

# ASTM D 5 - ISO EN 1426 - IP 49 - DIN 52010 & D 217 - ISO 2137 - IP 50 - DIN 51580 & D 937 - IP 179 - DIN 51579 & D 1321 - ISO 3992 - DIN 51579 & D 1403- ISO 6298 - IP 310

#### **SCOPE**

This test method covers determination of the penetration of semi-solid and solid bituminous materials.

## FULLY AUTOMATIC MODEL OF PENETRATION VALUE DETERMINATION

NPN TECH MODEL -

- REF 942734 -

#### **MAIN CHARACTERISTICS**

- ✓ Built-in user friendly software
- ✓ 2 separate keyboard : parameters entry / measurement operation
- ✓ Stepper motor for penetration depth as low as 0.01 mm
- ✓ Programmable Penetration time between 0 and 999 min
- ✓ Position recall for routine tests can be set
- ✓ Automatic approach for conductive samples
- ✓ Optoelectronic detection of depth penetration
- ✓ Optional automatic level detection device for bitumens

#### **SCOPE OF DELIVERY**

Holder for accessories, magnifying lens and low voltage illuminator, centering guide with screw and nut, power cord, set of 2 fusibles, RS232C output, accessories for automatic level detection for conductive sample comprising probe cable, mini grip & test probe and instruction manual.

REF 9417341 Light bulb for ref. 941734
REF 9417342 Flexible light for ref. 941734
REF 9417343 Magnifying glass for ref. 941734

**REF 4873465** CD-rom with PC application + USB cable - for NPN TECH

#### **ADITIONAL ACCESSORIES AND OPTIONS**

REF 0195200004 Transfer bath, made of stainless steel with coil

To be connected to a water bath

**REF 0195200005** Transfer bath support made of stainless steel

**REF 29396** Constant temperature water bath (range: -25 to +150°C) - Model RE 1225S - **REF 941732** Calibration kit for automatic penetrometer

REF 9417371 Bitumen automatic level detection device
REF 11504 ASTM thermometer (17 C)
REF 11532 ASTM thermometer (63 C)
REF 11533 ASTM thermometer (64 C)



REF. 942734 - NPN TECH



**GREASE MODE** 



**REF 941736** 

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#### **ACCESSORIES AND CONSUMABLES for Bitumen (ASTM D5)**

**REF 518063** Standard needle 2.5 g (up to 350 units)

**REF 941737** Needle holder 47.5 g (1 supplier with main equipment)

**REF 941810** Outfit for penetration of bituminous material, comprising: needle, holder, 50

g weight and 2 containers

**REF 941812** Additional weight 100 g **REF 941815** Additional weight 50 g

**REF 9418140** Long needle 2.5 g (up to 500 units)

**REF 21712** Pack of 300 Sample containers only one use, 55x35 mm

REF 518066 Aluminium container, 55 X 35 mm,

**REF 9418181** Aluminium container, 55x70 mm (>200 units) **REF 9418191** Aluminium container, 55x57 mm (up to 500 units)

REF 21932 Standard needle 2.5 g (up to 350 units) with UKAS Certificate



REF 941735

#### ACCESSORIES (for lubricating greases - ASTM D 217)

**REF 941739** Grease cutter with blade

**REF 941736** Outfit for consistency of lubricating grease comprising : cone, holder and

container

**REF 941737** Cone holder , nickel-plated brass, movable, 47.5 g

**REF 941738** Standard cone 102.5 g **REF 9417411** Sample container, 76x63 mm

**REF 27322** Spatula 30x200 mm

**REF 9417582** Normalab production - GWM CLASSIC- Compact twin-unit automatic grease worker - using electronic counter to control the strokes number. Delivered in standard with 2

plunger plates 51 holes  $+\ 2$  covers  $+\ 2$  Shaft and Handle  $+\ 2$  Vent Cocks. For use on AC 400 V, three-phase, 50 Hz, 16 A, 400x260x500 mm ( $\pm$ 29 kg)



**REF 941811** 

#### ACCESSORIES (for consistency of petroleum - ASTM D 937)

**REF 941735** Outfit for consistency of petroleum, comprising: cone, container and holder

REF 941737 Cone holder , nickel-plated brass, movable, 47.5 g

**REF 941738** Standard cone 102.5 g

REF 9417412 Sample container 100 x 65 mm with cover Standard needle 2.5 g (up to 350 units)
REF 518081 Needle with shoulder 2.5 g, stainless steel



REF 9417582

#### ACCESSORIES (for consistency of petroleum waxes - ASTM D 1321)

**REF 941811** Outfit for consistency of petroleum waxes comprising : shouldered needle, container, weight &

**REF 941816** Needle with shoulder 2.5 g, stainless steel

**REF 941737** Cone holder, nickel-plated brass, movable, 47.5 g holder

REF 941815 Additional weight 50 g

**REF 941820** Sample container with base plate **REF 21932** Needle 2,5g with certificate

# ACCESSORIES (Penetration tests using one-quarter or one-half scale cone equipment - ASTM D 1403)

**REF 941742** 1/4 scale cone (9.38 g) **REF 941743** 1/2 scale cone (37.5 g) **REF 27322** Spatula 30 x 200 mm

REF 9417421 1/4 scale grease worker (manual operation)
REF 9417431 1/2 scale grease worker (manual operation)

### **ORDERING INFORMATION**

#### **REF 942734**

NPN TECH For use on AC 230 V, 50 Hz - 1 A

(W) 260x (D) 320x(H) 540 mm (± 23 kg)

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