





# 10 LITER CAPACITY PLANETARY MIXER

#### **PRODUCT CODE**

**NT-G3100M** 10 Liter capacity planetary mixer

#### **SPECIFICATIONS**

This 10-liter mixing capacity mixer is designed for high quality and reliability, suitable for benchtop use. It adheres to standards while also meeting the demand for more extensive testing of other materials for research applications.



Thanks to its planetary mixing mechanism, the mixing paddle rotates around its own axis at 20 to 480 rpm and simultaneously moves around the mixing bowl at 10 to 240 rpm. This bi-directional mixing ensures homogeneity and repeatability throughout the entire mix. The speed can be manually adjusted by the user using the potentiometric speed adjustment knob on the mixer. The planetary mixer is equipped with safety switches that automatically stop mixing if the user lowers the mixing bowl with the handle.

If used for asphalt design, an electric Isomantle heater must be ordered separately.

For proper mixing operation, the container containing the bituminous sample must be heated to the temperature specified in the Standards. A standard laboratory oven is used for this purpose, and the sample mixing process is performed immediately after removing the container from the oven.

#### **Technical Features**

Capacity	10 Liter
Material	Stainless steel mixing bowl and pallet
Mixing program	Manual, with potentiometer
Areas of use	Sample preparation





## In-situ CBR Test Set

#### **PRODUCT CODE**

**NT-S5680** In-situ CBR Test apparatus, 50 kN capacity

#### **STANDARDS**

ASTM D4429, BS 1377:9, BS 1924:2

#### **SPECIFICATIONS**

The Field CBR Test Set is a testing system used to quickly and accurately measure the bearing capacity of soils in situ.



This device, critically important in engineering applications such as road construction (asphalt and stabilized road bases), foundations and fill areas, airport runways, and infrastructure, allows for the determination of the California Bearing Ratio (CBR) in the field.

This system is equipped with a mechanical jack, load ring, penetration piston, and load ring. Its 50 kN capacity ensures high accuracy in soil strength measurements.

#### **TECHNICAL SPECIFICATIONS**

Loading Jack (Mechanical)	50 kN capacity, ball bearing, manual operation
Load Ring	50 kN capacity, high precision measurement
CBR Penetration Piston	Standard sizes, adjustable
Dial Gauges	Adjustable, with fixed connection piece
Extension rods	2 pieces of 110 mm, 1 piece of 305 mm, 1 piece of 610 mm
Datum Bar System	With tripod stands and 1400 mm bar
Additional Load Weights	4.5 kg circular and slotted, 9 kg slotted weights
Carrying Case	Wooden box for easy transport and storage





## **CBR Test Device with Load Ring**

#### **PRODUCT CODE**

**NT-S2580** 50 kN CBR Test device with Load Ring, 220-240V 50-60hz. 1 ph.

#### **STANDARDS**

AASHTO T193, ASTM D1883, BS 1377:4, EN 13286-47

#### **SPECIFICATIONS**

The CBR Testing Machine is designed to determine CBR values and strength values of base and subbase materials with dimensions less than 19 mm.



The CBR testing machine consists of a bench-type motorized frame with a compact base unit. The machine has a capacity of 50 kN and a constant test speed of 1.27 mm/min.

The machine is equipped with upper and lower piston travel limit switches.

Device is supplied complete with a 50 kN capacity load ring, a penetration piston, a stabilising bar, and a digital indicator with a 25 mm stroke and 0.01 mm accuracy.

#### **TECHNICAL SPECIFICATIONS**

Frame	50 kN capacity, Electical engine for loading
Load Ring	50 kN capacity, high sensitive measurement
CBR Penetration Piston	Complies with Standards, height adjustable
Dial Gauges	Adjustable, with connection
Dim. weight (w x d x h)	470 x 610 x 1100 mm approx. 80 kg
Power	220-240V 50-60hz. 1 ph





#### **Automatic CBR Test Device**

#### **PRODUCT CODE**

NT-S2590 Automatic Digital CBR Test Machine 50 kN 220-240V, 50-60hz.1ph.

#### **STANDARDS**

AASHTO T193, ASTM D1883 • EN 13286-47 • BS 1377-4

#### **SPECIFICATIONS**

The Automatic CBR Testing Machine is specifically designed to measure the bearing capacity of road substructures and soil layers in a laboratory environment. It is particularly suitable for the strength analysis of highway subbases, subgrades, and cohesive materials with a maximum grain size of 19 mm.



The device features a 50 kN capacity double-column test frame with an electromechanical drive, a digital control unit, and high-precision load cell measurement systems. Its user-friendly interface and automated testing features increase test repeatability and accuracy.

The machine is equipped with upper and lower piston travel limit switches.

#### **Advantages**

- ·VFull automatic test cycle: Load, data-logging and graphs are automatically produced.
- ·VHigh Sensitivity: ±0.1% accuracy with advanced sensor technology
- ·VMulti Purpose use: Compatibility with ASTM, BS, EN, AASHTO test standartlards
- Ease of Use: User-friendly interface and quick installation
- ·VRobust Frame: Robust and compact design suitable for laboratory conditions

#### **Technical Specifications**

Frame	50 kN capacity, Digital screen
Load Cell	50 kN capacity, high sensitive load cell
CBR Penetration Piston	Complies with the standards
Displacement transducer	25mm x 0,01mm sensitive linear potentiometric displacement transducer
Ölçüler En x Boy x Yükseklik	470 x 610 x 1100 mm ağırlık yaklaşık 80 kg
Voltaj	220-240V 50-60hz. 1 ph





## **Automatic Soil Compactor**

#### **PRODUCT CODE**

NT-S0560 Automatic Soil Compactor 220-240V, 50 hz. 1 ph.

#### **STANDARDS**

ASTM D698, CNR N. 69, CNR UNI 10009, EN 13286-2, ASTM D1557, ASTM D1883, AASHTO T99 AASHTO T180, AASHTO T193

#### **SPECIFICATIONS**

The Automatic Soil Compactor is used to determine the relationship between molding water content and dry unit weight of soils, enabling accurate determination of optimum moisture content and maximum dry density.



Capable of performing both Standard and Modified Proctor compaction tests, the unit ensures precise, uniform compaction as per ASTM, AASHTO, and EN testing requirements.

A digital screen enables the operator to choose the type of compaction required (circular blow pattern for 4" or 100mm specimen moulds and double concentric circles for 6" or 150 mm specimen moulds).

The height of the rammer drop is adjustable to 305 mm or 457 mm and the weight of the rammer can be adjustable either 2,5 kg or 4,5 kg. Adjustable rammer weights and drop heights support compliance with multiple standards, enhancing the machine's adaptability to varied testing requirements.

The rotating base ensures even distribution of compaction energy, eliminating inconsistencies and improving specimen integrity.

The machine is designed for long-term operation and has built-in safety features (to CE Standards) to prevent it from being operated without the unbreakable safety guard.





## ZEMIN

Manuel CBR, Marshall Sample Extruder

#### PRODUCT CODE

NT-S0800 Manuel Sample Extruder 30 kN

#### **STANDARDS**

AASTHO T134, AASTHO T180, AASTHO T193, AASTHO T245, ASTM D1557, ASTM D1559, ASTM D1883, ASTM D698, BS 1377:4, BS 1924:2, BS 598:107, EN 12697-30, EN 13286-2, EN 13286-47



Marshall/CBR/Proctor Sample Extruder is designed to extrude specimens easily and quickly from Marshall and CBR, standard and modified proctor moulds. Constructed from stell,

The extruder is supplied complete with a manual hydraulic jack and 2 pcs. adaptor to extrude specimens from Ø100 mm (4") and Ø150 mm (6") dia. Proctor, CBR and Marshall moulds. Moulds can be easily fitted by dedicated bracket support that can be adjusted in order to match the right of the mould to be extract.







# Liquid Limit Device (Casagrande)

#### **PRODUCT CODE**

NT-S2020 Manuel Liquid Limit Device NT-S2120 Motorised Liquid Limit Device 220 V 50 Hz, 1 ph. NT-S2125 Metal Grooving tool ASTM

#### **STANDARDS**

ASTM D4318; BS 1377:2; AASHTO T89

#### **SPECIFICATIONS**

The liquid limit device is used to determine the moisture content at which clay soils pass from a plastic to a



liquid state. Defined as a point where two halves of a soil sample flow together when dropped 25 times in a specified manner using a Liquid Limit machine. The device consists of: removable brass cup, cup adjustment crank, blow counter, metal grooving tool and hard plastic base complies with the related standards.

#### **Manuel Model**

Hand-operated liquid limit machine features mechanical revolution counter attached to the shaft to register the number of drops in the liquid limit cup.

#### **Motorised Model**

Motorized liquid limit device gives uniform testing with greater degree of accuracy. Unit is comprised of manual liquid limit machine with geared motor to give proper operating speed and a counter. Machine is attached to metal plate with rubber feet. Includes grooving tool and gauge block



Metal Grooving Tool





#### Sieve Shaker Device

#### **PRODUCT CODE**

NT-G1130 Sieve Shaker with digital time adjustment, suitable for sieves having dia. 200 - 250 - 300 - 315 mm, and 8"...12"

NT-G1131 Sieve Shaker with digital time and frequency adjustment by a potentiometer, suitable for sieves having dia. 200 - 250 - 300 - 315 mm, and 8"...12"

#### **STANDARDS**

ASTM E11, ASTM E323, BS 410-1, BS 410-2, EN 932-5, ISO 3310-1, ISO 3310-2

#### **SPECIFICATIONS**

The sieve shaker applies a circular motion to the material being sieved so that it makes a slow progression over the surface of the sieve. They are ideal for heavy duty applications when heavy or large bulk samples have to be analyzed.



Sieve shakers are equipped with a power source which ensures the right vibration is applied to the sieves and sample for fast, accurate and repeatable tests. The vertical movement is fixed to ensure the sample spends maximum time on the sieve surface.

The shaker is fitted with a clamping device that ensures sieves are being hold firmly without overtightening and allows them to be quickly removed and replaced.

The shaker is fitted with digital timer which can be pre-set for any duration up to 99 minutes.

Device accepts 12 pieces of 200 (8") mm half-height (50mm) sieves + pan and cover or 8 pieces of 300 (12") mm half height (50mm) sieves + pan and cover

Wet sieving kits in the appropriate sizes may be used with this shaker.





## Constant Head Permeability Test Set

#### **PRODUT CODE**

NT-S0040 Constant Head Perpeability Test Set Ø75 mm NT-S0042 Constant Head Perpeability Test Set Ø115 mm

#### **STANDARDS**

BS 1377:5

#### **SPECIFICATIONS**

The setup is supplied complete with three manometer tubes mounted on a wooden base, a steel rule, a clear plastic water tank, plastic hoses, and a constant-level permeability cell. The constant-level permeability cell is constructed from a Plexiglas body between a top and bottom aluminum plate with three pressure points.











## **Falling Head Permeability Test Set**

#### **PRODUCT CODE**

NT-S0016 Falling Head Permeability
Test Set

#### **STANDARDS**

BS 1377:5

#### **SPECIFICATIONS**

A falling head permeability test is a laboratory test performed to determine the water permeability of soils. This test is used to understand the water flow rate in soils and the effects of soil properties on water movement. The falling head permeability test aims to determine the hydraulic conductivity coefficient (k) of soils. Hydraulic conductivity indicates the soil's ability to conduct water and is a critical parameter for water movement, drainage, and stability analyses in geotechnical engineering.

The Falling Head Permeability Cell is constructed of steel with an inner diameter of 100 mm. The set consists of a wooden stand with a manometer tube, a water overflow tank, permeability cell inner dia 100 mm and a plastic hose.









## **Consolidation (Odeometer)**

#### **PRODUCT CODE**

NT-S0030 Consolidation device (one dimensional)

NT-S0031 Consolidation bench with 3 device capacity

NT-S0032 Consolidation Cell for Ø 50 mm samples

NT-S0032/1 Lower and upper porous stone for Ø 50 mm

NT-S0032/2 Cutting ring for Ø 50 mm samples

NT-S0032/3 Calibraiton disk for Ø 50 mm samples

NT-S0032/4 Sample preperation apparatus for Ø 50 mm samples

NT-S0033 Consolidation Cell for Ø 63,5 mm samples

NT-S0033/1 Lower & upper porous stone for Ø 63,5 mm samples

NT-S0033/2 Cutting ring for Ø 63,5 mm samples

NT-S0033/3 Calibration disk for Ø 63,5 mm samples

NT-S0033/4 Sample preparation apparatus for Ø 63,5 mm samples

NT-S0034 Consolidation Cell for Ø 75 mm samples

NT-S0034/1 Lower & upper porous stone for Ø 75 mm samples

NT-S0034/2 Cutting ring for Ø 75 mm samples

NT-S0034/3 Calibration disk for Ø 75 mm samples

NT-S0034/4 Sample preperation apparatus for Ø 75 mm samples

NT-S0036 Consolidation weight set 50 kg (3x 10 kg, 2x 5 kg, 3x 2 kg, 2x 1 kg, 3x 0,5 kg, 2x 0,25 kg)

NT-S0038 Consolidation weight set 64 kg (4x 10 kg, 3x 5 kg, 2x How to Sellect; 2 kg, 3x 1 kg, 3x 0,5 kg, 2x 0,25 kg)

NT-GM0250 Digital dial gauge 12.7 mm stroke 0,001 mm sensitivity (don't sleep)

NT-GM0260 digital dial gauge 25 mm strok 0,01 mm sensitivity (don't sleep)

#### **STANDARDS**

ASTM D2435 ASTM D3877 ASTM D4546 AASHTO T216 BS 1377:5 UNE 103-602 UNI EN ISO 17892-5

#### **SPECIFICATIONS**

NT-S0030 is used to determine the behavior of the soil sample upon certain loading in a specified period of time. It indicates the settlement characteristics of the soil which is known as Consolidation.

The beam provides three loading ratios: 9:1, 10:1, and 11:1. The beam assembly is fitted with an adjustable counterbalance weight.

Maximum load: 170 kg of slotted weights, corresponding to 1870 kg using the beam ratio 11:1.

Consolidation cells are manufactured from corrosion-resistant materials in accordance to the standards. The outer wall of the cell is made of Plexiglas, and collapse can be observed during testing. All cells are supplied with upper and lower porous stones, a loading head, and a cutting ring.



For Ø 50 mm Samples

(For different diameter samples, only the cell code will be changed, other codes and quantities will remain the same)

NT-S0030 Consolidation device 3 pcs

NT-S0031 Consolidation bench (3 device capacity) 1 pcs

NT-S0032 Consolidation Cell for Ø 50 mm samples 3 pcs

NT-S0036 Consolidation weight set 50 kg 3 pcs

NT-GM0250 Digital dial gauge 12.7 mm stroke 3 pcs or

NT-GM0260 Digital dial gauge 25 mm stroke 3 pcs





## **Dynamic Cone Penetrometer (DCP)**

#### **PRODUCT CODE**

**NT-S5900** Dynamic Cone Penetrometer Test Set (DCP)

#### **STANDARDS**

ASTM D2435 ASTM D3877 ASTM D4546 AASHTO T216 BS 1377:5 UNE 103-602 UNI EN ISO 17892-5



#### **SPECIFICATIONS**

The dynamic cone penetrometer (DCP) is a portable, fast and cost-effective manually operated tool for in-place testing of fine-grained soils, pavement base courses, sub-bases, and soil subgrade layers. The test is performed by dropping the 8 kg hammer from a height of 575 mm, the DCP drives a 60° cone into the soil, measuring penetration resistance per blow. This data correlates with soil strength parameters such as CBR ( as per sperimental Kleyn 1982 studies.) and allows for quick identification of weak zones or inconsistencies in compaction

#### The equipment consists of:

- 8 kg Hammer,
- · Penetration Bar,
- 2 pcs. 60° Conical Tips,
- · Metal Plate for Ruler Attachment,
- Ruler Reading Plate
- · Anvil,
- Extension Rod (430 mm),
- Extension Rod (994 mm),
- Wrench, 13 mm and 17 mm,
- · Adhesive,
- · Steel Ruler, and
- · Wooden Carrying Case.





#### **Direct Shear Test Device**

#### **PRODUCT CODE**

NT-S0600 Direct Shear Test Device (5 kN kapasiteli)

**NT-S0605** Shear Box Set for 60x60 mm samples

**NT-S0610** Shear Box Set for  $\emptyset$  60 mm samples

NT-S0615 Shear Box Set for 100x100 mm samples

**NT-S0620** Shear Box Set for Ø 100 mm samples

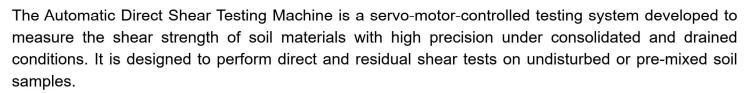
**NT-S0625** Shear Box Set for  $\emptyset$  2,5 inch samples

**NT-S6100** Slotted weight set, 50 kg (4x10 kg, 1x5 kg, 2x2 kg, 1x1 kg)



AASHTO T236, ASTM D3080; BS 1377:7; EN-ISO 17892-10





The device offers the ability to perform direct shear testing, one of the most critical tests used in analyzing soil mechanical behavior, fully automatically and without requiring user intervention.

**Fully Automatic Test Process:** Position resetting and system checks are performed automatically at the beginning of the test.

**Servo Motor Driven Mechanism:** Infinitely variable speed control between 0.00001 mm/min and 9.99999 mm/min, enabling forward and reverse movement.

**Load Application Device:** A lever-operated loading system with ratios of 9:1, 10:1, and 11:1 allows for a total vertical load of up to 5 kN with a weight of up to 50 kg.







## **Direct Shear Test Device**

#### **SPECIFICATIONS**

#### Sample Size Compatibility:

**Square:** 60x60 mm and 100x100 mm **Circular:** Ø60 mm, Ø100 mm, and Ø2.5"

#### **RS232 & PC Software Compatibility:**

The test process can be monitored via computer, graphical data can be generated (shear stress - vertical stress curves), and cohesion and internal friction angles are automatically calculated.



**Touch Screen & User Friendly Interface:** Test start, stop, data tracking and sensor calibrations can be easily performed via the microprocessor-controlled 6" color TFT screen.

#### **Technical Specifications:**

Capacity: 5 kN

**Loading Speed** : 0.00001 – 9.99999 mm/min (forward/reverse)

Reverse Speed : 10 mm/min

Vertical Displacement : 10 x 0.001 mm

Horizontal Displacement : 25 x 0.001 mm

Voltage : 220-240V, 50-60Hz

Note: Shear box assemblies (for different sizes) must be ordered separately.





## **Plastic Limit Test Set**

#### **PRODUCT CODE**

NT-S0520 Plastic Limit Test Set NT-S0521 Glass plate 300x300x10 mm

NT-S0522 Referance rod Ø 3 mm

NT-GH5841 Flexible spatul, 100 mm length

**NT-GC0525** Moisture content tins  $\emptyset$  55x35 mm. (6 pcs.)

NT-GP0010 Wash bottle 250 ml

NT-GS0140 Porcelain cup 100 mm



ASTM D4318 AASHTO T90 BS 1377:2 UNI 10014 UNE 103-104





#### **PRODUCT CODE**

Plasticity is a property of fine-grained soils and refers to the ability to be shaped without breaking. The plastic limit determines the lowest moisture content of soil, by which a sample can be rolled Ø 3 mm without breaking either longitudinally or transversely.





## **Proctor Mould & Rammers**

#### **STANDARDS**

ASTM D 698, D 1557, D 558; AASHTO T 99, T180, T 134; TS EN 13286-2; BS 1377:4, 1924:2; TS 1900-1

#### **SPECIFICATIONS**

Moulds and Rammers are used to determine the relationship between moisture and temperature in compacted soil. Moulds made of coated steel.

Consist of mould body, extension collar and base plate. Rammers used in compacting soil samples in proctor moulds are made of coated steel.



#### **Product Code & Technical Specifications**

#### **Proctor Moulds**

Product Code	Description	Inner Dia. (mm)	Body Height (mm)	Volume (cm3)	Weight (Approx.) kg
NT-S0060A	Standard Proctor Mould, ASTM	101.6 ± 0.4	116.4 ± 0.5	944.0 ± 14	7
NT-S0061A	Modified Proctor Mould, ASTM	152.4 ± 0.7	116.4 ± 0.5	2124 ± 25	9
NT-S0060EN	A Type Proctor Mould (Standard) TS	100 ± 1	120± 1	942	5
NT-S0061EN	B Type Proctor Mould (Modified), TS FN	150 ± 1	120 ± 1	2120	89
NT-S0060BS	1 liter Mould (Standard	105±0.5	115.5±0,5	1000	5
NT-S0061BS	CBR type Mould (Modified Proctor), BS /	152 ± 0.5	127 ± 1	2303	73
NT-S0060TS	1 liter Mould BS, TS 1900-1	105±0.5	115.5±0,5	1000	5
NT-S0061TS	Modified Proctor Mould, TS 1900-	1.524	1.155	~ 2106	8





## **Proctor Moulds & Rammers**

## Product Code & Technical Properties

#### **Proctor Rammers**

Product Code	Description	Rammer Dia (mm)	Falling Height (mm)	Rammer Mass (g)	Weight (Approx.) kg
NT-S0065A	Standard Proctor Rammer, ASTM	508	304.8± 1	2495 ± 23	45
NT-S0066A	Modified Proctor Rammer, ASTM	508	457 ± 1.3	4540 ± 10	8
NT-S0065EN	A Type Proctor Rammer (Standard), TS EN	50 ± 0.5	305± 3	2500 ± 20	45
NT-S0066EN	B Type Proctor Rammer (Modified), TS EN	50 ± 0.5	457 ± 3	4500 ± 40	8
NT-S0065BS	2,5 kg Rammer, BS	50 ± 0.5	300± 3	2500 ± 25	45
NT-S0066BS	4,5 kg Rammer, BS	50 ± 0.5	450 ± 4	4500 ± 50	8
NT-S0065TS	2,5 kg Rammer, Standard Energy,	50	305±1,5	2500±25	45
NT-S0066TS	4,5 kg Rammer, High Energy	50	458 ± 1,5	4500±50	8





## **CBR Mould & Accesories, ASTM**

#### **STANDARDS**

ASTM D1883; AASHTO T193

#### **SPECIFICATIONS**

This method was developed by the California State Highway Department and is accepted by nearly all currently applicable International Standards. The test is intended to evaluate the bearing capacity of soil for flexible pavement design in road construction. Compaction testing can be performed with both manual rammers and automatic compactors.

Made of steel and coated against corrosion, CBR equipment is available in different versions according to the various Standards in force.



#### ÜRÜN KODU

NT-S0070A	CBR Mold ASTM/AASHTO, 6" (152.4 mm) diameter x 7" (177.8 mm) high, with steel mold body, extension collar.
NT-S0071A	Spacer Disc. T-Handle, ASTM, 150.8 mm diameter x 61.4 mm height
NT-S0072A	Annular Surcharge weight, 2.27 kg
NT-S0073A	Slotted Surcharge weight, 2.27 kg
NT-S0074A	CBR Solid base plate
NT-S0075	Straightedge knife 300x30x5 mm
NT-S0076A	Filter Paper CBR No:5 x 150 mm çap (100 pcs)
NT-S0077A	Screen filter, Ø144 mm, 150 µm screen mesh
NT-S0067A	Tripod for CBR swelling test
NT-S0068	Adjustable Handle and Perforated Aluminum Plate for CBR swell Test
NT-SM0230	Analog dial indicator 30 mm stroke 0.01 mm reading
NT-SM0260	Digital dial indicator 25 mm stroke 0.01 mm reading
NT-SM0497	6 mold capacity soaking tank





## **CBR Mould & Accesories, BS**

#### **STANDARDS**

BS-1377-4

## **SPECIFICATIONS**

Made of steel and coated against corrosion, CBR equipment is available in different versions according to the various Standards in force.

The CBR Mould Set is supplied complete with Extension Collar and Perforated Base Plate. Other accessories must be ordered separately.



## ÜRÜN KODU

NT-S0080B	CBR type Modified Proctor Mould, BS inner dia.: 152 mm, height: 127 mm, including collar and base plate.
NT-S0081B	Spacer Disk BS, Ø150 mm x 50mm height
NT-S0082B	Annular surcharge weight BS/EN, 2 kg
NT-S0083B	Slotted surcharge weight BS/EN, 2 kg
NT-S0084B	CBR perforated base plate BS
NT-S0085B	Filter paper CBR No:1 x 150mm dia ,100 pcs.
NT-S0086B	C-type Key to dismantle the mould 2 pcs
NT-S0087B	Base fixing apparatus
NT-S0075	Straightedge knife 300x30x5 mm







## **CBR Mould & Accesories, EN**

#### **STANDARTLAR**

EN 13286-47

#### ÜRÜN TANIMI

Made of steel and coated against corrosion, CBR equipment is available in different versions according to the various Standards in force.

The CBR Mould Set is supplied complete with Extension Collar and Perforated Base Plate.

Other accessories must be ordered separately.











## ÜRÜN KODU

NT-S0090E CBR Mould, EN inner dia.: 150 mm, he including collar and base plate.	ght: 120 mm,
NT-S0091E Annular surcharge weight BS/EN, 2 kg	
NT-S0092E Slotted surcharge weight BS/EN, 2 kg	
NT-S0093E CBR perforated base plate EN	
NT-S0075 Straightedge Knife 300x30x5 mm	
NT-S0094E Filtrer Paper 148 mm dia (100 adet)	
NT-S0067E Tripod, for CBR swell test	
NT-S0068 Adjustable Handle and Perforated Alum CBR swelling Test	inum Plate for
NT-SM0230 Analog dial indicator 30 mm stroke 0.01 accuracy	. mm reading
NT-SM0260 Digital dial indicator 25 mm stroke 0.01 accuracy	mm reading
NT-SM0497 6 mold capacity soaking tank	





## SOIL

## Particle Size Distribution Hydrometer Analysis Test Set

#### **PRODUCT CODE**

NT-S0720 Hydrometer Analysis Test Set NT-S0722 High-speed mixer, 13,000 rpm, mixing cup, mixing blade, and a cup switch. 220-230V 50Hz, 1ph.

**NT-S0723** Sedimentation cylinder, 1000 ml capacity (6 pcs. included in the set).

NT-S0724 Glass Hydrometer Bath

NT-S0725 Thermostatically controlled heater.

NT-S0726 Circulation pump

**NT-S0727** Soil hydrometer 151H, 0.995-1.038 g/ml, 0.001 g/ml readibility

NT-S0728 Soil hydrometer 152H, 5-60 g/ml, 1 g/L readibility

**NT-GT00150** Thermometer, 0-50°C, 0.5°C readibility

NT-GS0220 Borosilicate Glass Beaker, 250 ml Capacity

**NT-GC0010** Sodium Hexametaphosphate, 1000 g

#### **STANDARDS**

ASTM D7928, ASTM D422, AASHTO T 88, TS 1900-1

#### **SPECIFICATIONS**

The hydrometer test is a sedimentation analysis performed to determine the grain size of silty and clayey soils consisting of very small-sized particles (grain sizes smaller than 0.075 mm) and the analysis method is based on Stokes' law.









# Liquid Limit Penetrometer Cone Penetrometer

#### PRODUCT CODE

NT-S0810 Liquid Limit (Cone) penetrometer NT-S0812 Conical penetration rod 30° and total 80 gr weight

NT-S0812/1 30°Cone test gauge

NT-S0813 Conical penetration rod 60° and total 60 gr weight

NT-S0813/1 60°Cone test gauge

NT-GC0525 Sample cup with cover Ø55x35 mm made of aliminium

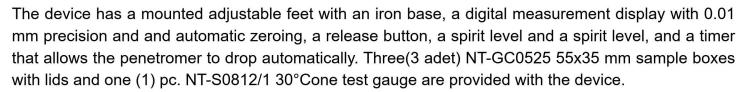
#### **STANDARDS**

BS 1377:2 UNI EN ISO 17892-12 UNI EN ISO 17892-06

#### **SPECIFICATIONS**

The conical tip liquid limit penetrometer apparatus is used to determine at which moisture content the clay soils changes from a plastic to a liquid state (liquid limit) and it is used also for the determination of user liquid limit is used also for the determination of user liquid limit liquid limit).

and it is used also for the determination of undrained shear strength.



## The following must be ordered seperatly

NT-S0813 Conical penetration rod 60° and total 60 gr weight NT-S0812/1 60°Cone test gauge









## **Plate Load Test Apparatus**

#### PRODUCT CODE

NT-S1011 100 kN Capacity Plate Loading Test Set

NT-S1012 200 kN Capacity Plate Loading Test Set

NT-S1015 500 kN Capacity Plate Loading Test Set

NT-S1001 Manual Hydraulic Pressure Jack – 600 bar Pressure, supplied with a pressure transducer, hydraulic hose and a digital backlight LCD display.





#### **STANDARDS**

BS 1377, ASTM D1194

#### **SPECIFICATIONS**

The plate loading test set is a field loading test that can be used to obtain data for calculating the deformation modulus and bearing coefficient of subgrades and compacted road components.

#### The Plate Loading Test apparatus is supplied with the following;

**NT-S1001** Manual Hydraulic Pressure Jack – 600 bar Pressure, supplied with a pressure transducer, hydraulic hose and a digital backlight LCD display.

**NT-S1011** /2 100 kN Capacity Loading Piston (Piston capacity is given according to the selected model).

**NT-S1011/3** Datum Bar – made of steel, 2.4 meters long and supplied with two legs and three dial indicator mounting brackets.

NT-SM0230 Dial indicator – 50 mm stroke length and 0.01 mm precision. 3 pcs

NT-S1011/5:150 mm diameter loading plate NT-S1011/7:305 mm diameter loading plate

And wooden carrying box.

#### Accesories:

NT-S1011/2: Datum Bar – made of steel, 2.4 meters long, supplied with two legs and three dial indicator mounting brackets.

**NT-SM0230**: Dial indicator – 50 mm stroke length and 0.01 mm precision. Three (3) pieces are used in the plate loading test.

NT-S1011 /4: Manual Hydraulic Pressure Jack - 600 bar

Pressure, supplied with a pressure transducer, hydraulic hose and a digital backlight LCD display.

#### NT-DSA0150 Digital Screen

Loading Plates – each plate was made of steel and galvanised for protection, thickness are 25 mm.

Loading plates needs to be ordered seperatly

#### Loading Plates;

NT-S1011/5: Ø150 mm loading plate
NT-S1011/6: Ø253 mm loading plate
NT-S1011/7: Ø305 mm loading plate
NT-S1011/8: Ø455 mm loading plate
NT-S1011/9: Ø610 mm loading plate
NT-S1011/10: Ø760 mm loading plate







## **Water Level Indicator**

## PRODUCT CODE

**NT-S0500** Water Level Indicator 50 Meter

NT-S0505 Water Level Indicator 100

Meter

NT-S0510 Water Level Indicator 150

Meter

#### **SPECIFICATIONS**



It is used for measuring the total depth of boreholes, water well depths, observation pipes, and water reservoirs.

When the electrode on the device's measuring probe contacts the water surface, an audible alarm and a warning light illuminate.

High-tensile steel tape measure and stainless steel conductor water level measurement probe; ASME approved







## **Speedy Moisture Tester**

#### PRODUCT CODE

NT-S5510 Speedy moisture test device

#### **STANDARDS**

AASHTO T217 ASTM D4944

#### **SPECIFICATIONS**

Speedy moisture tester is a portable test method for the determination of moisture content of soils, sand, and fine aggregates. The procedure involves the reaction between water and calcium carbide when mixed together give off a gas.



The amount of gas is directly proportional to the amount of water present in the sample and results in percentage are taken from the pressure gauge.

The tester is supplied complete with a precision scale, brushes, 2 pcs steel ball, measurement spoon and cup, and a calibration kit in a plastic carrying case.

Capacity 20 gr

Humidity range 0-20%