

# NMC 445

## AUTOMATIC MICRO CONRADSON CARBON RESIDUE TESTER



### STANDARDS

ASTM D 4530, D 189, ISO 10370, IP 398 and related methods.

### SCOPE

This test method, equivalent to the Conradson Carbon Residue test, covers the determination of the carbon residue amount formed after evaporation and pyrolysis of petroleum materials under certain conditions and is intended to provide some indications of the relative coke forming tendency of such materials.

NMC 445 is an automated carbon residue tester developed by Normalab. Normalab has been designing and manufacturing petroleum testing instruments and glassware since 1963.



« IMPROVEMENT FOR  
BETTER PERFORMANCE »

## SPECIFICATIONS

- Fully automatic calculation of % carbon residue or ash (requires balance)
- Quick verification of nitrogen flow rate on front panel
- Automatic controlled atmosphere into the furnace
- Test reports including initial weight and results
- Maximum test temperature : 775°C
- 2 pre-set methods + 18 additional ones with 4 heating segments
- Automatic nitrogen flow rate switch
- Quick access to calibration parameters
- Data storage : 200 results



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

## APPLICATIONS

- Non volatile petroleum
- Crude
- Oils
- 10% distillation residue

## ACCESSORIES

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



- Small vials 2 ml (*P/N 41001*)
- Medium vials 4 ml (*P/N 41026*)
- Larger vials 16 ml, may be used for samples that are expected to yield residues <0,10% (m/m) (*P/N 41002*)
- 12 places vials holder (small and medium) (*P/N 41005*)
- 6 places vials holder (large) (*P/N 41006*)
- 7 places vials holder (4 small and 3 large) (*P/N 41007*)
- Porcelain crucibles for ash test (120 ml, *P/N 10510*; 40 ml, *P/N 10508*; 80 ml, *P/N 10515*)

## ANALYTICAL BALANCE

For automatic calculation of ash or carbon residue percentage, an analytical balance must be ordered with the device. The balance can be connected to record data. (*P/N 24248*)

- Weighing up to 120g
- Resolution 0,1mg

## EASY CONFIGURATION

Delivered ready to use, our NMC 445 is user-friendly with its digital screen and the quick access keypad. You can easily program the parameters. The integrated software allows you :

- Transfer the select result on local printer
- Table configuration



## ORDERING INFORMATION

41030

**NMC 445** provides all safety requirements to perform the measurement. It gives the detailed test report and the calculated carbon residue. For user flexibility, a balance can be connected to the device.

### Scope of delivery:

NMC 445 is delivered ready to use with:

- 12 sample vials 2 ml (P/N 41001)
- 6 sample vials 16 ml (P/N 41002)
- 3 vials holders: large, small and mixed (P/N 41005, P/N 41006, P/N 41007)
- Cleaning cable (P/N 41045)
- Hook for safe hot lid manipulation (P/N 41008)

*Gas connection necessary*

### Site requirements:

- Power supply: 230 V - 50/60 Hz - 16 A
- Dimension: (W) 430 x (D) 630 x (H) 480 mm
- Weight: 35 kg

*Air filtered and Nitrogen purity 99,998%: 2,5 bar max*

## SUMMARY

<b>Ambient temperature of use</b>	15 to 30 °C	<b>Temperature safety</b>	By regulated separate thermocouple
<b>Furnace temperature range</b>	0 to 775 °C	<b>Maximum gas pressure</b>	2.5 bars (250 kPa)
<b>Furnace temperature sensor</b>	Thermocouple K	<b>Minimum gas Pressure</b>	1 bar (100 kPa)
<b>Cooling of the furnace</b>	Accelerate by internal turbine at 500 °C	<b>Saved results</b>	99 results
<b>Safety Stop probe furnace</b>	Program between 600°C and 900°C	<b>Number of programs</b>	18 programmable with 2 fixed programs
<b>Temperature measurement resolution</b>	0.1 °C		



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