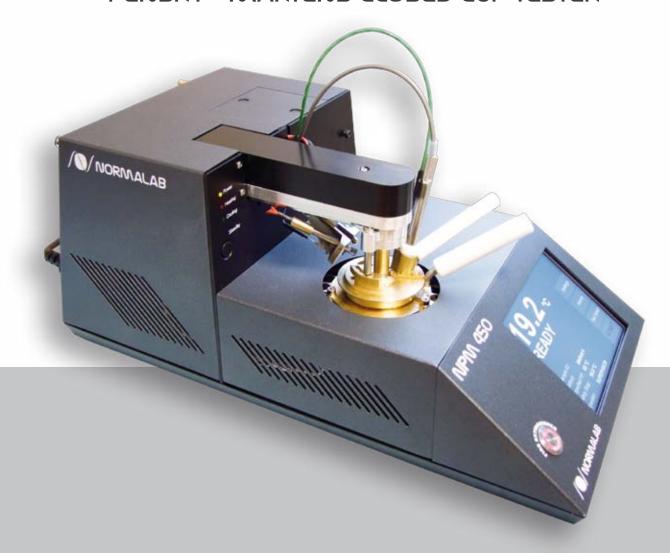
MODEL NPM 450

AUTOMATED FLASH POINT BY PENSKY - MARTENS CLOSED CUP TESTER



STANDARDS

ASTM D 93, IP 34, NF M07019, ISO 2719, DIN 51758, GBT 261, JIS K 2265-3 and related methods.

SCOPE

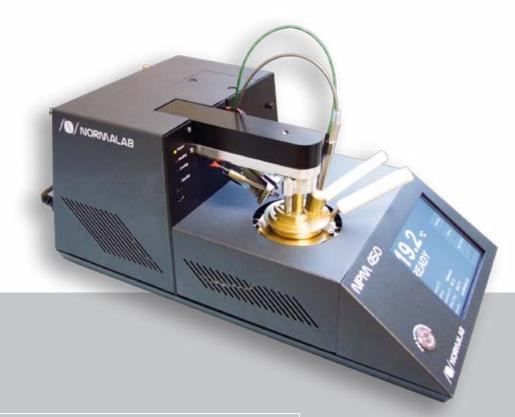
These test methods cover the determination of the flash point of petroleum products in the temperature range from 40 to 360°C and biodiesel from 60 to 190°C by manual or automated Pensky-Martens closed cup apparatus.





NPM 450 is the 5th generation of automated flash point developped by Normalab. Normalab has been designing and manufacturing petroleum testing instruments and glassware since 1963.

THE MOST EFFICIENT AND COMPACT UNIT >>



SPECIFICATIONS

- Test temperature range: 0 to 410°C
- Flash point detection by thermocouple
- Electric and gas ignition (unique combined system)
- Regulated electric ignitor
- Automatic gas flame relighting
- Integrated barometric correction
- One hand easy operation
- 6,4 inch high definition screen
- Capacitive touch screen (gloves usable)
- Standard methods: A, B, C
- User programmable methods
- Predictive heating regulation
- Heavy sample preheating and automatic stirring start
- Fast heating and cooling
- Sample cup, probe, thermocouple holder stand
- Small size



Revolutionary stirring & dipping arm

SAFETY FEATURES

- Automatic N₂ fire extinguisher
- Illuminated extinguisher push button
- Integrated hydrocarbon sensor
- Over-temperature protection



Unique Gas & Electric System

WIRING

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

SOFTWARE FEATURES SUMMARY

- One hand easy operation
- Windows 8® operating system
- Lifetime data storage 16 GByte SSD
- Reporting: PDF, Email, LIMS
- Different level access settable (Operator Supervisor Maintenance...)
- Remote operation



Friendly & Professional Software

ACCESS TO EVERY DATA PROCESSING AVAILABLE



Send the select result to LIMS: by RS-232 connector



Print the selected result: on local printer or network printer



Export the selected result to PDF: use USB key or Intranet network



Send the selected result by Email



Live trends follow up

EASY CONFIGURATION



Regional options: date and time, language, temperature units and pressure units



User and password: user name, password for level access



Software update: by USB key



Instrument: instrument name, serial number and network information

ORDERING INFORMATION

NORMALAB production - Fully automated Pensky Martens Flash Point tester

NPM 450 operable through integrated touchscreen and Windows8[®] based software.

60400

Scope of delivery:

NPM 450 delivered ready to use with:

- Cup (P/N: 40346)Cover (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 110/240V 50/60 Hz 4A
 Dimensions: (W) 260 x (D) 460 x (H) 185 mm
- Weight: ± 12 kg
- Propane/Butane pressure: mini 20 to 40 mBar max
- Nitrogen pressure: mini 4 to 12 Bar max

SUMMARY

Flash point range

Heating rate

Safety stop

Ignition

Electric ignition

Stirring speeds

Flash detection

Cooling

0 to 410°C

0 to 15°C/min

0 to 30°C (Above expected flash point)

Electric and gas

Regulated / monitored

50 to 300 RPM (±3 RPM)

Thermocouple

Integrated - Forced air

Gas connections

Automatic switch off

Hydrocarbon detection

Overheating protection

Real time clock

Fire detection

Automatic fire extinguisher

Extinguisher push button

Propane/Butane, Nitrogen

Integrated

Integrated

Integrated 600°C

Integrated

Ionization

Integrated (nitrogen network

or bottle)

Integrated & illuminated



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