

NCL 440

AUTOMATIC CLEVELAND OPEN CUP FLASH AND FIRE POINT TESTER



STANDARDS

ASTM D 92, IP 36, ISO 2592, AASHTO T48 and related methods.

SCOPE

This test method describes the determination of the flash point and fire point of petroleum products by a manual Cleveland open cup apparatus or an automated Cleveland open cup apparatus. The test method is applicable to all petroleum products with flash points above 79°C (175°F) and below 400°C (752°F) except fuel oils.

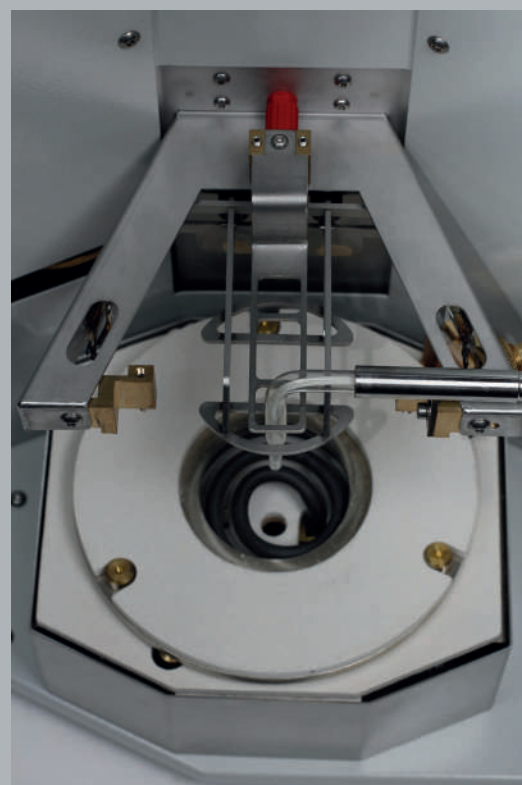
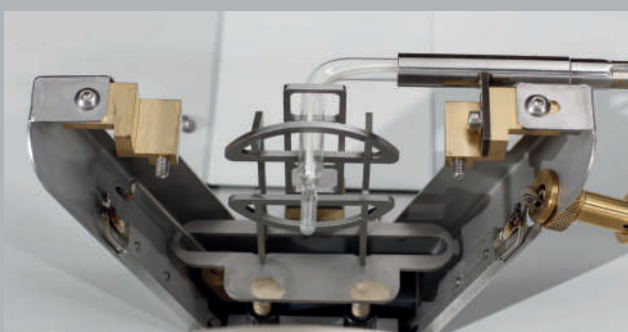
NCL 440 is a cleveland open cup tester developed by Normalab. Normalab has been designing and manufacturing petroleum testing instruments and glassware since 1963.



« POLYVALENT INSTRUMENT FOR FLASH AND FIRE POINTS »

SPECIFICATIONS

- Test temperature range ambient to 400°C
- Temperature resolution 0,1°C
- Angled glass probe type Pt100 class B
- Detections by ionisation rings
- Data storage: 200 results
- Pre-installed standard test method
- Automatic sampler 6 positions (Optional)
- Surface skimmer (Optional)



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

APPLICATIONS

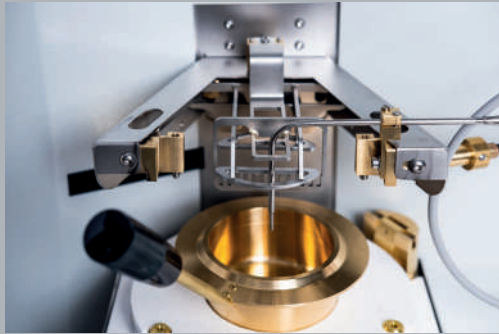
- Petroleum industry
- Research
- Bitumen
- Lubricants



ACCESSORIES

Delivered in standard with the necessary accessories to run a test, you can complete your device with :

- **Automatic sampler - 6 positions (P/N 40440)**
NCL 440 can be configured with an auto sampler that allows to launch 6 analysis at the same time and collect the results at the end of the cycle.
- **Surface skin skimmer (P/N 40480)**
The surface skin from bituminous samples is removed during the test through the skimmer function. *This accessory is not compatible with the auto sampler.*
- **Gas cartridge kit (P/N 40484)**
The option minimizes the volume of gas present in the lab.
- **Protective screen (P/N 40454)**
Reduces the exposure of the sample cup to external disturbances during the analysis.
- **Pt 100 probe stainless steel delivered in standard with skimmer option (P/N 40467)**
- **Anti over flow cup (P/N 40422)**



SAFETY FEATURES

For safety reasons, the NCL 440 is equipped with several protection user systems:

- Automatic flame lightening
- Emergency safety switch
- Safety probe
- Detection of gas with auto cut-off
- Automatic gas cut-off at the end of the test
- Thermal fuse (overheating protection)
- Shutter lid at the end of the test



CONFIGURATION

Delivered ready to use, the device is user-friendly with its digital screen and the quick access keypad. You can easily choose the best program according to your application

- Standard
- Bitumen
- Manual
- Research

Access to calibration and service parameters can be protected by password.



ORDERING INFORMATION

Fully automatic, NCL 440, combines leading flash and fire point detection. Easy to use, the evolution of the test is displayed in real time on the screen.

40400

Scope of delivery:

NCL 440 is delivered ready to use with:

- Cup (P/N 40417)
- Pt 100 probe (P/N 40441)
- Electric ignitor
- Insulated plate mobile (P/N 40439)
- Insulated plate fixed (P/N 40437)

40480

NCL 440 **with** surface skin skimmer
(Can not be ordered separately from the instrument)

Site requirements:

- Power supply: 230 V - 50 Hz - 1000W
- Dimension: (W) 330 x (D) 400 x (H) 640 mm
- Weight: 20 kg

Propane/Butane pressure: 50 mbar

SUMMARY

Temperature range	0 to 400°C	Gas connection	Propane / Butane
Sample temperature	Pt 100 probe Class B	Data storage	200 results
Ignition	Gas	Automatic gas cut off	Integrated
Flash detection	Ionisation ring		
Fire detection	Ionisation ring		



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