

**ASTM D 97 - D 2500 - ISO 3015 & ISO 3016 - IP 15 & IP 219**

**SCOPE**

Standard Test Method for Pour Point of Petroleum Products

**FULLY AUTOMATED CLOUD AND POUR POINT TESTER  
- MODEL NTE 450 -**

**- REF 60300 -**

**MAIN CHARACTERISTICS**

- ✓ Mimics the standard methods
- ✓ Detection by specific optical fibre for CLOUD Point
- ✓ Detection by ultra sonic sensor for POUR Point
- ✓ Visualisation of the different cooling steps – detection every 3°C or every 1°C
- ✓ Programmable cooling slope
- ✓ Quick coupling on measuring head
- ✓ Stand alone
- ✓ Easy access to maintenance parameters by software
- ✓ Easy access to hardware maintenance
- ✓ Computer interface through a user friendly software accessible by touch screen
- ✓ Storage of 200 results in stand alone

**SCOPE OF DELIVERY**

NTE 450 CPP delivered ready for use with :

<b>REF 40386</b>	Printer
<b>REF 21146</b>	Could point tubes
<b>REF 21147</b>	Pour point tubes
<b>REF 60310</b>	Stainless steel probe for Pour Point
<b>REF 60311</b>	Stainless steel probe for Cloud Point
<b>REF 60312</b>	Optical Fibre for Cloud point detection
<b>REF 60313</b>	Ultra sonic sensor for Pour Point detection
<b>REF 60209</b>	Stylet for touchscreen

**NECESSARY ACCESSORY**

<b>REF 22237</b>	Ultra Cryostat (-81/+100°C ±0.02)
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**OPTION**

<b>REF 60202</b>	Connexion for 2 equipments on one cryostat
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**CONSUMMABLES**

<b>REF 21146</b>	Test tube for Pour Point
<b>REF 21147</b>	Test tube with glass mirror for Cloud and Pour Point
<b>REF 21150</b>	Test tube with platinum mirror for Cloud and Pour Point

**REFERENCE FLUIDS**

<b>REF 60002</b>	Cloud point (diesel)
<b>REF 60003</b>	Pour point (diesel)

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NTE 450 Leaflet 15



ZOOM on Detection Head

**ORDERING INFORMATION**

**REF 60300**

NTE 450 CPP For use on AC 230V – 50/60Hz

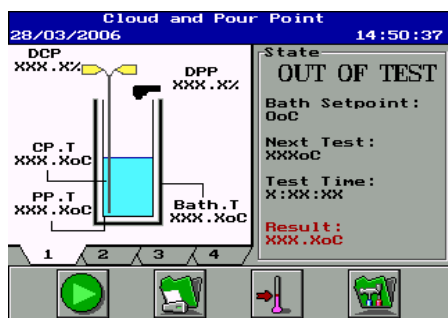
**REF 60301 NTE 450 PP** For determination of  
POUR POINT only / 115V – 50/60Hz

**REF 60302 NTE 450 CP** For determination of  
CLOUD POINT only / 115 – 50/60Hz

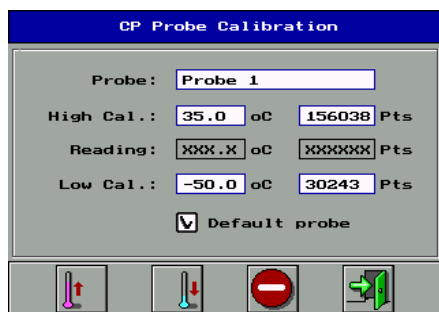
(W) 270x (D) 500x (H) 600 mm (+/- 25kg)

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## HIGHLY COMPREHENSIVE SOFTWARE



### MAIN MENU

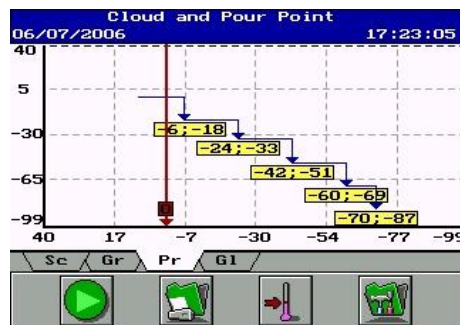


### PROBE CALIBRATION

#### TECHNICAL SPECIFICATIONS

##### GENERAL

- ✓ Visualisation of the detection level
- ✓ Adjustable bath temperature at stand by position
- ✓ Pt 100 sample temperature
- ✓ Jacket temperature
- ✓ Visualisation of the cooling levels
- ✓ Apparatus and sensors status
- ✓ Easy access to the service parameters
- ✓ Storage of the 200 last tests results
- ✓ Sample identification
- ✓ Operator's name
- ✓ Maintenance and calibration protected by password
- ✓ Programme files: 15 (5 standards and 10 parametrable)



### COOLING STEPS GRAPH

- ↳ Quick and easy to master
- ↳ Simple icons
- ↳ Intuitive software
- ↳ Direct access by shortcuts
- ↳ QUICK TEST LAUNCH available
- ↳ Fresh design

#### POUR POINT

- ✓ Detection by ultrasonic sensor
- ✓ Temperature range from -75°C to 51°C (Lowest temperature depends on the cryostat type)
- ✓ Temperature measurement resolution : 1°C
- ✓ Tilting intervals : every 3°C or 1°C (configurable)

#### CLOUD POINT

- ✓ Detection by optical fibre
- ✓ Intervals of 1°C
- ✓ Temperature measurement resolution : 0,1°C
- ✓ Temperature range from -75°C to 49°C (Lowest temperature depends on the cryostat type)

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