# **NCL 440**

## AUTOMATIC CLEVELAND OPEN CUP FLASH AND FIRE POINT TESTER



#### STANDARDS

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

#### SCO7E

This test method describes the determination of the flash point and fire point of petroleum products by a Cleveland open cup apparatus. The test method is applicable to all petroleum products with flash points above  $79^{\circ}$ C ( $175^{\circ}$ F) and below  $400^{\circ}$ C ( $752^{\circ}$ F) except fuel oils.



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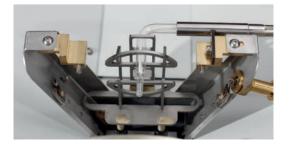


## « OFFERS A GOOD REPEATABILITY»

### TECHNICAL FEATURES

- Test temperature range : 0°C to 400°C
- Temperature resolution : 0,1°C
- Angled glass probe type Pt100 class B
- Flash and fire point detection by ionisation rings
- Data storage: 200 results
- Pre-installed standard test methods
- Surface skimmer (Optional)





### APPLICATION

- Petroleum industry
- Research
- Bitumen
- Lubricants
- Paint

### ACCESSORIES



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

• Surface skin skimmer (P/N 40480)

(The skimmer has been designed to remove the surface skin from bituminous samples during the test.)

- **Gas cartridge kit** (*P/N 40483*) 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)
- Thermal ticket printer (P/N 40490)

## SAFETY

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

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

#### SOFTWARE



You can choose the best program according to your application (4 pre-installed programs) :

- Automatic
- Bitumen
- Manual
- Research (unknown flash point)

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



#### SCOPE OF DELIVERY

40400	Scope of delivery: NCL 440 is delivered ready to use with:
	<ul> <li>Cup (P/N 40417)</li> <li>Pt 100 probe (P/N 40441)</li> <li>Electric ignitor (P/N 40380)</li> <li>Insulated mobile plate (superior) (P/N 40439)</li> <li>Insulated fixed plate (intermediate) (P/N 40437)</li> <li>Metal plate</li> </ul>
40480	<b>NCL 440 with</b> surface skin skimmer ( <i>Can not be ordered separately from the instrument</i> )
	Site requirements:

- Power supply: 230 V 50/60 Hz 1000W
- Dimension: (W) 330 x (D) 400 x (H) 640 mm
- Weight: 20 kg

*Propane/Butane pressure: 50 mbar* 

#### SUMMARY

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