

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

### **SCOPE:**

The Pour point describes a procedure for testing the fluidity of a petroleum product at a specified temperature. The Cloud point is defined as the temperature of a liquid specimen when the smallest observable cluster of wax crystals first appears upon cooling under prescribed conditions.

### **APPLICATIONS:**

Lubricating oils, distillate and residual oils, Biodiesels.

## **FULLY AUTOMATED CLOUD AND POUR POINT TESTER - MODEL NTE 450 - - REF 60300 -**

### **MAIN FEATURES**

- ✓ 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 fixation on measuring head
- ✓ Stand alone or network multiple
- ✓ Easy access to maintenance parameters by software
- ✓ Easy access to hardware maintenance

### **SOFTWARE**

- ✓ Computer interface through a user friendly software accessible by touch screen
- ✓ Connexion of external PC by Ethernet cable
- ✓ Storage of 200 results in stand alone

### **SCOPE OF DELIVERY**

**REF 60300 NTE 450 CPP** for determination of CLOUD AND POUR POINT delivered complete with Printer, 1 cloud and 1 Pour point tubes, instruction manual. CRYOSTAT to be ordered separately

**REF 60300/115V** Same as above for 115V / 60Hz

### **NECESSARY ACCESSORY**

**REF 23205** Cryostat TLC 80 11 litres (-80°C / +20°C)

### **CONSUMMABLES**

**REF 21146** Test tube for Pour Point

**REF 21147** Test tube with glass mirror for Cloud and Pour Point

**REF 21150** Test tube with platinum mirror for Cloud and Pour Point



TOUCHSCREEN  
interface  
Storage: 200 results

COOLING BY CRYOASTAT



ZOOM on  
Detection Head

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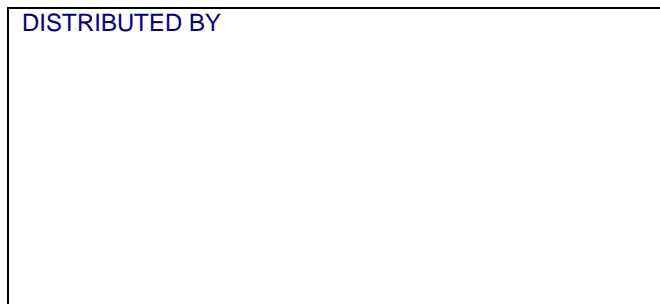
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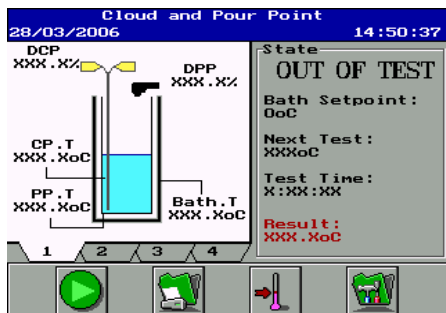
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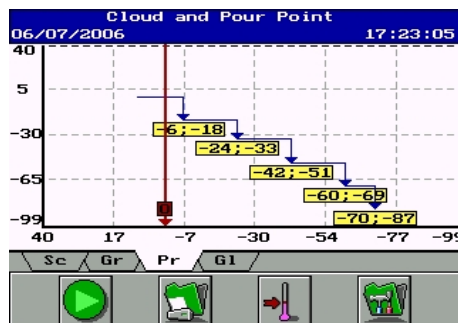
## HIGHLY COMPREHENSIVE SOFTWARE



### MAIN MENU



### PROBE CALIBRATION



### COOLING STEPS GRAPH

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

### ALTERNATIVE MODELS

- REF 60301 NTE 450 PP For determination of POUR POINT only
- REF 60302 NTE 450 CP For determination of CLOUD POINT only

### 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 paramettable)

#### 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 (paramettable)

#### 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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