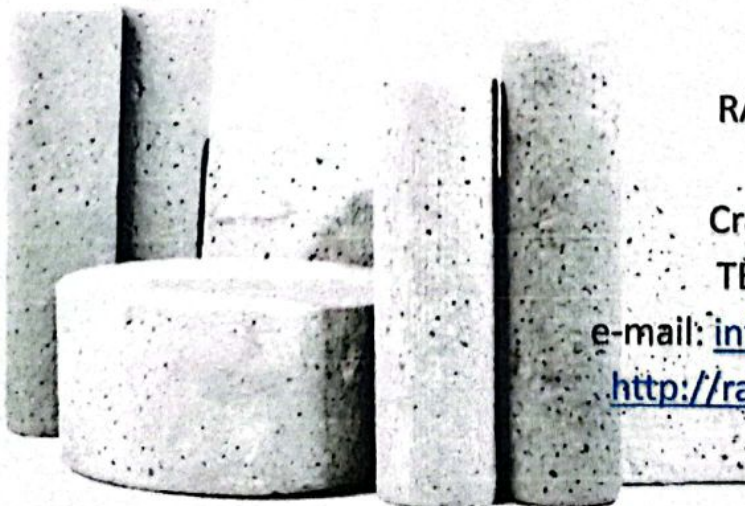




RALTEC LTDA.

**CATÁLOGO DE EQUIPOS DE
ENSAYO PARA MATERIALES
DE CONSTRUCCIÓN
SECTOR CEMENTOS Y
CONCRETOS**



RALTEC LTDA.

BOGOTÁ

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<http://raltecequipos.com/>

TEST SIEVE

Stainless Steel Sieve

Brass Sieve

TS-200/300

Made from stainless steel, Brass

Diameter: 200mm, 300mm

Other size: 100mm, 450mm etc.



TS-200/300



UC-300

Sieve Aperture Size Table

Aperture	Mesh	Aperture	Mesh
125 mm	5 in.	2.36 mm	No.8
106 mm	4.24 in.	2.00 mm	No.10
100 mm	4 in.	1.7 mm	No.12
90 mm	3-1/2 in.	1.4 mm	No.14
75 mm	3 in.	1.18 mm	No.16
63 mm	2-1/2 in.	1.00 mm	No.18
53 mm	2.12 in.	850 um	No.20
50 mm	2 in.	710 um	No.25
45 mm	1-3/4 in.	600 um	No.30
37.5 mm	1-1/2 in.	500 um	No.35
31.5 mm	1-1/4 in.	425 um	No.40
26.5 mm	1.06 in.	355 um	No.45
25.0 mm	1.00 in.	300 um	No.50
22.4 mm	7/8 in.	250 um	No.60
19.0 mm	3/4 in.	212 um	No.70
16.0 mm	5/8 in.	180 um	No.80
13.2 mm	0.530 in.	150 um	No.100
12.5 mm	1/2 in.	125 um	No.120
11.2 mm	7/16 in.	106 um	No.140
9.5 mm	3/8 in.	90 um	No.170
8.0 mm	5/16 in.	75 um	No.200
6.7 mm	0.265 in.	63 um	No.230
6.3 mm	1/4 in.	53 um	No.270
5.6 mm	No.3-1/2	45 um	No.325
4.75 mm	No.4	38 um	No.400
4.00 mm	No.5	32 um	No.450
3.35 mm	No.6	25 um	No.500
2.80 mm	No.7	20 um	No.635

ULTRASONIC CLEANER

Stainless Steel Ultrasonic Cleaner

UC-300

Inner size: 300x240x150mm

330x300x150mm

Power: 0.24Kw, 0.36Kw

Equip Stainless Steel

Washing mesh Basket

SIEVE SHAKER

Standard Mechanical Sieve Shaker

SS-300

For sieve diameter: 200mm, 300mm

Vibration: 221times/ min

Vibration journey: 25mm

Peak attack times:147times/min

Power: 0.37Kw

High Frequency Sieve Shaker

SS-301

EN 932-5

Vibration frequency: 42HZ

Vibration mode: Upper and down ways



SS-300



SS-301

SAMPLING

Soil Hand Auger HA-5

5meters with T handle

Cutting Ring Soil Sampler SS-100

100cm³, 200 cm³ capacity

Stainless Steel Soil Sampler SS-1

1m Length



HA-5



SS-100



SS-1

EXTRUDER

Universal Extruder UE-150

Max. extruding power: 125KN

Max. sample: Dia.152mm

Working stroke: 175mm

Electric Hydraulic Universal Extruder UE-E150

Max. extruding power: 150KN

Max. sample: Dia.152mm

Working stroke: 240mm

Working speed: 70mm/min.

DYNAMIC PENETRATION

Light Weight Dynamic Penetrometer DP-L10

Drop weight: 10Kg±10g

Fall height: 500mm

Max. Penetration: 600mm

Drive conical angle: 60°

Drive conical point: dia.40mm

Standard Dynamic Penetrometer DP-S635

Drop weight: 63.5Kg±10g

Fall height: 760mm

Drive conical angle: 60°

Drive conical point: dia.74mm

Dynamic Penetrometer DCP DP-EU8

Cone: 60° point and 20mm dia.

Penetration rod: up 803mm, below 910mm

Drop weight: 8kgs

Falling height of 575 mm



UE-150



UE-E150



DP-L10



DP-S635

SAMPLE MIXER

Laboratory Mixer LM-10

Capacity: 10L

Speed: 60-1000RPM

Power: 0.5Kw



DP-EU8





MOISTURE TEST

Speedy Moisture Tester MT-5

Used for determine of moisture content of soils, sand and fine aggregates.

Measuring capacity: 5g

Pressure gauge:

0.16MPa \pm 0.0005MPa

Moisture Determination Balance MT-100

It can dry and weigh sample and get moisture content automatically.

Measuring range: 100g

Weighing division: 0.001g

Moisture division: 0.01%



MT-5



MT-100

SPECIFIC GRAVITY

Pyknometer

P-50/100/250/500

50ml, 100ml, 250ml, 500ml

Hydrometer

TM-85

0.995-1.050 g/ml.

BS 1377/NF



P-50/100/250/500



TM-85



PL-30



SL-30



LSM

PLASTIC LIQUID LIMIT

Electric Plastic Liquid Limit Tester (Cone Penetrometer)

PLL-76/100

used to determine the moisture content at which clay soils pass from a plastic to a liquid state.

Measuring range: 22mm

Division: 0.1mm

Nonlinear error: 2%

cone's weight:

76g /100g \pm 0.1g

Cone: 30° \pm 2°



PLL-76/100

Liquid Limit Tester

Electric or Manual LL-30

Consist of removable brass cup, adjustable crank and cam mechanism, blow counter and base.

Plastic Limit Test Set PL-30

Supplied with 6 aluminum boxes, one mixing dish, one spatula, one glass plate, one rod and one 250ml graduated cylinder

Shrinkage Test Set SL-30

Liner Shrinkage Mould in brass LSM



LL-30 Manual



LL-30 Electric

FRONT LOADING OEDOMETERS

Front Loading Oedometer (Consolidation Tester) CT-800/1600/3200

It determines the rate and magnitude of consolidation of soil.

Specimen: 30cm², 50cm²

Load grade: 12.5, 25, 50, 100, 200, 300, 400, 800, 1600, 3200

Single Lever Consolidation Tester CT-400

Specimen: 30cm²

Load grade: 12.5, 25, 50, 100, 200, 300, 400



CT-800/1600/3200



CT-400

SHEAR TEST

Portable Manual Shear Testing Machine ST-M30

Testing area: 30cm²

Max. loading: 1.2KN

Lever ratio: 1: 2

Electric Shear Testing Machine ST-E30

Testing area: 30cm²

Max. loading: 1.2KN

Lever ratio: 1: 2



ST-M30



ST-E30

Electric Tetragenous Shear Testing Machine ST-T30

Area of the soil sample: 30cm²

Lever ratio: 1:12

Vertical loading: 50, 100, 200, 300, 400(Kpa)

Max. horizontal loading: 1.2KN

Shear rate: 0.02, 0.8, 2.4mm/min



ST-T30

TRIAXIAL LOAD TEST

Digital Triaxial Machine TM-D10/30/80

The settlement of soil-supported foundations and the change in earth pressure due to small movement of retaining walls or other earth supports, the yield of soil caused by local application of load, are determined by the relation between stress and strain in soils. It is carried out with a triaxial compression test. It can perform unconsolidated-undrained shear test (UU), consolidated-unstrained shear test (CU) and consolidated-drained shear test (CD).

TM-D10

Loading Capacity: 10KN

Max. sample size: $\Phi 39.1 \times 80$ mm

Max. platen travel: 50mm

Speed: 0.0001-4.8mm/min.

Confining pressure: 0-1Mpa

Back pressure: 0-0.6Mpa

Pore water pressure: 0~1Mpa

Volume change: 0-25ml

Division of volume change: 0.1ml

TM-D30

Loading Capacity: 30KN
 Max. sample size: $\Phi 61.8 \times 125$ mm
 Max. platen travel: 90mm
 Speed: 0.0001-4.8mm/min.
 Confining pressure: 0-2Mpa
 Back pressure: 0-0.8Mpa
 Pore water pressure: 0~2Mpa
 Volume change: 0-50ml
 Division of volume change: 0.1ml

TM-D80

Loading Capacity: 80KN
 Max. sample size: $\Phi 101 \times 220$ mm
 Max. platen travel: 100mm
 Speed: 0.0001-4.8mm/min.
 Confining pressure: 0-2Mpa
 Back pressure: 0-1Mpa
 Pore water pressure: 0~2Mpa
 Volume change: 0-100ml.
 Division of volume change: 0.1ml

Accessories:

Triaxial cell, proving ring, saturator, membrane mould, split mould, compactor, soil cutter, porous stone, latex membrane, pressure pad, rubber hose, nylon tube, etc.

Automatic Triaxial Machine**TM-A10/30/80**

Machine control displacement rate and loading rate automatically and continuously. It perform stress and strain unconfined test, UU, CU and CD compression shear test. Once equip different test container and controlled module, it can perform more test such as K_0 consolidation, static confining pressure coefficient, multi stress path triaxial, and tension.



TM-D10/30/80



TM-A10/30/80

**SOIL COMPACTOR****Standard Proctor Mould and Rammer SC-M100**

Rammer weight: 2.5Kg
 Rammer diameter: 50mm
 Fall height: 300mm
 Proctor Mould: $\Phi 100 \times 127$ mm

Modified Proctor Mould and Rammer SC-M152

Rammer weight: 4.5Kg
 Rammer diameter: 50mm
 Fall height: 450mm
 Proctor Mould: $\Phi 152 \times 170$ mm
 Pad of proctor mould: 50mm

Automatic Proctor/CBR Compactor SC-A100-152

Rammer weight: 2.5Kg, 4.5Kg
 Rammer diameter: 50mm
 Fall height: 300mm, 450mm
 Proctor Mould:
 dia. 100×127 mm,
 dia. 152×170 mm



SC-M100/152



SC-A100-152

CALIFORNIA BEARING RATIO / CBR

CBR Loading Frame and Press CBR-30/50

Digital Model CBR-A30/50

CBR motorized loading press, 50 kN capacity, complete with 50 kN load ring, adjustable penetration piston and dial gauge.

Maximum load: 30KN, 50KN.

Test Speed: 1mm/min (BS Model)

1.27mm/min (ASTM Model)

Penetration piston: Adjustable.

CBR Mould Accessories

CBR-M152

CBR mould complete with collar and perforated base plate
152.4 mm dia. x 177.8 mm, tripod,
spacer disc with T handle,
Perforated plate
slotted surcharge weight,
annular surcharge weight.



CBR-30/50



CBR-D30/50

UNCONFINED COMPRESSION

Electric Strain Controlled Unconfined Compression Apparatus UC-06

It is used to determine the unconfined compressive strength and the sensitivity of soft clay of stronger saturation.

Platen travel: 30mm

Max. axial load: 0.6KN, 6KN

Molding cylinder: Dia. 39.1mm, 50-100mm

SAND REPLACEMENT METHOD

Sand Density Cone Apparatus

SR-150 ASTM Version

Specification: dia.150mm

Sand Replacement Complete Set

SR-S100/S150/S200 BS Version

Specification: dia.100, dia.150, dia.200mm

Complete sets: pouring cylinder, calibration container and metal tray.



CBR-M152

SR-150 SR-S100/S150/S2

PLATE BEARING TEST

Plate Bearing Test Apparatus

PB-50/100

It used to estimate bearing capacity of road base or ground base, which is filled and compacted after coarse and fine grained soil, also can used to count deformation modulus of even groundsill.

Load plate: 300mm

Hydraulic jack max. load: 50KN, 100KN

Hydraulic jack journey: 12mm

Span: 3000mm

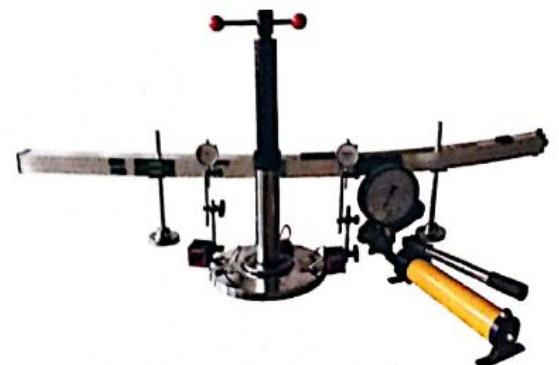
Electric oil pump rated pressure: 70Mpa

Pressure gauge: 0-25Mpa

Displacement range: 0-10mm



UC-06



PB-50/100

Dynamic Plate Load Test Apparatus

Light Drop-weight Tester

PB-225

The dynamic plate load test employing the Light drop-weight tester is used in earthwork and road construction to determine the soil bearing capacity and the compaction or consolidation of soils and non-cohesive subbases, as well as for soil improvement applications.

Testing range: $10\text{Mpa} \leq E_{vd} \leq 225\text{Mpa}$

Test depth: 0-500mm

Loading unit: 15kgs

Hammer weight: 10kg

Max. impact force: 7.07KN

Duration of impact: 18 ms

Loading plate diameter:

300 mm

Plate Weight; 15Kgs

Plate thickness: 20 mm

Settlement measuring range:

0.10 – 2.0 mm \pm 0.02 mm



PB-225

PAVEMENT RESILIENCE

Pavement Resilience Test Apparatus (Benkelman Beam Test set Apparatus)

BBA-3.6/5.4/7.2

Specification: 3.6m, 5.4m, 7.2m

Dial gauge: 10mm/0.01mm

Level ratio: 2:1



BBA-3.6/5.4/7.2

PERMEABILITY TEST

Constant Head Permeameter

CP-100

Cylinder inner diameter: $\Phi 100\text{mm}$

Cylinder height: 400mm

Three pressure point

Distance between the measuring
pressure point: 100mm



CP-100

Falling Head Permeameter

FP-30

Specimen's dimensions:

dia.61.8 \times 40mm (30cm²)



FP-30

FP-S3/5

3 or 5 pipes stand



FP-S3/5

SHRINKAGE AND EXPANSION

Soil Cutting Sampler

SCS-39/61

Sample size: dia.39.1mm,
dia.61.8mm

Soil Shrinkage Meter

SSM-61

Specimen spec.:

dia.61.8mm \times 20mm

Perforated plate surface:

Pore surface: 2:1

Plate spec.: dia.10 \times 4mm

Soil Expansion Meter

SEM-61

Soil specimen:

dia61.8mm \times 20mm

Level adjust: bottom screw



SCS-39/61



SSM-61



SEM-61

SOIL DENSITY

Non-Nuclear Soil Density Tester EDG-1S

It used to measures the physical properties of the roadbed and foundation compaction soils.

Density humidity range: standard compaction soil area

Measuring depth: 300mm

GPS precision: 3m

Operation environment temperature: 0-50°C

Operation environment humidity: 5-90%

Power supply: 12V, rechargeable lithium battery

Battery: it can continuously work 8h with completed charging.

Relative Density Meter RD-1

It's applied to test minimum void ratio of non-cohesion soil, whose granular diameter is no bigger than 5mm, thus to provide data for relative density calculation.

Big metal barrel volume: 250cm³ (dia 48x13.9mm)

Small metal barrel volume: 1000cm³ (dia 100x127mm)

Hammer weight: 1.25kg

Drop: 15cm

Hammer foundation: diameter 45mm

Electric Relative Density Meter ERD-2

Metal cylinder: 250ml, dia. 50x127mm

Hammer: weight 1.25kgs, falling height: 150mm, diameter 5mm, 32times/min.

Vibration hammer: each 155times/min.

Time range: 0-15min.

Working voltage: AC220V

VANE SHEAR

Vane Shear Testing Apparatus VS-1

It used for determining the natural shear strength of saturated soft clay in the field.

Vane shear plate size: dia. 75 x h150mm and dia. 50 x h100mm

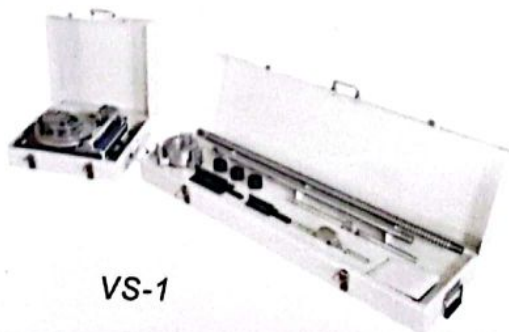
Large allowable torque of steel ring: 80N.m

Torque accuracy: 0.55N.m

Outer size: upper part: 430 x 910 x 220mm

Below part: 1000 x 75 x 75mm

Accessory guide: 1040 x 30mm



VS-1



EDG-1S



RD-1



ERD-2

MENARD PRESSURE

Menard Pressuremeter PY-3/4/5

In-situ Pre-boring pressure testing

Pressure meter sensor:

Outer diameter: Dia. 50mm, 57mm, 74mm

Total test length: 400, 540mm

Length of test part: 210mm, 250mm

Require test hole diameter: dia. 75mm-dia. 83mm

Test pipe section surface: 20cm³

Pressure-meter cylinder volume: 808cm³

Test cylinder capacity: 860cm³

Max Pressure: 2.5 Mpa, 4.0Mpa, 5.5Mpa

Min reading of pressure gauge: 0.005Mpa



PY-3/4/5

SAND EQUIVALENT SHAKER

Motorized Sand Equivalent Shaker SE-203

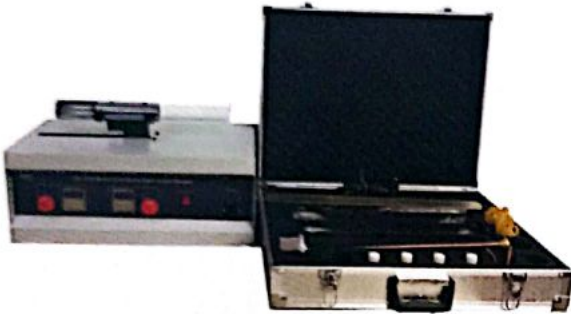
Stroke: 203mm

Rate: 180strokes/min

Working voltage: AC220V 50HZ

Test tube size: Dia.32X42±0.25mm

A timer stops the machine at the end of the test.



SE-203

FLAKINESS AND ELONGATION INDEX

Thickness and Length Gauge TL-100 EN Standard

Used to determine if aggregate particles are to be considered flaky and elongated.

Grid Bar Slotted Sieve BSS-1

Include 2.5, 3.15, 4, 5, 6.3, 8, 10, 12.5, 16, 20, 25, 31.5, 40mm total 13pcs

PARTICLE DENSITY

Sand Absorption Cone and Tamper SAC-74

It used in determining the specific gravity and absorption of fine aggregates.

Mould size: 38x89x74mm

Tamping rod: Dia.25mm



TL-100



BSS-1



SAC-74



ACV-150



AIV-1375

RESISTANCE DETERMINATION

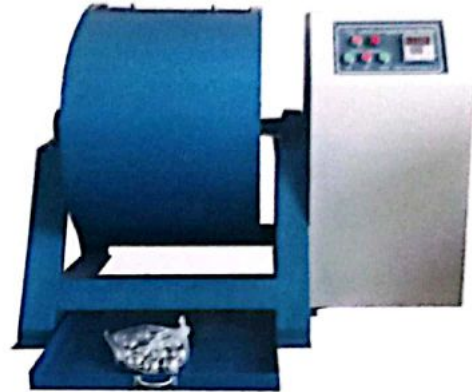
Los Angeles Abrasion Machine LAA-33

Drum size: Dia.710 x 510 mm

Electric motor speed: 30-33 RPM

Voltage: AC380V or AC220V

Equip12 abrasive charges



LAA-33

IMPACT AND CRUSHING VALUE

Aggregate Impact Value Tester AIV-1375

Hammer weight: 13.75kg±0.05kg

Fall height: 380±5mm

Impact cup: Dia.102×50mm

Aggregate Crushing Value Tester ACV-150

It provides relative resistance crushing value under gradually applied compressive load.

Inner size: Dia.150mm

SKID RESISTANCE AND FRICTION

Skid Resistance and Friction Tester RFBM-III

Digital Model RFBM-DIII

It is used to measure surface friction properties.

Pendulum weight: 1500g

Moment of pendulum's barycenter: 410mm

Face-on static pressure on pavement: 22.2N

Distance between edge and center of pendulum: 508mm

Pendulum's sliding distance on pavement: 126mm



RFBM-III



RFBM-DIII

POINT LOAD

Digital Point Load Tester

PLT-100

It is used to test the rock strength of rock samples or cores.

Max. working power: 100KN

Precision: $\leq 1\%$ F.S

Piston diameter: dia.32mm

Max loading distance: 90mm

Max. sample width: 90mm

Peak value memorized



PLT-100

POLISHED STONE VALUE

Accelerated Polishing Machine AP-1

It is used to measure resistance of road stone on polishing action of vehicle tires on a road surface.

Road wheel speed: 320RPM.

Electric motor: 550 W

Voltage: 220V/380V

Rubber wheel static pressure: 400N

METHYLENE BLUE TEST

Digital Methylene Blue Test Set

MB-600

The test is performed for determining the clay content in the fines fraction of the aggregates.

Electric agitator Speed: 0-600RPM



AP-1



MB-600



SF-R1 SF-A1

BULK DENSITY

Standard Rock Funnel SF-R1

Standard Aggregate Funnel SF-A1

It is used to test bulk density, compacting density and void ratio for rock or aggregate.

COMPRESSION AND FLEXURAL TEST

Digital Compression Testing Machine CT-D2000

It is suitable for the compressive strength test of building materials such as concrete, cement, airbrick, fire proofing tile, engineering ceramics and building stone.

Capacity: 2000KN

Relative indication error: $\pm 1\%$

Platen size: 320x260mm

Vertical clearance: 330mm

Max. piston stroke: 50mm

Rated pressure of the hydraulic pump: 40Mpa

Power: AC220V/380V 50Hz

Piston rise speed: 50mm/min.

Piston back speed: 20mm/min.

Analogue Compression Testing Machine CT-A2000

Capacity: 2000KN

Measuring range: 0-800KN, 0-2000KN

Relative indication error: $\pm 2\%$

Platen size: 320x260mm

Vertical clearance: 330mm

Max. piston stroke: 50mm

Digital Compression Testing Machine (Automatic Screw Post Moving) CT-DA2000/3000

Automatic screw post moving

Capacity: 2000KN/3000KN

Relative indication error: $\pm 1\%$

Platen size: 320x260mm

Vertical clearance: 330mm

Max. piston stroke: 50mm

Hydraulic pump rated pressure: 40Mpa

Computer Controlled Hydraulic Servo Compression Testing Machine CT-P2000/3000

Capacity: 2000KN/3000KN

Measurement accuracy: $\pm 1\%$

Platen size: 320x260mm

Max. piston stroke: 100mm

Computer Controlled Compression Testing Machine Heavy Duty CT-PH2000/3000

Platen size: 370x370, 400x500mm

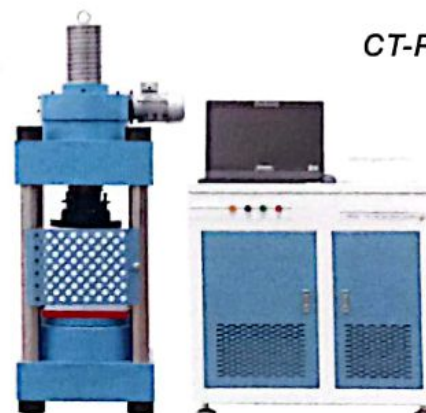
Max. piston stroke: 100mm, 150mm

Piston diameter: 310mm, 400mm

Weight: 1600kgs, 2300kgs



CT-PH2000/3000



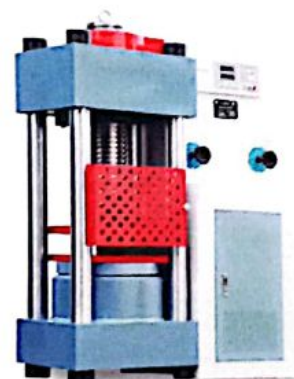
CT-P2000/3000



CT-D2000



CT-A2000



CT-DA2000/3000

Digital Compression and Flexural Testing Machine CFT-D300

It is used to perform compressive strength test of the cement and the flexural strength of the concrete.

Capacity: 300KN

Relative indication error: $\leq \pm 1\%$

Rated pressure of the hydraulic pump: 25Mpa

Diameter of the flexural roller: 30mm

Vertical clearance: 165mm

Power of motor: 0.75KW

Working voltage: 380V/220V

Concrete Flexural Clamp F-150X550

150X150X550mm



CFT-D300



F-150X550

CORE DRILLING MACHINE

Electric Core Drilling Machine ECD-150

It used in the laboratory or field for cutting core samples from hard material such as rock asphalt and concrete.

Power unit: 2Kw

Coring range: Dia.25-150mm

Coring depth: 400mm

Electric Core Drilling Machine ECD-250/300/450

Power unit: 2.3-4.5Kw

Coring range: Dia.25-250/400mm

Coring depth: 400mm

Speed: 700RPM, 450/850RPM



ECD-250/350/450

Pavement Core Drilling Machine PCD-200

Power unit: 5.5HP, 8.5HP.

Coring range:

Dia.25-200mm

Coring depth: 400mm

Speed: 800-1200RPM

Japan Yamaha Engine



PCD-200

Multifunctional Electric Core Drilling Machine ECD-M150

It can perform Core drilling, cutting, grinding on one machine.

Power unit: 2.2-2.5Kw

Coring, grinding range: Dia.25-150mm

Speed: 500-1000RPM



ECD-150



ECD-M150

SPECIMEN GRINDING

Electric Grinding Machine GM-100/150

Used to grind and polish concrete specimens, natural stones, ceramic materials.

Specimens: 50-100/150mm

Vertical travel: 47.5-215mm

Grinding wheel speed: 2100RPM

Voltage: 220V

Power: 1700W/2600W



GM-100/150

Electric Double-face Grinding Machine GM-200

Grinding wheel: Dia. 200 mm

Vertical travel: 350 mm

Max. specimen size: up to 150 mm cubes and cylinders or cores up to 300mm height

Automatic cross feed in both directions

Grinding spindle motor: 1100 W, 2pcs.

Feed motor: 550W



GM-200

DIMENSIONAL VERIFICATION

Concrete Sample Verification Apparatus SV-150

Sample diameter: 150mm



SV-150

SLUMP TEST

Slump Cone Test Set SC-300

Stainless Steel Slump Cone Test Set SC-S300

Slump cone cylinder: Dia. 100-200X300mm

Tamping rod: Dia. 16X600mm



SC-S300



SC-300

CONCRETE DENSITY

Unit Weight Measure UW-1-30

1L, 2L, 5L, 7L, 10L, 20L, 30L

AIR CONTENT

Concrete Air Entrainment Meter AE-7

Capacity: 7L

Aggregate size: Max. 40mm

Graduations: 0.1% up to 6%;

0.2% from 6 to 10%



AE-7

PENETRATION SETTING TIME

Concrete Penetrometer CP-100

Digital Display Model CP-D100

Dial gauge accuracy: 5N

Penetration needle:

100mm², 50 mm², 20 mm²



CP-100 CP-D100

VEBE TEST

Vebe Consistometer VEBE-300

It is used to determine consistency and workability of concrete. It consists of vibrating table, container, slump cone, graduated rod and plate.

Slump cone: Dia. 100-200x300mm \pm 2mm

Container: Dia. 240 \pm 5mmx200 \pm 2mm

Vibrator frequency: 3000 \pm 200hit/min.

Vibration table amplitude: 0.5 \pm 0.10mm

Power: 250W



UW-1-30



VEBE-300

CONCRETE MIXER

Horizontal Forcing Type Concrete Mixer CM-H60

Capacity: 96L

Yield: 60L

Speed of the mixing shaft: 45RPM

Motor power: 2.5KW



CM-H60

Drum Type Concrete Mortar Mixer CM-D115

Capacity: 180L

Yield: 115L

Motor power: 1KW

Motor speed: 2800RPM

Pan Type Concrete Mixer CM-P300/350/400

Capacity: 300L, 350L, 400L



CM-D115



CM-P300/350/400

CONCRETE MOULD

Cast Iron Concrete Cube Mould M-CC100/150/200

High quality cast iron 10kgs

Dimension: 100x100x100mm

150x150x150mm, 200x200x200mm

Plastic Concrete Cube Mould

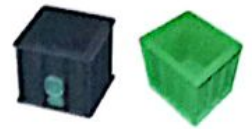
M-PC100/150/200

Black: Made from plastic

Blue: Made from high quality ABS plastic



M-CC100/150/200



M-PC100/150/200

Plastic Three-gang Concrete Cube Mould M-P3X100/150/200

Dimension:

100x100x100mm

150x150x150mm,

200x200x200mm

Made from plastic



CM-P3X100/150/200

Cast Iron Concrete Beam Mould (Flexural Mould)

M-C100X300/150X550

Dimension:

100x100x300mm

150x150x550mm

Made from high quality case iron



M-C100X300/150X550

Plastic Concrete Beam Mould M-P100X300/150X550

Made from plastic



M-P100X300/150X550

Cast Iron Concrete Cylinder Mould M-C100X200/150X300

Dimension: Dia. 100x200mm

Dia. 150x300mm

Made from high quality cast iron

Plastic Concrete Cylinder Mould M-P100X200/150X300

Made from high quality plastic



M-C100X200/150X300



M-P100X200/150X300

VIBRATING TABLE

Electric Concrete Vibrating Table VT-500/800/1000

Table dimension: 500x500mm
800x800mm, 1000x1000mm
Vibrating speed: 2860 times/min
Amplitude: 0.3-0.6mm
Motor power: 1.1KW
Max load: 250kg



VT-500/800/1000

Magnetic Concrete Vibrating Table VT-M500/800

Table dimension: 500x500mm
800x800mm
Vibrating speed: 2860 times/min.
Amplitude: 0.3-0.6mm
Motor power: 1.5KW
Magnetic forcing stick cast iron mould.



VT-M500/800

Compacting Factor Apparatus CCFA-1

It is used to determine the compaction factor of concrete with low, medium and high workability.

CCFA-1

POKER VIBRATORS

Light Concrete Vibrator CV-1-25-50

Tip dimension: Dia.25-50x1m
Motor power: 0.25-1.1KW

Electric Concrete Vibrator CV-6-25/50

Tip dimension: Dia.25-50x6m
Motor power: 1.1-1.5KW

Gasoline Concrete Vibrator CV-28-70

Tip dimension:
Dia.28-70x3-10m



CV-1-25/50



CV-6-25/50



CV-28-70

WATER PENETRATION

Concrete Water Impermeability Apparatus WI-185

Digital type WI-D185

Penetration pressure: 4Mpa
Specimen: Dia.174-185XH165mm
Six place mould

Concrete Impermeability Mould M-C150-185/M-P150-185

Top dia175 base dia185 x 180 high



WI-D185



WI-185



M-C150-185



M-P150-185

CONCRETE ELASTIC MODULUS

Concrete Elastic Modulus Tester (Compressometer-extensometer) EM-150

Used for determining the axial deformation and diametrical extension of concrete cylinder specimens during compression test.

Dial gauge: 1mm/0.001mm

Specimen size:

Dia. 150x300mm or Dia. 160x320mm

Equip carrying case.



EM-150

SHRINKAGE AND EXPANSION

Concrete Shrinkage and Expansion Tester SE-540

Used for the determining hydraulic axial shrinkage and restrained expansion of concrete.

Dial gauge: 1mm/0.001mm

Measuring rod length: 540±0.2mm



SE-540



MSJY-8

MSJY-8S



RESISTIVITY

Concrete Resistivity Meter CRR-62

Measuring range: 0-2000KΩ;

Precision: 1 KΩ;

4 probe



CRR-62

CHLORIDE TEST

Chloride Field Test Set SCWY-610

Measuring range:

0.001-1.500%

Resolution: 0.0001%



SCWY-610

Chloride Penetration Meter (Electric Flux Test) SWD-6D

Current range: 0-500Ma/0.1mA

Voltage range: 0-60V/0.1V

Temperature range: -55-125°C/0.1°C

Electric Flux: 0-9999C/1C



SWD-6D

CONCRETE METAL TEST

Deep Scanning Metal Locator MSJY-8/MSJY-8S/MSJY-8ST/K

Concrete cover range: 6-90
and 7-180mm

Rebar range: 6-32mm

Digital Corrosion Meter MCJY-XS600

Measuring electric potential: ±999mV

Precision: ±1mV

Distance between points: 1-100cm

Data saving: 5400 testing areas
per 11000 testing points

Measuring area: 8000m²

SURFACE STRENGTH

Concrete Rebound Hammer

RHC3-A

Digital Voice Concrete Test Hammer

RHT225-2

Impact energy: 2.207J (0.225kgf.m)

Needle friction force: 0.5-0.8N

Stiffness of elastic spring: 785.0N/m

Elastic spring length: 61.5mm

Elastic hammer impact length: 75.0mm



RHC3-A



RHT225-2

Standard Anvil

SA-80

Calibrate rate: 80±2

Hardness: HRC58-62

Weight: no less than 16kgs



SA-80

Standard Concrete Anchor Pullout Tester

AP-200/500

Digital Type AP-200/500D

Jack pullout force: 200KN, 500KN

Piston stroke: 100mm

Resolution: 0.1KN



AP-200



UVL-5100



AP-500D

FBL-8100

CRACK TEST

Crack Measurement Microscope

CM-40/100

Magnification: 40x, 100x

Pocket type, with light source

Crack Width and Depth Tester

WD-F800

Width measuring range: 0-6mm

Width precision: less than 0.01mm

Depth measuring range: 5-500mm

Depth precision: 5mm



CM-40/100



WD-F800

ULTRASONIC DETECT

Concrete Ultrasonic Detector

UVL-5100

Channel: 1 transmitting+1 receive

Sample recycle: 0.025μs~1638.4μs

Precision: 0.025μs

Measuring range: ±1677.7ms

Dynamic range: 154 dB

Frequency bandwidth: 3~450kHz

Sensitivity: ≤10 μV

Gain precision: 0.5dB

Transmitting voltage: 65, 250, 500, 1000V

Foundation Pile Dynamic Detector

FBL-P8100

It is used to assess the integrality of concrete pile and identify the extent and location of the pile defect. It can be used for testing perfusion pile and hammer pile. It can also be used for testing the exposed top surface of constructions such as pillars.

Control mode: A8 Embedded platform

Operation mode: Key+Touch Screen

Dynamic Range: 184dB

Noise voltage if system: ≤1mV

Amplifier frequency range: 10Hz-10kHz

Sampling time intervals: 1us-64ms adjustable

Max length of sampling: 4096

HUMIDITY AND RAPID CURING

Concrete Cement Curing Cabinet CU-40B

Humidity: no less than 90%
 Temperature: 15-30°C
 Precision of temperature: 1°C
 Compressor power: 145W;
 Heating power: 600W;
 Can capable 40pcs cement mould, 20pcs concrete mould
 Stainless steel inner.



CU-40B

Concrete Cement Curing Cabinet CU-60B

Humidity: $\geq 95\%RH$
 Humidity control accuracy: $\pm 1\%$
 Temperature: 15-30°C
 Precision of temperature: 1°C
 Compressor power: 240W;
 Heating power: 600W;
 Sensor: PT100A
 Inner working size:
 drawer 1100x590x1160mm



CU-60B

Concrete Rapid Curing Tank CU-120

Capacity: 120L
 Temperature:
 room temperature to 100°C
 Heating power: 10KW



CU-120

SCC TEST APPARATUS

Concrete Freezing and Thawing Cycle Testing Machine FTTM-2

Quantity of the specimens: 16PCS
 Size of the specimen: 100×100×400,
 Size of the specimen bucket: 120×120×500mm,
 Sensor 1: control temperature control: 5 - -18±2°C;
 Sensor 2: Liquid temperature control: 18-23°C;
 Sensor 3: Diagonal line temperature control: - -18°C;
 Sensor 4: Secondary protection temperature control: 50-30°C;
 Freezing and thawing cycle period: 2-4h,
 Thawing time is no less than 1/4 of
 the freezing and thawing cycle
 The transmitter substance for freezing
 and thawing cycle: - 45°C (Anti-freeze fluid)
 Refrigeration compressor: 5HP
 Heating power: 4KW

SCC TEST APPARATUS

V-Funnel Test Apparatus

It used to test segregation resistance of freshly mixed self-compacting concrete.

L-Shape box Test Apparatus

It used to test filling ability, passing ability, and resistance to segregation.

U-shape box apparatus

It used to test flowability and the capacity of the SCC concrete to flow within confined spaces.

J-Ring test apparatus

It used to test the flowability, flow time and the capacity of the SCC concrete to go through obstacle



V-funnel



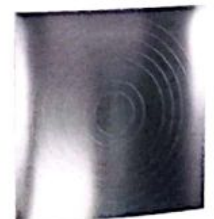
L-box



U-box



J-ring



J-ring plate



CEMENT SAMPLER

Cement Sampler

CS-1/1.5

Length: 1m, 1.5m
Stainless steel



CS-1/1.5

SPECIFIC GRAVITY

Le Chatelier Flask

LF-250

250ml capacity



LF-250

CEMENT SOUNDNESS

Le Chatelier Mould

LM-30

Max. expansion of 300g load:
less than 17.5 ± 2.5 mm

Weight: 30g



LM-30

Le Chatelier Mould Tester

LM-T30

Standard weight: 300g
Division: 0.5mm



LM-T30

Le Chatelier Accessories

LM-S30



LM-S30

Le Chatelier Water Bath

LWB-31

Working capacity : 31L
Heating and keeping time:
3 hours
Heating power: 4KW



LWB-31



BF-05



BF-01

CEMENT EXPANSION

High Pressure Cement Autoclave

CA-2

It used to do cement expansion test.

Max. Pressure: 2-2.2Mpa

Max. temperature: 216°C

Heating power: 0.6KW/1.2KW

Adding distilled water: 8.5L

Sample Mould

CM-25

25x25x280mm



CM-25



CA-2

Cement Length Comparator

CL-300

New Standard CL-158/176

Valid testing space:

156-300mm/0-158mm/0-176mm



CL-300



CL-158/176

CEMENT FINENESS

Blaine Fineness Apparatus

(Air Permeability Apparatus)

BF-01

It is used to test particle size of Portland cement, limes and similar powders in method of specific surface.

Inner diameter of permeability cell :

Dia. 12.7 ± 0.05 mm

Sample height in the cell : 15 ± 0.5 mm

Perforated plate No.: 35holes

Perforated plate diameter: 1mm

Perforated plate thickness: 1 ± 0.1 mm

SETTING TIME AND CONSISTENCY

Cement Vicat Apparatus

CVA-1

Initial needle: Dia.1mm
Consistency plunger: Dia.10mm
Mould: top dia.60x base
dia.70x40mm high
Accessories include
initial needle,
final needle,
consistency plunger,
glass plate etc.



CVA-1

Cement Mortar Consistency Meter

CC-1725

Capacity: 1725±5ml
Time: 8.0S±0.2S



CC-1725

Cement Mortar Flow Table Tester

CFT-300

Skip weight: 4.35Kg±0.15Kg
Drop height: 10mm±0.2mm
Table diameter: 300mm±1mm
Tamping rod: Dia.20mmx200mm
Self skip times: 25 times



CFT-300



MAC-1

Cement Mortar Air Content Tester

MAC-1

It used to determine the content of air
in cement mortar, cement paste,
and lime mortar.

Capacity: 1L

Pressure gauge: 0.01Mpa

Air content directly reading: 1%-20%

FLOW PROPERTIES

Mud Funnel Viscometer

MV-1

Nozzle: dia.5mmx100mm long
Water value: 15±0.5s
Measuring cup: 200/500ml



MV-1

Mud Balance (Density Meter)

MD-1

Measuring range:
0.96~3 g/cm³
Precision: 0.01 g/cm³
Cup capacity: 140cm³



MD-1

Mud Sand Content Meter

MS-1

Filter mesh: 200mesh
Sand content scale:
1%-15%/division 0.5%
15%-30%/ division 1%



MS-1

Full sets mud tester,
can choose handle case



MIXER

Cement Paste Mixer

CM-P2. 5

Bowl capacity: 2.5L
Mixing blade width: 111mm
Rotation: low speed 140±5 rpm;
high speed 285±10 rpm;
Revolution: low speed 62±5 rpm;
high speed 125±10 rpm;
Voltage: AC380V/220V



CM-P2.5

AIR CONTENT

Cement Mortar Mixer

CM-M5

Bowl capacity: 5L
Mixing blade width: 135mm
Rotation: low speed 140 ± 5 rpm;
high speed 285 ± 10 rpm;
Revolution: low speed 62 ± 5 rpm;
high speed 125 ± 10 rpm;
Voltage: AC380V/220V



CM-M5

Standard Sand

SS-1350

1350g each small bag, 15 bags,
total 20.25kgs per package.



SS-1350

COMPACTION

Cement Mortar Compaction Jolting Apparatus

CJ-96

Jolting parts weight: 20kg;
Drop height: 15mm; 3mm
Jolting: 60 rpm
Motor: 70W



CJ-96

CEMENT MORTAR MOULD

Cement Mortar Three Gang Mould M-C40X160

Dimension: 40X40X160mm
Made from high quality case iron



M-C40X160

Cement Mortar Three Gang Cube Mould M-C70.7

Dimension: 70.7x70.7x70.7mm
Made from high quality case iron
M-P70.7



M-C70.7

Made from high quality plastic



M-P70.7

Cement Mortar Three Gang Cube Mould M-S50

Diamond sharp M-D50

Made from steel

Plastic Model M-P50

Made from high quality plastic



M-S50



M-P50



M-D50

LAB BALL MILL TEST

Laboratory Cement Ball Mill Test Machine LCBM-1

Drum inner size: $\Phi 500 \times 500$ MM
Rotating speed: 48r/min
Abrasion loading weight: 100kg
Feeding capacity: 5kg
Weight of abrasive: 10kg
Power of motor: 1.5KW
Voltage: 220V/380V



LCBM-1

COMPRESION FLEXURAL STRENGTH

Computer Controlled Cement Compression and Flexural Testing Machine

CFT-P300

It is used to perform compressive strength test of the cement and the flexural strength of the concrete.

Compression capacity: 300KN

Flexural range: 10KN

Relative indication error: $<\pm 1\%$

Loading speed: compression: 0.3-10KN/S

Flexural: 0-50N/S

Piston stroke: 80mm

Piston: Dia.130x50mm

Constant speed loading, high testing accuracy.

Cement Compression Clamp

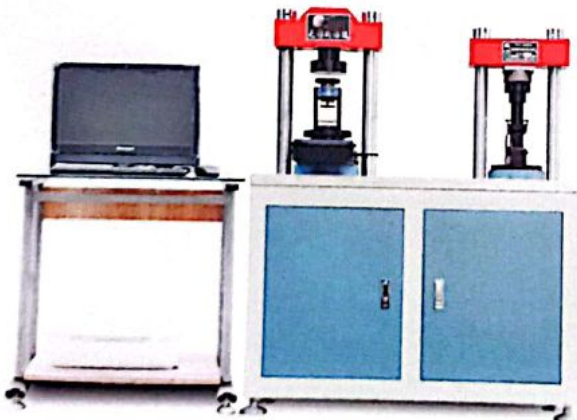
C-C40/50

For specimen size: 40x40mm, 50x50mm

Cement Flexural Clamp

C-F40

For specimen size: 40x40x160mm



CFT-P300



C-F40



C-C40/50

Digital Cement Compression Testing Machine CT-D300

It is used to test compressive strength test of the cement, mortar.

Capacity: 300KN

Relative indication error: $<\pm 1\%$

Rated pressure of the hydraulic pump: 25Mpa

Vertical clearance: 165mm

Power of motor: 0.75KW

Working voltage: 380V/220V



CT-D300

Electric Cement Flexural Testing Machine FT-E5

Max. lever ratio: 10:1, 50:1

Loading speed: 50N/S

Capacity: 1000N/single lever, 5000N/double lever

Precision: 1%

Roller space: $100\pm 0.1\text{m}$

Automatic Cement Flexural Testing Machine FT-A50

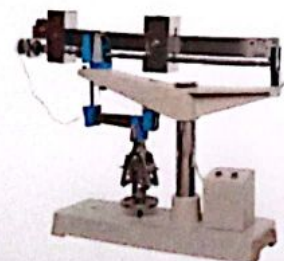
It is used to determine the flexural strength of cement, brick and asphalt.

Capacity: 10KN, 20KN, 50KN

Adjustable loading speed, servo control, Low noise, PC display.



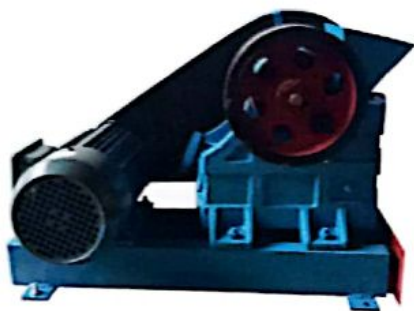
FT-A5



FT-E5

PULVERISER

Jaw Crusher JC100x60/100x150
Feeding opening: 100x60 mm, 100x150mm
Max. material size: 45mm
Output size: 2-10/5-25mm can adjust
Motor: 1.5KW/2.2KW
Capacity: 230-400/400-1800kg/h
Weight: 130kg/190kg
Jaw made from durable Manganese Steel



JC100X60/100X150

Disk Crusher DC-175

Diameter of millstones: 175mm
Input particle size: no higher than 4mm
Output particle size: no higher than 0.15mm
Productivity: 25kg/h
Main shaft speed: 900r/min
Power: 1.5KW
Grind disc made from durable Manganese Steel

Enclosed Lab Pulverizer

GJ100-1/2/3/4
Motor power: 1.1KW, 1.5KW
Sample: 1, 2, 3, 4pcs;
Input particle size: less than 13mm
Input weight: 100gx1pcs;
Crushing time: less than 2min.
Milling output: 80-200mesh
Grind container made from durable Manganese Steel



DC-175



GJ100-1/2/3/4

CURING CABINET

Mortar Curing Cabinet MC-40B

Humidity: 60±10RH% (mortar use standard), can set to 60-95%RH
Humidity control accuracy: ±1%
Temperature: 15-30°C
Precision of temperature: 2°C
Compressor power: 125W;
Heating power: 1500W;
Working size: 550x580x1160mm;



MC-40B

Concrete Cement Curing Cabinet (Drawer type) CU-D30B

Humidity: ≥ 95%RH
Humidity control accuracy: ±1%
Temperature: 15-30°C
Precision of temperature: 1°C
Compressor power: 180W;
Heating power: 1000W;
Inner working size:
drawer 180x320x75mmx30pcs



CU-D30B

CENTRIFUGE EXTRACTOR

Digital Bitumen Centrifuge Extractor
Speed control model CE-S15000/3000
Simple 1500g model CE-1500
It is used to determine bitumen percentage of bituminous mixtures.
Bowl capacity: 1500g, 3000g
Power: 750W
Speed: 3000 rpm
Voltage: 220V



CE-S15000/3000



CE-1500

Automatic Bitumen Centrifuge Extractor **CE-A15000/3000**

It is used to separate and extract bitumen by solvent and sieving method.
Extraction capacity: 1000- 3000g
Precision: 0.1%
Rotation speed: 5000-10000 rpm
Power: 4KW
Voltage: 380/220V
Sieve: 0.075, 0.15, 0.6, 2.36mm, lid and pan.
Solvent automatic recovery and repeated use.

SOLVENT RECOVERY

Trichloroethylene Recycler **SR-T3500**

Recovery capacity:
1500-3500ml
Recovery rate: 24ml/min.
Compressor motor: 75W
Heating power: 800W



SR-T3500

ASPHALT RECOVERY

Asphalt Rotary Evaporation Apparatus **AWC-2000**

It used to recover bitumen from solvent.
Oven power: 1.5KW
Capacity: 50-2000ml
Vertical moving distance: 120mm
Max. vacuum: lower than 0.1Mpa
Temperature: -80-300°C



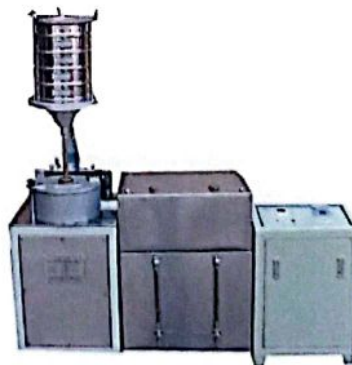
AWC-2000

IGNITION METHOD ASPHALT CONTENT

Ignition Method Asphalt Binder **Content Analyser**

AC-I4500

Balance measuring range: 10Kg
Precision of balance: 0.1g
Max. specimen weight: 4500g
Precision: 0.1%
Working room: 350x440x330mm
Standard working Temperature: 538°C with temperature compensation.
Power: 3000W



CE-A1500/3000



AC-I4500

SAMPLER

Bitumen Sampler **BS-500/1000**

Capacity: 500ml, 1000ml
Made from brass or stainless steel



BS-500/1000

MARSHALL COMPACTION

Manual Marshall Compactor MC-M101

Sliding mass weight: $4536 \pm 9\text{g}$
Fall height: $457\text{mm} \pm 1.5\text{mm}$
Mould diameter: 101.6mm
Mould height: 87mm



MC-M101

Automatic Marshall Compactor MC-A101

Sliding mass weight: $4536 \pm 9\text{g}$
Fall height: $457\text{mm} \pm 1.5\text{mm}$
Mould diameter: 101.6mm
Mould height: 87mm
Blows frequency: 60 blows/min

Automatic Modified Marshall Compactor MC-A152

Sliding mass weight: $10210\text{g} \pm 9\text{g}$
Fall height: $457\text{mm} \pm 1.5\text{mm}$
Mould diameter: 152.4mm
Blows frequency: 60 hits/min

Automatic Standard and Modified Marshall Compactor MC-A101-152

Combine function of
 4.536kgs and 10.21kgs



MC-A101/152
MC-A101-152

Marshall Mould MM-101

Mould diameter: 101.6mm



MM-101

MARSHALL STABILITY

Digital Marshall Stability Tester MS-30/50

Complies to ASTM D1559
Capacity: 30KN , 50KN
Precision: 1%
Resolution: 0.1KN , 0.01KN
Platen speed: $50 \pm 5\text{mm/min}$
Marshall head:
dia. 101.6 ± 0.2 , dia 152.4 ± 0.2
Flow range: $0-15\text{mm}/0.01\text{mm}$
Motor: 700W
Overload protection
Automatic display stability
and flow value



MS-30/50

UNIVERSAL LOADING FRAME

Universal Loading Testing Machine UMS-128

Max. load: 100KN , 200KN
Low rise speed: 1mm/min
High rise speed: 50mm/min
Max. travel: 200mm
Sensor: $30/50\text{kN}$, 200kN
Can perform combine test of CBR, Marshall, Split, Unconfined compression Road material strength etc.



UMS-128

RICE TEST

Bitumen Mixture Theoretical Maximum Density Meter MTD-1

Pressure container:
C, $4000\text{ml} \times 2\text{pcs}$
Vacuum pressure when test:
 $3.7\text{kPa} \pm 0.3\text{kPa}$
Vacuum pump:
Can choose Non-oil model
Vibrator motor: 30W
Motor power: 300W



MTD-1

BITUMEN MIXING

Bitumen Mixer

BM-10/20

Capacity: 10L, 20L

Temperature range: room temp.-250°C

Temperature accuracy: $\pm 3^{\circ}\text{C}$

Resolution: 0.3°C

Mixing time: 1-999S free setting

Paddle rotation speed: 75rpm

Paddle revolution speed: 48rp/m

Insulation mixing pan,
heating by conduction oil.



M-10/20

WATER BATH

Digital Constant Temperature Water Bath CWB-36/46

Heating power: room temperature~100°C

Precision: $\pm 0.5^{\circ}\text{C}$

Motor: 1KW

Power: AC220V

Working size: 440×330×320mm

Internal stainless steel

Low Temperature Water Bath CWB-L6/L15/L20

Temperature controlling: -5°C -100°C

Resolution: 0.1°C

Internal working size:

145×145×150mm (6L)

235×140×180mm (15L)

180×180×300mm (20L)



CWB-36



CWB-46



CWB-L15/30



CWB-L6/15/20

WHEEL TRACKING TEST

Asphalt Wheel Tracking Apparatus

AWT-300

It used to measure rutting resistance of
asphaltic materials under high temperature
or simulate traffic effect.

Loading wheel move table: 42 ± 1 times/min

Harmonic motion distance: 230 ± 10 mm

Asphalt slabs: 300×300×50mm

Wheel rubber hardness: 78 ± 2 (60°C)

Wheel load pressure: 0.7 ± 0.05 MPa

Rut depth: 0-30mm/0.01mm

Constant temperature controlling:
room temperature- $80 \pm 0.3^{\circ}\text{C}$



AWT-300



SRC-300

SLABS COMPACTION

Asphalt Slabs Roller Compactor SRC-300

Slabs size: 300×300×(30-100mm)

Roller diameter: 500mm, width: 300mm

Roller force: 0-20KN free setting
(set 9KN before shipment)

Roller temperature: 0-200°C

Slabs mould speed: 6times/min
(back and force movement)

Dimension:

1216×640×1750mm

Weight: 300Kgs

Power: 3KW



CWB-L15/30



CWB-L6/15/20

BITUMEN PENETRATION

Digital Bitumen Penetrometer BP-D50 Micro Adjust

Measuring range: 50mm/0.01mm

Standard needle: $2.5g \pm 0.05g$

Plunger, needle and needle holder:
 $100g \pm 0.05g$

Penetration cup: dia. 55x35mm



AWC-500



BP-D50

WATER CONTENT

Bitumen Water Content Set AWC-500

It used to test water content of bituminous and petroleum materials by distillation method.

Oven power: 500W

Flask capacity: 500ml

BITUMEN ROTATING OVEN

Bituminous Rotating Thin-film Oven RTO-82

Heating power: 2.5KW

Working temperature: $163 \pm 1^\circ\text{C}$

Voltage: 220V/50HZ

Plate rotation speed: 5.5RPM

Working room: 430x410x450mm

Bituminous Rolling Rolling Thin-film Oven RTO-85.

Heat power: 2.4KW

Working temperature: $163 \pm 0.5^\circ\text{C}$

Rotation speed: $15 \pm 0.2\text{rpm}$

Air flow: $4000 \pm 200\text{ml/min.}$

Voltage: AC220V

SOFTENING POINT TEST

Digital Bitumen Softening Point Tester (Bitumen Ring and Ball Tester)

BRB-D125

Automatic Progame model DRB-D126

Test range: $-5-125^\circ\text{C}$

Resolution: 0.1°C

Timing: 0-99m99s

Temperature rise speed: $5 \pm 0.5^\circ\text{C/min}$

Magnetic stirrer speed: 0-150 rpm

Heating power: 600W

Beaker volume: 800ml

Steel ball: weight: $3.5g \pm 0.05g$

Diameter: 9.53mm

Steel ball drop depth: 25.4mm



BRB-D125



BRB-D126



RTO-82



RTO-85

BREAKING POINT

Bitumen Breaking Point Apparatus BBP-100

It used to determine the breaking point of solid and semi-solid bitumen.

Test range: -30-100°C

Precision: 1°C

Steel sheet: 41X20X0.15mm

Max. insert distance: 44mm

Height difference: 3.5mm



BBP-100

PYKNOMETER

Asphalt Pyknometer AP-20

Capacity: 20ml



AP-20

FLASH AND FIRE POINT

Electric Cleveland Flash Fire Point Tester FFP-C1

It used to test the flash and fire point of petroleum products and bitumen.

Oven heating power: 400W

Fire source: liquid gas, coal gas.

With SS table, igniter, gas vessel



FFP-C1

DUCTILITY

Digital Bitumen Ductility Testing Machine BDT-1500/2000

Extension speed: 50±2.5mm/min

Max. ductility: 1500mm, 2000mm

Heating range: room temperature-50°C

Temperature accuracy: ±0.5°C

Heating power: 1.2KW

Voltage: AC220V 50HZ

Inner and outer made from SS.



BDT-1500/2000

Low Temperature Bitumen Ductility Testing Machine BDT-L1500/2000

Extension speed: 50±2.5mm/min

Max. ductility: 1500mm, 2000mm

Precision: 1mm

Heating range: -5-80°C

Temperature accuracy: ±0.5°C

Heating power: 2KW

Cooling power: 1.2KW

Voltage: AC220V 50HZ

By ball screw and linear guide tracking system, stable extension working.



BDT-L1500

Ductility Mould M-D200

Ductility Mould Plate M-DP200

Made from brass



M-D200/DP200

KINEMATIC VISCOSITY

Bitumen Petroleum Kinematic Viscometer KV-B20/P20

Temperature range: room temp. to 135°C

Precision: $\pm 0.1^\circ\text{C}$

Water bath capacity: 20L Double layer

Sensor: Pt100

Capillary viscometer: 0.6, 0.8, 1.0, 1.2, 1.5, 2.0, 2.5mm

Power consumption: less than 1800W

Capillary viscometer:

Cannon-Fenske Opaque Viscometer

0.02mm to 8mm (NO.25 to NO.500)



KV-B20/P20



Cannon-Fenske
Viscometer

EFFLUX VISCOSITY

Digital Standard Tar Viscometer STV-100

Constant temp. tank: dia.160x100mm

Sample tube: inner diameter 40mm

Orifice diameter: dia. 40mm,

Receive bottle: 100ml

Temperature: room temp. to 90°C

Accuracy: $\pm 0.2^\circ\text{C}$

SAYBOLT VISCOSITY

Digital Saybolt Viscometer SV-60

Receive bottle: $60 \pm 0.05\text{ml}$

Heating power: 1000W

Working temperature: room temp.-240°C

Accuracy: $\pm 0.1^\circ\text{C}$

Timing range: 0.0s~999.9s

Accuracy: $\pm 0.1\text{s}$

DYNAMIC VISCOSITY

Bitumen Petroleum Dynamic Viscometer DV-B20/P20

Temperature range: 0.00-100.00 °C

Precision: $\pm 0.01^\circ\text{C}$;

Pressure range: $300 \pm 0.5\text{mmHg}$

Timing range: 0.0s -9999.9S

Timing accuracy: no higher than 0.05%;

Measuring range: 18 -580000Pa.s

Sample no.: 4pcs

Power: no higher than 1800W

Dimension: 660x440x750mm

Automatic control of temperature, time and vacuum degree.

Capillary viscometer:

Asphalt Institute Vacuum Viscometers

NO.25 to NO.800R



DV-B20/P20



Vacuum Viscometer



STV-100



SV-60

EMULSIFIED ASPHALT TEST

Emulsified Asphalt Wet Wheel Abrasion

Loss Tester EAWW-0752

Voltage: 220V

Power: 250W

Abrasion head weight 2.27kg

Time controller: digital display and adjustable

Template: 300x300x6mm

Circular opening of template: 279mm

Abrasion head: revolution 61rpm, rotation 140rpm

Emulsified Asphalt Cohesion Strength Tester

EACS-0754

Pressure gauge 0-1.0Mpa, Torquemeter (0-600N.CM)

Rubber foot with hardness 60, size: 28.6

(diameter)×6.4mm Ring moulds (6×60mm, 10×60mm)



EAWW-0752



EACS-0754

Emulsion asphalt Storage stability Tester

EASS-0656

Valid height: 310±10mm

Mark line: 250ml

Sample input entrance: $\Phi 32 \pm 0.1$ mm

Emulsified Asphalt Particle Charge Tester

APC-1000

Beaker: 1000ml

Brass electrode: 100x10x1mmx2pcs

Power voltage: DC6V

Sieve mesh: 1.18mm

Solubility Apparatus Set

SAA-028

Include filter flask,

Gooch crucible funnel,

fiber glass filter disc etc.

Can choose to equip Whatman filter



EASS-0656



APC-1000



SAA-028

FUME HOOD

Laboratory Fume Hood

FH-1000/1200/1500

Width: 1m, 1.2m, 1.5m

Air Velocity: 0.3-0.8m/s

Noise: no higher than 60dB

Fluorescent lamp: 15W, 18W, 38W

UV lamp: 30Wx1, 20Wx2, 30Wx2

Standard accessories: water tap,



FH-1000/1200/1500

NON-UNCLEAR DENSITY

Non-Nuclear Asphalt Density Test:

EDG-2A

Measure depth: 20mm-300mm

Temperature sensor: 0-350°C

Measure time: less than 3s

Precision: 3%

Display: density, % density,

%K porosity, segregation variable



EDG-2A





Automatic Computer Controlled Hydraulic-servo Universal Testing Machine

U-AHS300B/600B/1000B

Six Column Model U-AHS300D/600D/1000D

Application:

It is suitable for doing testing experiments such as the tensile, compression, bending and shear testing for all kinds of metal materials and nonmetal materials such as plastic, concrete.

Feature:

AC Servo motor, ensure good performance for long term.

PID control, constant loading and unloading and hold on loading, constant-speed displacement and hold on displacement, constant-speed deformation and hold on deformation.

High precision load cell.

Parameter:

Capacity: 300KN/600KN/1000KN/2000KN

Precision: Class one

Load measuring range: 2%-100% FS

Loading accuracy: 1%

Loading resolution: 0.01KN

Displacement accuracy: 1%

Piston moving speed: 0-70mm/min.

Piston stroke: 150mm

Beam moving speed: 0-270mm/min

Effective tensile span: 750mm

Effective compression span: 500mm

Round specimen clamp: dia. 6-60mm

Flat specimen clamp: 0-40mm

Clamp width of flat specimen: 75mm

Size of compression plate: 160mm

Bending stick distance: 300mm

Bending stick width: 140mm

Bending degree allowance: 150mm

Total motor power: 2Kw

Displacement testing device: Staff

Overload protection: 2-5%

Weight: 3000/3500Kgs

2000KN Model U-AHS2000D

9000Kgs(2000KN)

1200X800X3300mm (2000KN)

Accessories:

Clamping jaw: 0-20, 13-40, 40-60mm total 12pcs;

Bending testing seat, bending testing plug

PC, software, intelligent controller, etc.



U-AHS300D/600D/1000D



U-AHS300B/600B/1000B



Digital Hydraulic Universal Testing Machine U-H300B/600B/1000B

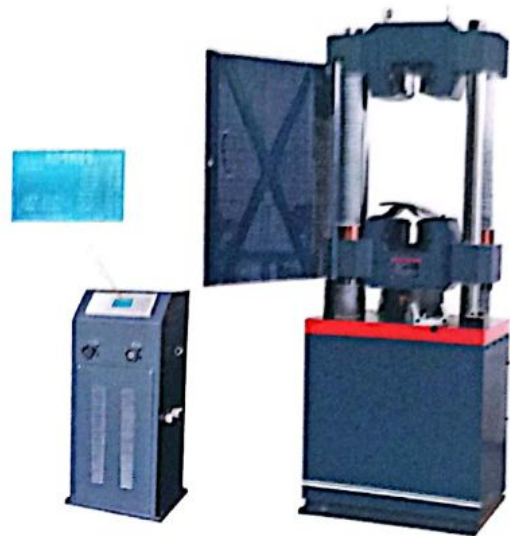
Six Column Model U-H300D/600D/1000D

Capacity: 300KN/600KN/1000KN/ 2000KN

LCD display with curve and data print



U-H300D/600D/1000D



U-H300B/600B/1000B

Accessories:

Clamping jaw: 0-20, 13-40, 40-60mm total 12pcs;

Bending testing seat, bending testing plug

Optional: Mechanical extensometer



PC Display Universal Testing Machine U-PH300B/600B/1000B

Six Column Model U-PH300D/600D/1000D

Capacity: 300KN/600KN/1000KN/ 2000KN

PC Display and data analysis from PC software



U-PH300D/600D/1000D



U-PH300B/600B/1000B

ELECTRONIC UNIVERSAL TESTING



Digital Electronic Universal Testing Machine U-E1/2/5

It is suitable for tensile, compression, shearing, peeling, tearing etc test of metal materials and non-metal materials, like rubber, plastic, cable wire, composite material, plastic profile, spring, etc.

Capacity: 1KN, 2KN, 5KN (Optional)

Load measuring range: 2%-100% FS

Testing accuracy: $\pm 0.5\%$, $\pm 1\%$

Effective stretch range: 650mm, 800mm, 1000mm

Effective width: 400mm, 500mm

Displacement speed: 0.01-500mm/min.

Digital Electronic Universal Testing machine U-E10/20/50

Computerized model U-P10/20/50

Capacity: 10KN, 20KN, 50KN, 100KN, 200KN (Optional)

Load measuring range: 0.4-100%/2%-100% FS

Testing accuracy: $\pm 0.5\%$, $\pm 1\%$

Effective stretch range: 700mm

Effective width: 400mm, 500mm

Displacement speed: 0.01-500mm/min

When load over 3-5%, stop working and self-protection.

Max. force, min force, break value, up and below yield strength,

compression strength, elastic modulus strength, elongation,

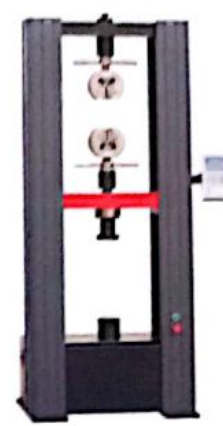
peel off max, min strength, average strength (User choose)

Overload protection, over flue protection, over speed protection,

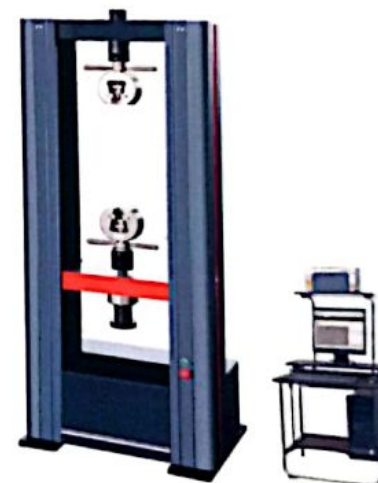
lack pressure protection, stroke protection etc.



U-E1/2/5



U-E10/20/50



U-P10/20/50

BENDING AND IMPACT TEST

Steel Bar Bending Testing Machine GW-40B

It special used for cold bending and level reverse bending.

Bending diameter: dia.25-40mm, dia.6-22mm freely set

Forward direction angle: 0-180 degree freely set

Backward direction angle: 0-90 degree freely set

Working plate rotation speed: ≤ 3.7 RPM

Motor power: 1.5kW

Automatic Pendulum Impact

Testing Machine (Charpy Impact)

CIP-150/300

It used to determine steel tension and bending strength by Charpy impact method.

Impact energy: 150J, 300J

Impact speed: 5.2 m/s

Falling angle: 150°

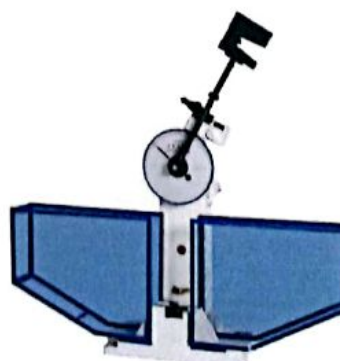
Distance from impact center to axis: 750mm

Anvil block span: 40mm

Round angle radius of grips: R 1.1.5mm

Round angle radius of striking: R2-2.5mm

Resolution power of indicator: 2/1



CIP-150/300



GW-40B

HARDNESS

Rockwell Hardness Apparatus H-R150A

Measuring range: 22-88HRA,

20-100HRB, 20-70HRC

Strength: 588.4N (60Kgf),

980.7N (100Kgf), 1471N (150Kgf)

Max. height: 170mm

Vertical testing space: 135mm

Accessories: testing bench, pressure head, standard hardness sheet, etc.

Universal Hardness Tester HBRV-187.5

Brinell Scale: HBW2.5/31.25 HBW2.5/62.5

HBW2.5/187.5 HBW5/62.5

Rockwell hardness test (N): 60kgf(588N)

100kgf(980.7N) 150kgf(1471N)

Rockwell Scale: HRA HRB HRC HRD HRE

HRF HRG HRK HRH

Vickers hardness test (N): 30kgf(294.2N)

100kgf(980.7N)

Vickers Scale: HV-30, HV100

Min measure: Brinell: 0.004mm

Vickers: 0.002mm



HBRV-187.5



H-R150A



UT-322



UMF-510/522

CUT AND MARKING MACHINE

Steel Cut off Machine C-S40

It is used to cut the steel specimens to a suitable length before testing.

Power: 3Kw

Blade diameter: 400mm

Rotation: 840 rpm



C-S40

Steel Marking off Machine M-S40

Electric model M-ES40

Receive specimen: 0-50mm

Standard distance: 10mm

One time can mark 40 points



M-S40



M-ES40

STEEL ULTRASONIC TEST

Ultrasonic Thickness Tester

UT-322

Accuracy(mm): ± 0.01 mm

Velocity range: 1000~9999m/s

Operating temperature: -10°C ~ 60°C

Dampness: 20%~90%

Ultrasonic Metal Flaw Detector

UMF-510/522

Scanning range: 0-6000mm, 0-10000m

Velocity range: 1000-15000m/s, 100-2000m/s

Working frequency: 0.2MHz ~ 20MHz

Vertical linearity error: $\leq 3\%$

Horizontal linearity error: $\leq 0.1\%$