

NPN TECH

AUTOMATIC PENETROMETER



STANDARDS

ASTM D 5, D 217, D 937, D 1321, D 1403, ISO EN 1426, IP 179 and related methods.

SCOPE

These test methods cover different procedures of measurement using distinct accessories. It includes the determination of the penetration of semi-solid and solid bituminous materials. It measures the consistency of lubricating greases. It can be applied to petroleum, cosmetic, food and cream as an empirical measure of consistency but also on waxes derived from petroleum by measurement of the extent of penetration.

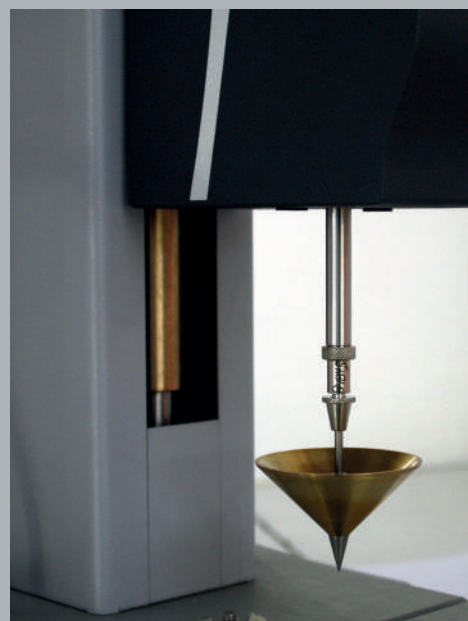
NPN Tech is an automated penetrometer developed by Normalab. Normalab has been designing and manufacturing petroleum testing instruments and glassware since 1963.



« RUGGED AND
RELIABLE FOR THE
REPEATABILITY OF
ITS ANALYSES »

SPECIFICATIONS

- 4 speeds (3 downward and 1 upward)
- Step by step motorized vertical displacements
- 4 programmable reference positions for the holder assembly
- Adjustable led lamp and magnifying glass
- Automatic monitoring of penetration period
- Optoelectronic detection of depth penetration
- For reliable manual surface detection
- Stepper motor for penetration depth as low as 0.01 mm
- Penetration time between 0 and 999 min 59 sec
- Automatic zero-position adjustment of the system



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

APPLICATION

- Bitumen
- Lubricating greases
- Consistency of petroleum
- Consistency of petroleum waxes
- Cosmetic creams
- Penetration test
- Pharmaceutical industry

SOFTWARE FEATURES



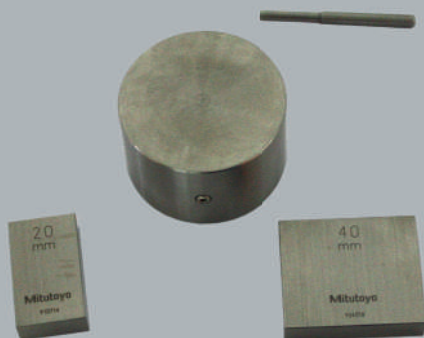
Thanks to an integrated software, you can easily program the parameters through an access keypad. The parameters characterizing a test are gathered in tables. Up to 20 tables can be memorized by the user according to the preferences and the samples. Parameters to set :

- Operating mode
- Pause time
- Penetration time
- Limits of penetration
- Quantity of tests

CALIBRATION

Our calibration kit will help you verifying the accuracy of the penetration measurements and laboratory internal quality compliance system. The set includes :

- 1 contact finger
- 1 certified gauge of 20 mm
- 1 certified gauge of 40 mm
- 1 rest block
- 1 connection wire



RELATED PRODUCTS

For the preparation of grease sample, the GWM Classic assist to work the grease used for the preparation of shear stability test. It is a compact twin-unit automatic grease worker using electronic counter to control the strokes number. The GWM Classic is suitable for single or double worker operation.



OPTIONS

- Accessory kits on request
- Cryostat
- Transfer bath and support
- Cooling incubator
- Automatic approach on conductive products and hard bitumen



ORDERING INFORMATION

Fully automated model of penetration value determination

942734



941731

NPN Tech is a compact instrument using an interactive software allowing time penetration programming. 4 mobile head positions can be memorized.

Scope of delivery:

NPN Tech is delivered with:

- Magnifying lens (P/N 9417343)
- Low voltage illuminator (P/N 9427342)
- Holder (P/N 941737)
- AC power cable (P/N 92-026670)
- Standard plunger (P/N 40-873700)

Accessories kits and options according to your application must be ordered separately.

Site requirements:

- Power supply : AC 230 V, 50 Hz - 1 A
- Dimension : (W) 260 x (D) 320 x (H) 540 mm
- Weight : 23 kg

Penetrometer is a **manual** instrument including a large table on levelling feet with spirit level, a manual release mechanism and a dial indicator with 0.01 mm.

SUMMARY

Temperature measurement	-10 to 150°C	Range	0 to 75 mm
Temperature unit	°C or °F	Results	In 1/10 mm on full range
Storage	-20 to +55°C	Displayed resolution	In 1/100 mm
Humidity Operating	30 to 80% Rh max	Precision	± 0.05 mm
Duty cycle	Continuous operation	Previous results	10
Penetration Time	Up to 999 min 59 sec	Tables	20
Pause	Up to 999 min 59 sec	(user specifications)	

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