalts at less than 200°F (93°C)

ASTM method	Power (50/60 Hz)	Dimensions (L x W x H)	Catalog number	Price
<b>Pensky-Martens closed-cup flash testers</b>				
D93	115 VAC	9½" x 8" x 22½" (24.1 x 20.3 x 57.2 cm)	<a href="#">GH-59871-00</a>	
	220 VAC		<a href="#">GH-59871-05</a>	
	Gas heated		<a href="#">GH-59871-07</a>	
<b>Tag closed-cup flash testers</b>				
D56	115 VAC	5" x 5" x 16" (12.7 x 12.7 x 40.6 cm)	<a href="#">GH-59871-10</a>	
	220 VAC		<a href="#">GH-59871-15</a>	
	Gas heated		<a href="#">GH-59871-17</a>	
<b>Cleveland open-cup flash tester</b>				
D92	115 VAC	10" x 5½" x 14" (25.4 x 14.0 x 35.6 cm)	<a href="#">GH-59871-20</a>	
	220 VAC		<a href="#">GH-59871-25</a>	
<b>Tag open-cup flash testers</b>				
D1310/ D3143	115 VAC	10" x 7" x 17" (25.4 x 17.8 x 43.2 cm)	<a href="#">GH-59871-30</a>	
	220 VAC		<a href="#">GH-59871-35</a>	
	Gas heated		<a href="#">GH-59871-37</a>	

#### Accessories

[GH-59871-50](#) **Stirrer motor** for Pensky-Martens tester. Slow-speed motor rotates stirrer at 115 rpm. Features adjustable support bracket and rod. Installs in base of flash tester. 115 VAC, 50/60 Hz operation

[GH-59871-51](#) **Stirrer motor** for 230 VAC, 50 Hz operation

[GH-59871-52](#) **Draft shield**

## Koehler Penetrometers

### Meet ASTM specifications

- Use to test lubrication grease, asphalt, petroleum wax, and more

#### Manual Penetrometer

- Take it with you—unit can be used in field or lab applications
- Accurately place cone on sample surface with adjustable head assembly

**What's included:** 47.5-gram plunger, 50- and 100-gram weights.

#### Microprocessor-Based Digital Penetrometer

- Get more accuracy with programmable interface—resolution of 0.01-mm
- Set time intervals easily to 9999.9 seconds in 0.1-second intervals
- Analyze data via PC with RS-232 output—parameters include sample number, interval, and penetration depth
- More precise tip placement with coarse and fine controls, magnifier, and illuminator arm

**What's included:** 47.5-gram plunger, 50- and 100-gram weights, conductive probe, and power adapter with 6-ft (1.8-m) cord with plug.



Manual penetrometer 59860-30

**AOCS** Method Cc 16-60

**AACC** Method 58-14

Model	Manual penetrometer	Microprocessor-based digital penetrometer
<b>Catalog number</b>	<a href="#">GH-59860-30</a>	<a href="#">GH-59860-70</a>
<b>Range</b>	0 to 62.0 mm	0 to 62.0 mm
<b>Resolution</b>	0.1 mm	0.1 mm
<b>Interval</b>	Operator timed	0.1 to 9999.9 seconds
<b>Display</b>	Indicator dial	10-digit, two-line LED
<b>Power</b>	—	115 VAC, 60 Hz
<b>Price</b>		

#### Accessories

Cones, needles, and plungers listed are compatible with both penetrometers above. Call our Application Specialists for information about additional cones and needles.

Description	Weight	Conformance	Cat. no.	Price
<b>Cones</b>				
Magnesium with stainless steel tip	102.5 g	ASTM D 217	<a href="#">GH-59860-88</a>	
Brass with stainless steel tip	102.5 g	ASTM D 217	<a href="#">GH-59860-90</a>	
Aluminum, quarter scale	2.48 g	ASTM D 1403	<a href="#">GH-59860-96</a>	
Stainless steel, half scale	22.5 g	ASTM D 1403	<a href="#">GH-59860-98</a>	
<b>Needles</b>				
Stainless steel with brass shank	2.5 g	ASTM D 5	<a href="#">GH-59860-80</a>	
Stainless steel with brass shank, NIST-traceable	2.5 g	ASTM D 5	<a href="#">GH-59860-82</a>	
Stainless steel with stainless steel shank	2.5 g	ASTM D 5	<a href="#">GH-59860-84</a>	
Stainless steel with stainless steel shank, NIST-traceable	2.5 g	ASTM D 5	<a href="#">GH-59860-86</a>	
Stainless steel	2.5 g	ASTM D 1321	<a href="#">GH-59860-92</a>	
Stainless steel, NIST-traceable	2.5 g	ASTM D 1321	<a href="#">GH-59860-94</a>	

[GH-59860-53](#) **Plunger**, 6.9 g; for use with cone 59860-96

[GH-59860-51](#) **Plunger**, 15 g; for use with cone 59860-98