

FORE TESTING EQUIPMENT MANUFACTURING INDUSTRY **and INTERNATIONAL CO. / TURKIYE**

"TESTING SOLUTIONS - TECHNOLOGIES for QUALITY"

(Notice; for the more details; www.fore.com.tr)

SOIL GROUP

TESTING EQUIPMENT DESCRIPTIONS

LOW WEIGHT DEFLECTOMETER

As a FULL SOIL LABORATORY

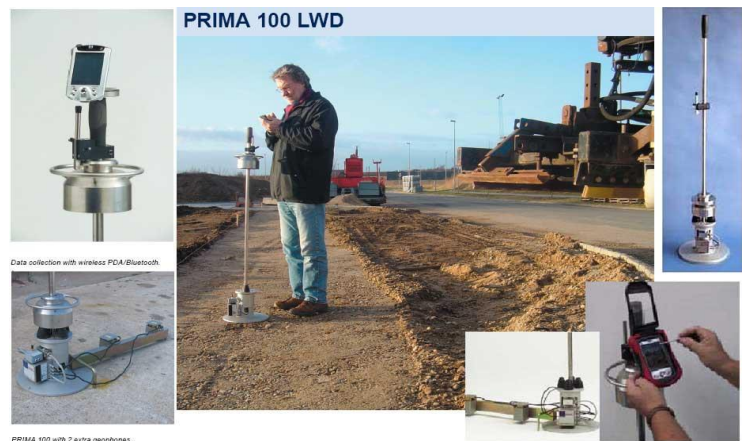
The easy way to quality assurance
Using a portable falling weight deflectometer, PRIMA 100, is the fastest, easiest and most secure way to bearing capacity determination and quality assurance of unbound layers. PRIMA 100 measures the surface modulus and presents results immediately to allow in-situ decisions.

The easy way to quality assurance
Using a portable falling weight deflectometer, PRIMA 100, is the fastest, easiest and most secure way to bearing capacity determination and quality assurance of unbound layers. PRIMA 100 measures the surface modulus and presents results immediately to allow in-situ decisions. (www.fore.com.tr)

EXPLANATIONS

FORE TEST

FR-Z108



PRIMA 100 is faster than isotope and Proctor. Isotope and PRIMA 100 measurements are done equally rapidly, whereas Proctor results will not be ready before the day after the measurements were performed.

PRIMA 100 applications

ROAD construction: Control of road base structures such as (sub)base, base course gravel, recycled concrete, recycled asphalt, slag and crushed aggregate. Isotope measuring and Proctor cannot be applied for recycled concrete and crushed aggregate. For this purpose PRIMA 100 is well suited, as static load bearing testing is far more expensive.

Ramps, parking spaces, terminals, etc.: Control of base structures for ramps, approach areas near industrial buildings, freight terminals, stocks, parking spaces, harbour terminals, etc.

Industrial flooring: Control of base structures before concrete or asphalt paving in industrial buildings, stocks, etc.

In the three above cases the employers consultant controls the E modulus values, as the E moduli form the basis of the projecting.

Excavations: In connection with excavations and re-establishment of road areas etc. the E moduli are determined during the excavation work and when re-establishing, compaction should reach the same modulus value. In this way differential settlements are avoided.

Sand cushions, foundation ditches: Control of compacted sand cushions for single-family houses etc. Control of foundation ditches.

In this case should be measured E moduli of > 30 MN/m² (MPa) in all points and an average of Ø 45 MN/m² for the entire sand cushion. In foundation ditches E moduli of > 10 MN/m² should be measured and an average of Ø 15 MN/m² in the entire ditch (the values correspond to requirements for similar vane strengths).

Construction of interim roads for e.g. construction work and timber transports:

In connection with construction of interim roads for heavy loads, the bearing capacity is controlled during construction as the demands regarding bearing capacity can be rather heavy in these cases.

Construction with geogrids: In connection with structures with geogrids for reinforcement of the sublayer the measurements will show, whether the geogrid has the expected effect.

Please note: In most cases measuring of E moduli is more relevant than measuring compaction degrees. This means that it is more relevant to use a falling weight deflectometer than to perform isotope measurements or use Proctor. However, it has not been possible to use a portable equipment for measurement of E moduli before PRIMA 100.

PERMEABILITY Testing Machine

PERMEMATER STAND CONSTANT
FALLING HEAD TESTER.
PERMEABILITY CELLS (4 ea or 3 ea)
PERMEAMETER STAND - 4 CELLS or 3
CELLS WEIGHT 28 KG
RESERVOIR TANK
VALUES and TUBING
(www.fore.com.tr)

FR-Z137



FORE TEST



**DIRECT SHEAR Testing Apparatus
(Motorized)**

ASTM D 3080 BS 1377:7 AASHTO T236
50KN-DIG.INDICATOR-LOAD CEL-2 DIGIT
GAUGE-HEAVES

Load Cell with Cap 5 kN
Variable Speed: 9.00000-0.00001 mm
Supplied with;
Dials (Vertical and horizontal), Beam
Loading Device, Shear Box 60 mm Ø or 60
mm Assembly, Weight set; 4 x 10kg, 5kg,
2x2kg, 1kg, 220-240 V / 50 Hz.
WEIGHT 110KG
(www.fore.com.tr)

FR-Z041



FORE TEST

**MOTORIZED UNCONFINED
Testing Machine**

ASTM D 2166 AASHTO T208
UNIAXIAL TESTER
Capacity; 50 kN
Load Cell and Digital Indicator
Peak Hold function for max load
Load Rate adjustable
220-240 V / 50 Hz.
(www.fore.com.tr)

FR-Z144



FORE A.Ş.
TEST CİHAZLARI
TEK EKSENLİ
TEST CİHAZLARI

FORE TEST

AUTOMATIC SOIL COMPACTOR

ASTM D 558 AASHTO T99 DIN18127
Fully automatic compaction
Automatic Blow Counter
Used both for 4" and 6" moulds
Automatic Turntable Rotation
With 2 Rammers (2,5 kg and 4,5 kg)
FOR CBR AND PROCTOR.
(www.fore.com.tr)

FR-Z035

FORE TEST



SOIL SAMPLING SET

HAND AUGER TEST SET
(www.fore.com.tr)

FR-Z020

FORE TEST



C.B.R. (DIGITAL)

California Bearing Ratio Tester

ASTM D1883 BS 1377:4AASHTOT193
Laboratuary Type
Digital-speed 12.7mm/min
Capacity; 50 kN
Digital Dial Indicator for Penetration
Load Indicator; Digital Load Cell
Supplied with; Penetration Piston
weight 87kg
(www.fore.com.tr)

FR-Z113

FORE TEST



**FORE A.Ş.
TEST CİHAZLARI
CBR TEST CİHAZLARI**

C.B.R.

California Bearing Ratio Tester

(www.fore.com.tr)

FORE TEST

FR-Z112



FORE A.Ş.
TEST CİHAZLARI
CBR TEST CİHAZLARI

FIELD C.B.R. Testing Apparatus

Capacity; 50 kN
DIAL GAUGE.
Mechanical Jack - 2 speed.
Load Ring - Calibrated with certificate
Set Including;
Penetration Dial (2 ea)
Dial Holder
CBR Penetration Piston
Extension Rods,
Surcharge Weight
(www.fore.com.tr)

FR-Z042

FORE TEST



C.B.R. MOULD

Standart and Modified Mould

CBR Mould
CBR Solid Base
CBR Performed Base
CBR Spacer Disc
Slotted Surcharge w
Annular Surcharge w
Swell Plate
CBR Tripod
Dial Gauge 0,01 mm
Soaking Tank

(www.fore.com.tr)

FR-Z143

FORE TEST



CONSOLIDATION Testing Machine

FORE TEST

ASTM D2435 D3877 AASHTO TT216
OEDOMETER
Front Loading Type
Load Ratios; 9: 1 / 10: 1 / 11 : 1
Rear Balancing Weight,
Screw Jack Support,
Suplied with;
Dial and Dial Holder,
Consolidation Cell,
Porous Disk (2ea),
Weight Set Total 100kg
-Oedometers can be ordered in nos 1-2-3
(www.fore.com.tr)

FR-Z111



POINT LOADING Testing Machine

FORE TEST

ASTM D 5731
Capacity 50kN
Conical Platens (hardened)
Used both in Lab and Field
Peak Value Holder
Rechargeable battery
Max. Sample dia 102 mm
Manuel - Hydraulic Loading
Digital reading and loadcell
Weight 30kg
(www.fore.com.tr)

FR-Z272



ROCK PERMEABILITY T.Machine

FORE TEST

(www.fore.com.tr)

FR-Z270

SAND EQUIVALENT Test Set

FORE TEST

EN 933-8 UNE 83131,7324
Rubber Stopper (2ea)
Measuring Cylinder (4 ea)
Measuring Can
Irrigator Tube
Syphon assembly bottle
Weighed foot
Funnel & Ruler
Carrying case
(www.fore.com.tr)

FR-Z051



PLATE LOADING Test Set

FORE TEST

PLATE LOADING TEST SET (FORE-SOIL78);
Hydraulic Loading, Manuel Pump and Manometer, Set of
Plates (3ea). Datum Bar, Dial Holder, Dial 0,01 mm (2ea).

DIGITAL PLATE LOAD TEST (FORE-SOIL79);
Hydraulic Loading, Load Cell and Digital Indicator,
Chargeable Power Supply for site, Manuel Pump, Set of
Plates (3ea), Datum Bar, Dial Holder, Dial 0,01mm (2ea)
ASTM D1195, BS 1377 : 9
(www.fore.com.tr)



LIQUID LIMIT TEST SET

FORE TEST

LIQUID LIMIT TEST SET (FR-Z050);
Casagrande Apparatus (Manuel)
Comprises; Cup, crank and cam mechanism
Supplied with blow counter; Growing Tool-
metal, Growing Tool-plastic.
ASTM D 4318, BS 1377 : 2, DIN 18122

(www.fore.com.tr)

FR-Z050



BENCH TYPE CONSOLIDATION Set

FORE TEST

ASTM D2435 D3877 AASHTO TT216
3 PIECE BENCH OEDOMETER
with heaves-dial gauge-cell
Front Loading Type
Load Ratios; 9 : 1 / 10 : 1 / 11 : 1
Rear Balancing Weight,
Screw Jack Support,
Supplied with; Dial and Dial Holder, Consolidation Cell,
Porous Disk (2ea), Weight Set Total 100kg
-Oedometers can be ordered in nos 1-2-3
(www.fore.com.tr)

FR-Z036



SAND DENSITY CONE Apparatus

FORE TEST

CONTAINER AND DENSITY PLATE
Base Plate
Plastic Jar
ASTM D 1556, AASHTO T 191
(www.fore.com.tr)

FR-Z044



TRIAXIAL - Compression Testing Machine and Apparatus

FORE TEST

Used to perform UU, CU, CD, UC and CBR Tests.
Touch Screen,
Load Cell with 50 kN,
Variable Speed; 9.00000-0,00001mm, Peak Hold - function for max load.

FR-Z106



The Machine is supplied with; Load Cell (Z Beam Type) and adaptor, Triaxial Cell for 35-50 mm samples, Cell accessories, Air/Water apparatus (pressure adjustable). Lab.Type Compressor, Sampling accessories, 10 ea "0" ring and membrane, RS 232 output for computer and downloading of data.

TRIAXIAL and UNCOFINED ROCK COMPRESSION Testing Machine

FORE TEST

(www.fore.com.tr)

FR-Z268



WATER BATH

FORE TEST

ASTM D1559 BS 598 AASHTO T245
24 LITERS
STEENLES STEEL
DIGITAL DEGRE CONTROL
WEIGHT 12KG
(www.fore.com.tr)

FR-Z026-1



MOTORIZED SAND EQUIVALENT SHAKER

FORE TEST

Digital stroke indicator
Stroke; 200 mm + - 10 mm
Rate; 175 str / min
220 - 240 V / 50 Hz
(www.fore.com.tr)

FR-Z021



MOTORIZED HYDROLIC SAMPLE EXTRUDER JACK

FORE TEST

Sampling for; Shelby, St.Proctor, Mod.Proctor, CBR, Triaxial
Piston Travels up/down 400 mm by hydrolic unit
Supplied with adaptors,
220 - 240 V 50 / Hz

MANUEL EXTRUDER (FORE-SOIL85/hb);
Hand operated pump, Suplied with adaptors
(www.fore.com.tr)

FR-Z134



SLAKE DURABILITY Testing Apparatus

FORE TEST

Rotates 20 r.p.m
Rotates 2 or 4 drums
Motorized drive unit
Acrylic water tank
Drums of ss mesh
Drums are 140 mm Ø x 100 mm
220 -240 V / Hz
(www.fore.com.tr)

FR-Z276

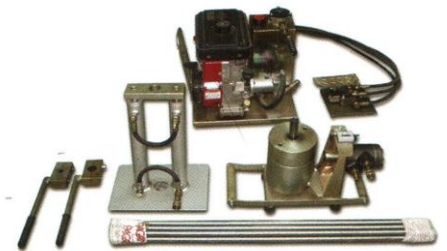


DYNAMIC PENETROMETER

FORE TEST

DYNAMIC PENETROMETER (FORE-SOIL63/hb);
Rammer; 30kg, 200mm drop, Rod Lifting Device-Hydraulic
Oleodynamic motor (3HP), Drop Counter
Cone and Sampler 32x1000 (10 ea)
Steel Rod Ø 20x1000 (10 ea)

LOAD RING PENETROMETER (FORE-SOIL62/hb);
"T" shape handling, Load Ring 1 k N diameter,
Graduated Extension Rod,
30 C cone with area 645 mm²
(www.fore.com.tr)



SIEVE SHAKER

Shaking 20cm and 30cm sieves
Time Controlling,
220 Volt 50 Hz.
Shaking frequency controlling.
(www.fore.com.tr)

FR-Z034-3



FORE TEST

PORTABLE CONE PENETROMETER

POCKET PENETROMETER (FORE-SOIL60/hb);
Peak Value indicator,
Supplied with case,
Range; 0-5 kgf/cm²



DIAL PENETROMETER (FORE-SOIL61/hb);
Peak Value indicator, Dial diameter; 60 mm
Zero setting by push button
5 different plungers; 6,35-10-15-20-25 mm dia
(www.fore.com.tr)



FORE TEST

DYNAMIC CONIC PENETROMETER

DIN 4049
10kg drop rammer 500mm fall and anvil
11 sounding rod 22mm diam.x 1m collar and
guiding rod
carrying case
70kg
(www.fore.com.tr)

FR-Z136



FORE TEST

SOIL CONE PENETROMETER

BS 1337-2
CASE ALIINIUM BASE 150MM DIA.DIAL SUBD
0.1 MM DEVICE
PENETRATION TEST CONE TWO SAMPLE BRAS
CUP
WEIGHT 14 KG
(www.fore.com.tr)

FR-Z142



FORE TEST

HYDROMETER TESTING SET

FORE TEST

ASTM D 422 AASHTOT 88 BS 1377-2
Sedimentation with Hydrometer Method.
High Speed Stirrer with cup (ss)
Sedimentation Cylinder 1000 cc (4ea)
Glass Tank - water bath
Hydrometer 151 and 152 H
ASTM D422, AASHTO T88, BS 137 : 2
(www.fore.com.tr)

FR-Z138



MECHANICAL ANALYSIS STIRRER

FORE TEST

(Hydrometer Stirrer)

ANALIYS STIRRER 10000rpm
paddle and cup

(www.fore.com.tr)

FR-Z019



SPEEDY MOISTURE METER

FORE TEST

Rapidly field moustire testing. (FR-Z140)0 to 20 % HUMIDITY RANGE
Supplied with; Portable Electronic Balance (capacity; 200gr-0,01gr),
Steel Balls, Tester Reagent. Max cap. 20 gr.(www.fore.com.tr)

MOISTURE / TEMP TESTER;
Specially for sand, aggregate,
Insertable 1-2 mt depth,
Moisture; %0-35 (%011),
Temp.; -20 / +60 (%0,1 C),
Easily recalibrated,
Built-in as autocal facility.



ROCK TESTING HAMMER

FORE TEST

Impact Energy; 0,74 N x m
Rock cradle
Similar to Concrete Testing Hammer
Core is positioned horizontally
Carrying case
(www.fore.com.tr)

FR-Z271



PORTABLE ROCK CROSSWISE

Testing Machine

(www.fore.com.tr)

FORE TEST

FR-Z275



VANE TESTING APPARATUS

With WIND (Laboratuary Type)

VANE TESTER (FORE-SOIL65/hb);
Supplied with ; Vane 19 mm (0-120 k PA), Vane 33 mm (0-28 k PA)
Extension Rod and Adaptor, shear strength of soi.

HAND VANE TESTER (FORE-SOIL64/hb);
Supplied in plastic container;
Vane 25 mm Ø (0-10 N/cm²), Vane adaptor (0-2 N/ cm²),
Vane adaptor (0-25 N/cm²)
(www.fore.com.tr)



FORE TEST



COMPACTION MOULD 6"

Standart Proctor Mould (6"Ø)
Standart Proctor Rammer (4,54 kg)
ASTM-BS-AASHTO
(www.fore.com.tr)

FORE-SOIL67/hb

FORE / TÜRKİYE



COMPACTION MOULD 4"

Standart Proctor Mould (4"/105 mm)
Standart Proctor Rammer (2,5 kg)
ASTM-BS-AASHTO
(www.fore.com.tr)

FORE-SOIL66/hb

FORE / TÜRKİYE



RAMMER FORMODIFIED 4.5 kg

(www.fore.com.tr)

FORE-SOIL67/hb-2

FORE / TÜRKİYE



RAMMER FOR PROCTOR 2.5 kg

(www.fore.com.tr)

FORE-SOIL66/hb-2

FORE / TÜRKİYE



COMPACTION DETERMINATION

Ring (12" dia) - machined,
Used for compaction determination,
Complete with accessories
(www.fore.com.tr)

FORE-SOIL70/hb

FORE / TÜRKİYE



MOISTURE CANS

(www.fore.com.tr)

FR-ZMC1

FORE / TÜRKİYE

FR-GL

CORE CUTTER

Supplied with saw disc
Cutting Rock Core - Axial
Coolant inlet and outlet
(www.fore.com.tr)

FR-AG55/hb

FORE TEST



*Notice; Pictures are almost same with ordering. Pictures are as SAMPLE.
Everytime, the coming ordering products' shapes and technical specifications can be better than catalog and pictures.
NOTICE; ALL ITEMS WILL BE IN INTERNATIONAL WOODEN CASE PACKING.*