

















IF IT'S WORTH BUILDING, IT'S WORTH TESTING

Contents



This wishlist was generated on 17/06/2016, and contains the following Products:

42-5305/02

Los Angeles Abrasion Machine

42-5300/10

Set of 12 Abrasive Charges (ASTM).

2021/02

Tri-Flex 2/DataSystem Triaxial Test Set 110 vAC Metric

27-1500/02

GDU 8 Channel Data Acquisition Unit 100-120 V 60 Hz

23-5802

1.4" and 2.8" Hand Specimen Trimmer

2103/02

DataSystem Direct/Residual Shear Test Set 110vAC Metric

25-0623

Combination Permeameter

29-3739

Proving Ring Penetrometer

24-9150/02

CBR-Test 50 Machine 50 kN Capacity BS and ASTM Supplied with Stabilising Bar.

24-9182

Penetration Piston

27-1559

50kN S-type Load Cell

27-1705

CBR Penetration Transducer 50mm Travel Fitted with 5 Pin Din Plug.

24-9188

Bracket and Adaptor. Dual Purpose Mounting Bracket for CBR Penetration Gauges EL24-9184/EL24-9186

27-1715

www.ele.com # +44 (0)1525 249 200 # +1 (800) 323 1242 Page 2 of 18

Contents



Transducer Extension Cable 1.5 m



Los Angeles Abrasion Machine

Code: 42-5305/02

Product Group: Los Angeles Abrasion Machine

The machine consists of a closed hollow cylindrical steel drum rotating around its horizontal axis on ball bearing units mounted on a sturdy base framework.

The drum is driven at a speed of between 30 - 33 rpm via an enclosed belt drive arrangement from an electric motor/gearbox unit situated on the base frame. Inside the drum a full length steel shelf is attached, accessed by a dust-proof opening.

The cylinder incorporates a removable internal shelf, one shelf position is provided to meet the requirements of both the ASTM and EN test standards.

Controls are located easily on the right-hand side of the machine at convenient operator height.

Start and stop push buttons and a subtracting revolution counter allows the user to preset the number of revolutions before an automatic stop.

Standards

ASTM C131, ASTM C535, AASHTO T96, NF P18-573

Further Information

110-120vAC, 60 Hz, 1ø.

Specification

Capacity 5,000 g each of aggregate and

charge.

Drum Speed 30-33 rpm.

Frame Welded structural steel.

Counter Adjustable; automatic shut-off;

push-button

reset and adjustment.

Controls Magnetic motor starter with

overload protection and integral On-Off switches.

Dimensions 38.6" w. x 36.2" d. x 38.6" h.

(980 x 920 x 980 mm).

Weight Net 882 lbs. (400 kg).

Motor 1 HP

www.ele.com +44 (0)1525 249 200

Set of 12 Abrasive Charges (ASTM).

Code: 42-5300/10

Product Group: Los Angeles Abrasion Machine, Los

Angeles Abrasion Machine

ASTM Set of 12.



Standards

EN 1097-2, ASTM C131, ASTM C535, AASHTO T96



Tri-Flex 2/DataSystem Triaxial Test Set 110 vAC Metric

Code: 2021/02

Product Group: Tri-Flex 2/DataSystem Triaxial Test

Set

Standards

ASTM D2850, ASTM D4767, AASHTO T296, AASHTO T297

Further Information

Set Includes:

- 1 GDU 8 Channel Data Acquisition Unit (27-1500/02)
- 1 Axial Strain Transducer (27-1617).
- 3 250psi (1700 kPa) Pressure Transducer. (27-1633).
- 1 Volume Change Transducer (27-1641).
- 1 1,100 lb. (5 kN) Submersible Load Transducer (27-1573).
- 1 Quick Undrained Triaxial Software (27-1750).
- 1 CU/CD Effective Stress Triaxial Software (27-1760).
- 1 Tri-Flex 2 Master Control Panel (25-0696/0x or 25-0697/0x).
- 1 Tri-Flex 2 Water De-airing Tank System (25-0698).
- 1 Digital Tritest 50 Load Frame (25-3518/0x).
- 1 Triaxial Cell (25-4117).
- 1 2.8" or 70 mm Base Pedestals (25-4178 or 25-4176).
- 1 2.8" or 70 mm Specimen Caps (25-6630 or 25-6430).
- 2 2.8" or 70 mm Drainage Lines (25-6430/10).
- 1 2.8" or 70 mm Porous Stones. Pack of 2 (25-6721 or 25-6561).
- 1 2.8" (70 mm) Sealing Rings. Pack of 10 (25-6641).
- 1 2.8" (70 mm) Filter Paper Drains. Pack of 50 (25-6580).
- 1 2.8" (70 mm) Filter Paper Discs. Pack of 100 (25-6585).
- 2 2.8" (70 mm) Rubber Membranes. Pack of 10 (25-6441).
- 1 2.8" (70 mm) O-ring Placing Tool (25-6470).
- 1 2.8" (70 mm) Membrane Tester (25-6443).
- 1 2.8" (70 mm) Two-Part Split Mold (25-6690).
- 1 2.8" (70 mm) Suction Membrane Device (25-6480)
- 1 2.8" (70 mm) Two-Way Split Former (25-6680 or 25-6500).

www.ele.com +44 (0)1525 249 200



GDU 8 Channel Data Acquisition Unit 100-120 V 60 Hz

Code: 27-1500/02

Product Group: Data Logging with the GDU, Geotechnical Data Acquisition Unit (GDU)

The GDU is a stand-alone, multi-tasking, multi-channel data logger, that is reliable and powerful, enabling it to co-ordinate test data from the range of ELE transducers required for various test methods.

The ELE Geotechnical Software package (DS7.1), in conjunction with the GDU and a range of transducers, are the two central components required to create a modern turnkey soil testing system. Being fully modular it can be adapted to a wide range of soil testing laboratory configurations.

- For performing CBR, Consolidation, Direct/Residual Shear and Total & Effective Stress Triaxial tests
- 8 Channels expandable to 32 for performing multiple, concurrent tests for cost savings
- Independent signal conditioning on each channel to maintain data accuracy
- Field-upgradeable software, meaning no downtime for future software and functionality upgrades
- Extended warranty

Specification

Dimensions

Case Aluminum, free standing;

houses power supply, analog to digital conversion module and an 8-channel analog input

module with transducer

energization.

Sockets Standard 5-pin DIN type. Input Range

 \pm 5 volts to \pm 10 mV full scale.

Transducer Supply 10vDC.

12.8" w. x 14.3" d. x 6.1" h.

(325 x 363 x 155 mm).

Weight Net 14.08 lbs. (6.4 kg).

+44 (0)1525 249 200 www.ele.com



1.4" and 2.8" Hand Specimen Trimmer

Code: 23-5802

Product Group: Soil Lathes, Soil Trimmers (Lathes)

Specimen Trimmers are designed to simplify precision trimming of soil samples for triaxial, shear, unconfined compression, and other tests requiring standard cylindrical specimens. This trimming frame is supplied complete with vane type grips for both 1.4" (35 mm) and 2.8" (70 mm) diameter specimens, and a narrow wire saw.

Further Information

- Lightweight frame construction for both laboratory and field use.
- Sturdy plated steel uprights serve as guides for wire saw during final trimming procedure.
- Samples are held securely during trimming through vane type grips.
- Adjustable upper gripper platen for various sample heights.
- Plated steel uprights and gripper assemblies for rust resistance and long life.

Includes Wire Saw.

Specification

Sample Size. Trims samples to either 1.4"

(35 mm) or 2.8" (70 mm) diam.

Uprights. Positioned to guide wire saw to

control final sample diam;

plated steel.

Sample Grips. Vane type; hold sample during

trimming; plated steel.

Overall Dimensions. 7" w. x 5" d. x 14" h. (178 x 127

x 356 mm).

Weight. Net 16 lbs. (7.3 kg).

www.ele.com +44 (0)1525 249 200



DataSystem Direct/Residual Shear Test Set 110vAC Metric

Code: 2103/02

Product Group: DataSystem Direct/Residual Shear

Test Set

Set includes:

- 1 Direct/Residual Shear Apparatus (26-2114/0x).
- 1 2.5" diam. or 60 mm square Shear Box (26-2213 or
- 1 2.5" diam. or 60 mm square Specimen Cutter (26-2217 or 26-2185).
- 1 2.5" dia. or 60 mm square Specimen Extrusion Tool (26-2189 or 26-2221).
- 1 GDU 8-Channel Geotechnical Data Unit (27-1500/0x).
- 1 Direct/Residual Shear Software (27-1790).
- 1 Vertical Displacement Transducer (27-1689).
- 1 Horizontal Displacement Transducer (27-1697).
- 1 2,000 lb. (8.9 kN) S-Type Load Cell (27-1583).
- 1 Weight Set (25-0535).

Standards

ASTM D3080, AASHTO T236

Further Information

110vAC, 50/60 Hz, 1ø. Metric.



Combination Permeameter

Code: 25-0623

Product Group: Combination Permeameter Constant or Falling Head, Combination Permeameter

- Plated steel chamber head assembly
- Corrosion-resistant cast aluminum base assembly
- •Includes accessories for conducting both constant

and falling head permeability studies

This combination permeameter has a transparent plastic chamber for soil specimens of either fine-grained or coarse-grained soils. Generally, soils containing 10 percent or more particles passing a 75 um sieve are tested using the falling head assembly. More granular soils, containing 90 percent or more particles retained on the 75 µm sieve, are tested using the constant head assembly.

The cell is sealed at the top so that a vacuum may be used to saturate the specimen. Porous stones located at the top and bottom of the cell prevent sample flaking or washout. For constant head tests, a plastic funnel reservoir is mounted on an upright attached to the cell, providing a maximum head of 550 mm. Falling head tests are performed using the grGDUated pipette falling head reservoir, which gives a maximum head of 1000 mm and is graduated 0.2 ml.

Specification

Specimen size 63.5 x 63.5 mm (dia x I max)

> when using lower chamber only, 63.5 x 140 mm (dia x I max) when using both lower and extension chambers

Chamber Transparent plastic, two

sections

Base Cast aluminium

Top seal Plated steel with gaskets **Porous Stones** 62.7 x 12.7 mm (diameter x

thickness)

Constant head Plastic, funnel reservoir, 550

mm

maximum head

Graduated pipette, 100 ml x Falling head

0.2 ml, 1000 mm maximum

head

Weight kg

2-1/2" diam. x 2-1/2" l. max. Specimen Size

(63.5 x 63.5 mm) when using lower chamber only; 2-1/2"



Page 11 of 18

diam. x 5-1/2" l. max. (63.5 x 14 0 mm) when using both lower and extension chambers.

Capacity Clear lucite; 1/4" (6.3 mm) wall;

two sections.

Base Cast aluminum.

Top Seal Plated steel with gaskets.

Porous Stones Mounts at top and bottom;

2.47" diam. x 1/2" thick (62.7 x 12 .7 mm); 105-120

permeability rating; 300 micron, average pore size.

Constant Head Plastic; funnel reservoir; 55 cm

maximum head.

Falling Head Graduated pipette; 100 cc x

0.2 cc; 100 cm. maximum

head.

Weight Net 11 lbs. (5 kg).

Spares/Consumables



Porous Stone 2.47" x .50"

Code: T-308



Proving Ring Penetrometer

Code: 29-3739

Product Group: Proving Ring Penetrometer

Further Information

250 psi capacity

Specification

Proving Ring 250 lb. (1.1 kN) capacity.

Dial Indicator Brake type.

Shaft $3/4\hat{a}$ (19 mm) diam. x $18\hat{a}$ I.

(45 7 mm); graduated at 6âIII

(152 mm) intervals.

Extension Rod 3/4âIII (19 mm) diam. x 36âIII I.

(914 mm); graduated at 6â.

(152 mm) intervals.

Cone 30 degree; 1 sq. in.;

replaceable.

Handle Cast aluminum.
Weight Net 12 lbs. (5.4 kg).



CBR-Test 50 Machine 50 kN Capacity BS and ASTM Supplied with Stabilising Bar.

Code: 24-9150/02

Product Group: CBR Load Frames, CBR-Test 50

Machine

Standards

AASHTO T99, AASHTO T134, AASHTO T135, AASHTO T136, AASHTO T180

Further Information

110-120vAC, 50/60 Hz, 1ø.

Proving Ring, Penetration Piston assembly and penetration dial indicator not included, order separately

Specification

Capacity 11 ,200 lbf. (50 kN). Horizontal Clearance 10" (255 mm).

Vertical Clearance 31 .5" (800 mm) maximum.
Platen 5.24 " (133 mm) diam.
Platen Travel 4.13 " (105 mm).

Dimensions 15 .75" w. x 21 .65" d. x 48" h.

(400 x 550 x 1,220 mm).

Weight Net 269 lbs. (122 kg).

Spares/Consumables



Dial Indicator - 1.0" Range

Code: 88-4100

www.ele.com +44 (0)1525 249 200



Penetration Piston

Code: 24-9182

Product Group: Penetration Measurement

1.935 mm2 (3 in2) area foot of case hardened steel. Designed to fit all ELE load rings.



50kN S-type Load Cell

Code: 27-1559

Product Group: Load Measurement, Force measurement, Electronic Instrumentation

Maximum working capacity of 50 kN and excitation 10 V ac/dc with an output of 2.7 mV/V nominal. Aluminium alloy and stainless steel construction with IP65 environmental protection.

Standards EN 12697-34

Further Information

NOT AVAILABLE FOR SALE IN THE USA



CBR Penetration Transducer 50mm Travel Fitted with 5 Pin Din Plug.

Code: 27-1705

Product Group: Penetration Measurement, Penetration Measurement

- Ideally suited for use with GDU for accurate displacement measurements
- Models available for use in consolidation, shear, CBR and triaxial test applications
- Supplied complete with mounting hardware for specified products

Displacement Transducers are used in consolidation, shear, CBR and triaxial test applications for accuratevdisplacement measurements. They are supplied complete with a 5-pin DIN type connector for direct connection to the GDU.

Specification

Construction

Excitation
Connector
Mounting bracket
Weight kg

Fully encapsulated electronics, sealed in a stainless steel case 14 V DC

5-pin DIN type
Included as standard

0.45

www.ele.com +44 (0)1525 249 200

Page 17 of 18



Bracket and Adaptor. Dual Purpose Mounting Bracket for CBR Penetration Gauges EL24-9184/EL24-9186

Code: 24-9188

Product Group: In-situ CBR, Conversion of In-situ to Laboratory CBR, Penetration Measurement

Dual purpose mounting bracket for CBR penetration dial gauges. Allows gauge to be fixed to penetration piston or load ring.

Standards BS 1377, BS 1924



Transducer Extension Cable 1.5 m

Code: 27-1715

Product Group: Extension cables

Wired with a 5-pin DIN plug at one end and 5-pin DIN type socket at the other, these extension cables are used to increase the length of any GDU/ECU transducer

+44 (0)1525 249 200