

NPM 450

PENSKY-MARTENS

AUTOMATED FLASH POINT TESTER

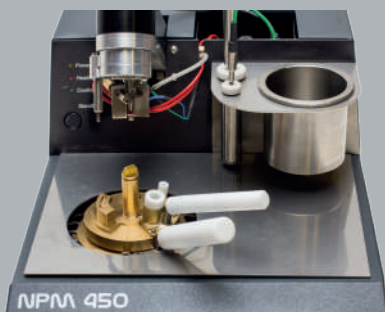


STANDARDS

ASTM D 93, IP 34, ISO 2719, NF M07019, DIN 51758, GBT 261 and related methods.

SCOPE

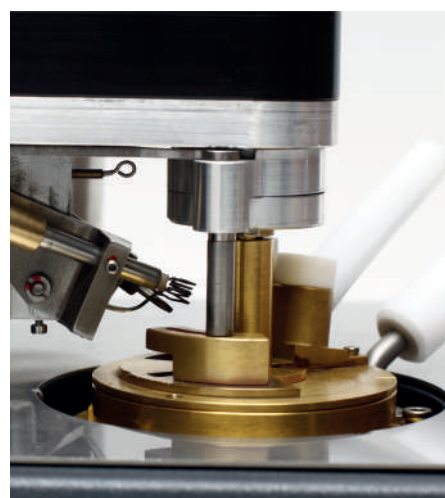
These test methods cover the determination of the flash point of petroleum products in the temperature range from 40 °C to 370 °C, and the determination of the flash point of biodiesel in the temperature range of 60 °C to 190 °C.



« EFFICIENT AND
COMPACT UNIT »

TECHNICAL FEATURES

- Small size
- 6.4" capacitive touch screen
- One hand easy operation
- Sample cup, probe, thermocouple holder stand
- Test temperature range: 0 to 410°C
- Unique combine ignition system (electric and gas)
- Standard methods: A, B, C
- Integrated barometric correction
- User programmable methods
- Automatic gas flame relighting
- Flash point detection by thermocouple
- Heavy sample preheating and automatic stirring start
- Fast heating and cooling
- Rapid cooling of heating block by air turbine



*Photos are non-contractual - they may differ from actual products.

CONNECTIVITY

- 4 USB ports
- 1 RS232C port or LIMS
- 2 LAN ports
- 1 VGA port



SAFETY

- Illuminated extinguisher push button
- Gas flame detection
- Over-temperature protection
- Built in gas leak detector

SOFTWARE

- One hand easy operation
- Windows 8 operating system
- Lifetime data storage - 32 GB SSD
- Reporting: PDF, Email, LIMS, Excel, Word...
- Different access level settable (Operator - supervisor or maintenance...)



DISPLAY

Access from basic to advanced parameters made easy through the intuitive software and large screen.

- Data export through USB, LIMS, PDF or e-mails.
- User and password settings
- Data transfer to printer
- Product files configuration

Flash Point: 0.0 °C	Test details
Corrected FP.: 0.0 °C	SAMPLE 001
	Select function
Sample ID: SAMPLE 001	
Method: Method A	
Exp. Flash Point: 65.0 °C	
Barometric Pressure: 992 mBar	Send to
Min. Heating Speed: 2.9 °C/min	
Max. Heating Speed: 5.6 °C/min	Trends
Start time: 06/04/16 08:56:57 de.	
Duration: 11 min, 14 sec	DONE
Operator Name: ADMIN	

ACCESSORIES

An Automatic N2 fire extinguisher is available in option:

- Allows a fire to be switched off by smothering.
- Acts on fire by reducing the oxygen content
- Very fast diffusion during emission
- Density comparable to that of air (composed of 78% nitrogen)
- Allows a durable maintenance of the extinction concentration



SCOPE OF DELIVERY

60400

The **NPM 450** delivered with :

- Cup (P/N: 40346) and Lid (P/N: 60447)
- Pt 100 probe (P/N: 60453)
- Detection thermocouple cable (P/N: 60448)
- Electric ignitor (P/N: 60480)

Site requirements:

- Power supply: Ac 110/240 V, 50/60 Hz - 4 A
- Dimension: (W) 260 x (D) 460 x (H) 185 mm
- Weight : 12 kg

*Propane/Butane pressure: mini 20 to 40 mBar max
Nitrogen : mini 4 Bar, maxi 12 Bar*

SUMMARY

Flash point range	0 to 410°C	Gas connections	Propane / Butane, Nitrogen
Heating rate	0 to 15°C/min	Automatic switch off	Integrated
Safety stop	0 to 30°C (above expected flash point)	Hydrocarbon detection	Integrated
Ignition	Electric and gas	Overheating protection	Integrated
Electric ignition	Regulated / monitored	Real time clock	Integrated
Stirring speed	50 to 300 RPM (± 3 RPM)	Fire detection	Ionization
Flash detection	Thermocouple	Extinguisher push button	Integrated & illuminated
Cooling	Integrated - Forced air	Automatic fire extinguisher	Integrated (nitrogen network or optional bottle)

