

















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

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# Contents

This wishlist was generated on 15/09/2016, and contains the following Products:

#### 24-9150/01

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

### 27-1559 50kN S-type Load Cell

#### 36-0720/01

ADR Touch 1500 Compression Machine with Digital Readout.

#### 25-0402

Consolidation Frame One Dimensional Consolidation Incremental Loading Device.

### 25-0650

**Guelph Permeameter Supplied Complete with Extension Kit.** 

25-3518/01

**Digital Tritest 50 Load Frame** 

#### 26-1872

**Six-Way Pneumatic Pressure Control Panel.** 

#### 25-4157

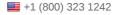
100mm Triaxial Cell 1700Kpa with 5 Pressure/ Drainage Ports. Supplied with Two Valves.

#### 26-2114/01

Digital Direct/Residual Shear Apparatus Complete with Lever Loading Assembly. 220-240V 50/60Hz 1Ph.

# 80-0200/01 ELE Sieve Shaker

24-9090/01 Automatic Soil Compactor BS 220-240V 50Hz 1Ph.





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

Code: 24-9150/01

Product Group: CBR Load Frames

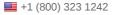
- Single speed machine (BS/EN and ASTM)
- Rapid platen adjustment
- Complete with stabilising bar
- Compact, bench-mounting design
- Options for mechanical or electronic measurement

Designed for performing laboratory CBR tests to BS 1377, EN13286-47 and ASTM D1883, this bench mounting machine comprises a twin column frame incorporating a motorised drive system. Rapid adjustment of the platen is provided, which enables daylight to be taken up quickly and also close control of application of a seating load.

## Standards BS 1377, BS 1924, EN 13286-47, ASTM D1883, AASHTO T193

### **Specification**

Dimensions (I x w x h)	550 x 400 x 1220 mm
Max vertical clearance	800 mm
Horizontal clearance	255 mm
Platen diameter	133 mm
Platen travel	105 mm
Weight kg	80







## 50kN S-type Load Cell

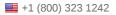
Code: 27-1559 Product Group: Load Measurement, Force measurement, Electronic Instrumentation

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\*\*





# ADR Touch 1500 Compression Machine with Digital Readout.

#### Code: 36-0720/01

Product Group: General Purpose Compression Machines

- 1560 kN/350 000 lbf capacity
- Calibration accuracy to BS EN ISO 7500-1; ASTM
- E4;
- Efficient hydraulic power packs
- Economic machines ideal for site use

The Compact 1500 range of compression machines has been designed to meet the need for a simple, economic and reliable means of testing concrete.

#### SPECIMEN CAPACITY

The dimensions of the frame allow the testing of cylinders up to 320 mm long x 160 mm diameter, and cubes 150 or 100 mm square. Kerbs and flagstones may also be tested on the ADR machine as well as 150 mm and 100 mm square section beams to ASTM C78, using the optional 100 kN flexural frames which are connected to the power pack.

#### LOAD INDICATION

The ADR digital readout is a microprocessor controlled instrument, which is fitted as standard to all digital machines in the range. Load can be displayed in kN, lbf or kgf as selected by the operator.

#### **Further Information**

\*\*NOT AVAILABLE FOR SALE IN THE USA\*\*

The Standard range of compression machines has been designed to meet the need for a simple, economic and reliable means of testing concrete.

Whilst delivering all the features and reputation of the established ADR Series with its extensive design history, the new and improved user interface provides a high quality platform for testing that enhances the performance of ELE's compression machines.

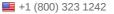
New, sophisticated electronics further the benefits of simplified operation, whilst delivering the highest levels of accuracy in testing concrete and cement/mortar samples, satisfying the needs of Quality Control Managers, Lab Managers and Technicians.

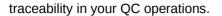
#### ACCURACY & SAVINGS

The new ADR Touch Series, with 145mm (5.7") high resolution QVGA touch screen interface and intuitive menu-driven operation, reduces the time taken to set up the machine and perform tests, reducing the time to train staff by up to 25%.

Up to 6 sample types can be set as favorites, enabling one-touch set up for repeat testing.
Full, QWERTY touch pad for input of test data.

Most testing errors produce lower strength results. Noncompliant loading rates can generate errors in measured strength. The user interface includes real-time display of load vs. time, further ensuring accurate and consistent test results and providing "goodness of test" data to improve





#### TRACEABILITY & DATA QUALITY

The ADR range now provides improved data quality and traceability in due diligence cases - it is now possible to demonstrate traceability all the way from the machine/user to the accreditation body, increasing your reputation and peace of mind - all test results now come complete with the machine serial number attached.

• Enhanced USB data communications between PC and machine - eliminating the need for download software.

• Two gigabytes of storage memory.

• Full customization of sample sizes - stress calculations are automatically recalculated.

#### USER SAFETY

With full safety gates as standard, total systems diagnostics, ram run-out switches and overload warnings ensure the safety of your employees and the reliability of your machine.

#### Specification

Testing Standards	BS EN ISO 7500-1, ASTM E4 1500 kN
Capacity	
Cubes (Concrete)	Up to 150 mm
Cylinders (Concrete)	Up to 160 x 320 mm
Blocks	n/a
Flexural Testing	Via Flexural Frame
TFV and ACV	Yes
Voltage Supply	220-240V 50/60 Hz 1Ph.
Frame Type	Welded
Max vert. Clearance	340 mm
Max hor. Clearance	325 mm
Platen Sizes	Lower, Upper 222 mm
Max Ram Travel	50 mm

#### Spares/Consumables



## Pressure transducer, 0-700bar, 0.05 to 10v DC Output

Code: 6014A0062





## Consolidation Frame One Dimensional Consolidation Incremental Loading Device.

Code: 25-0402

Product Group: Consolidation Apparatus, Table Top Consolidation Apparatus

- High capacity 8800 kPa on 50 mm diameter specimens using 11:1 beam ratio
- Triple beam ratio, 9:1, 10:1, 11:1
- Compact unit ensures maximum space saving

The ELE Oedometer is rigidly constructed to ensure minimum frame distortion. The frame is designed to load the specimen through a yoke assembly and one of three alternative beam ratios. The beam is fitted with a counterbalance weight and beam support jack. The cell platform will accept the complete range of ELE consolidation cells and is fitted with a central spigot to ensure accurate centring of the cell under the loading yoke. Dimensions without hanger 711 x 203 x 508 mm (l x w x h). Weight 22 kg.

#### Standards

ASTM D2435, ASTM D4546, AASHTO T216, ASTM D3877, BS 1377-5

### **Further Information**

Supplied without dial gauge and weights.

### Specification

48 tons/sq. ft. (5,14 8 kPa) on Load Capacity 2.5" (63 mm) diam. samples. Loading Beam Cast aluminum; counterbalanced; 9:1,10:1 and 11 :1 ratios. Frame Cast aluminum; integral beam support jack; plated steel and platform. Dimensions 203 x 711 x 508 mm, (8" w. x 28" d. x 20" h). excluding weight hanger. Weight (Net 30 lbs). 13 .6 kg; Shpg. 40 lbs. (18.1 kg).

### Spares/Consumables











# Electronic Digital Indicator, 0.600"/15 mm range

Code: 88-4210





# Guelph Permeameter Supplied Complete with Extension Kit.

Code: 25-0650

Product Group: Guelph Permeameter, Guelph Permeameter

- Lightweight and portable
- Robust construction
- Requires only 2.5 litres of water
- Results usually within 2 hours

The Guelph Permeameter is used to obtain accurate measurements of hydraulic conductivity, soil sorptivity and soil matrix flux potential. These three factors govern how liquids will move through an unsaturated soil profile.

Recent significant advances in both the theoretical and practical techniques of measuring soil hydraulic conductivity have been made by the University of Guelph, Canada. This has resulted in the development of the Guelph Permeameter, utilising the Constant Head Well principle.

### Standards ASTM D5126

### **Further Information**

Guelph Permeameter Set Includes:-

- •1 Field Tripod
- •1 Well Auger
- •1 Well Tripod
- •1 Preparation Tool
- •1 Hand Pump
- •1 Extension Kit (extends depth by 800 mm)
- •1 Collapsible Water Container
- •1 Set of Instructions and Carrying Case

### Specification

Cell

Capacity Base Top plate

Net Weight Overal Weight Permeameter Plated seamless tube 100 mm diameter x 130 mm height 3.18 Litres Porous plate with three tie rods Machined to accept smaller tubes 13.6 kg 111 kg High impact polycarbonate, molded elastomers.

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Auger

Carrying Case Test Time Test Depth Hydraulic Conductivity Range

Weight

2" (50.8 mm) diam.; machined steel. Die-cut foam for parts storage. 1/2 – 2 hours. 15 to 75 cm (0.5 to 2.5 ft). 10-4 to 10-8 m/sec (10-2 to 10-6 cm/sec). Net 30 lbs. (13 .6 kg).





### **Digital Tritest 50 Load Frame**

Code: 25-3518/01

Product Group: Digital Tritest 50 Load Frame, CBR Load Frames, Triaxial Load Frames

- Microprocessor control
- Large on-board LED screen display
- Direct entry via a touch sensitive keyboard
- Rapid approach and return to datum of platen
- Fully variable speed, 0.00001 to 9.99999 mm/min
- Samples up to 100 mm diameter

This 50 kN capacity machine, designed primarily for triaxial testing of soil specimens up to 100 mm diameter x 200 mm long, comprises a rigid twin column construction with an integral fully variable microprocessor controlled drive unit and LCD display with a touch sensitive keyboard. The machine is normally bench mounted for ease of installation and operation.

The use of a microprocessor controlled drive system and keyboard entry provides the Digital Tritest 50 with a wide variety of features which include pause and speed reset during test, RS 232C, operator programming of speed and control functions, self test diagnostics and many other features.

A robustly constructed steel case houses the motor drive system with careful attention being given to the prevention of ingress of water or grit. All operating controls are mounted on the front panel of the machine, which is angled and recessed to prevent physical and environmental damage.

#### Standards

BS 1377-7, BS 1377-8, BS 1924-2, ASTM D1883, ASTM D2166, ASTM D2850, ASTM D4767, ASTM D7181, AASHTO T99, AASHTO T134, AASHTO T135, AASHTO T136, AASHTO T180, AASHTO T193, AASHTO T208, AASHTO T296, AASHTO T297

#### **Further Information**

Rapid Approach Speed

Complete with RS 232C interface.

#### Specification

Capacity Speed Range 50kN (11,200 lbf). English mode: 0.000001 to 0.399999 in/min. Metric mode: 0.00001 to 9.99999 mm/min. 1.0 in/min. (25 mm/min.).

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Platen Travel

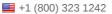
Platen Diameter Vertical Clearance

Horizontal Clearance Serial Interface

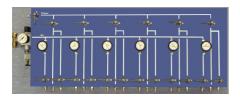
**Overall Dimensions** 

Weight

100mm (3.9"); limit switch protection. 133 mm (5.2") 910 mm, (36 .8") maximum; 305mm, (12") minimum. 364mm, (15 .3"). RS232C; programmable baud rate and protocol. 500 x 500 x 1,470 mm, (19.7" w. x 19.7" d. x 57.8" h). Net 100kg (220 lbs); Shpg. 136kg (300 lbs).



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# Six-Way Pneumatic Pressure Control Panel.

Code: 26-1872

Product Group: Air/Water Pressure Systems - up to 1000 kPa

The six-way pressure control systems have been designed specifically for the monitoring of up to six independent pressures. They are particularly useful for setting up and controlling a 3-cell effective stress system using three independent back pressures. The panel is used in conjunction with the Universal Pump and Pressure Indicating Panel which provides pressure monitoring and facilities for filling and de-airing the system. Comprising six pneumatic control valves mounted in a housing for controlling six independant outlets. Supplied with connection ports for coupling panel to EL26-1880. Maximum inlet pressure 1400 kPa maximum outlet pressure 1000 kPa.



## 100mm Triaxial Cell 1700Kpa with 5 Pressure/ Drainage Ports. Supplied with Two Valves.

Code: 25-4157 Product Group: Triaxial Cell, Triaxial Cells

- Working pressure up to 1700 kPa
- All round visibility
- Sample sizes 38 to 100 mm diameter
- · Rapid assembly and dismantling

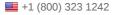
• Accepts a range of interchangeable submersible load transducers

This range of precision made triaxial cells has been designed to meet the requirements of the modern soils laboratory. The cells have been treated to minimise corrosion. Particular attention has been paid to the quality of finish between the piston and the head. Final assembly includes the fitting of an O-ring seal and the use of special lubricant to reduce friction to a minimum and eliminate water leakage.

The piston load capacity is designed to accept high horizontal forces which may be present during the final stages of a test. Each cell has five take-off positions drilled in the base for top drainage/back pressure, pore water pressure and bottom drainage. Two no-volume change valves and an anvil for strain gauge/transducer datum are supplied for fitting to the cell.

A feature of these cells is that they all accept a single diameter piston. The internal height is such that a range of submersible load transducers can be fitted without any modification. Each cell will accept a range of base adaptors and various accessories for testing a wide range of specimens

### Standards BS 1377, ASTM D2850, ASTM D4767, AASHTO T296, AASHTO T297





### Digital Direct/Residual Shear Apparatus Complete with Lever Loading Assembly. 220-240V 50/60Hz 1Ph.

Code: 26-2114/01

Product Group: Direct/Residual Shear Apparatus, Direct/Residual Shear Apparatus

- Microprocessor control
- Large on-board LCD screen display
- Direct entry via touch sensitive keyboard
- Rapid approach and return to start datum
- Fully variable speed, 0.00001 to 9.99999 mm/minute
- Accepts specimens up to 100 mm square

The ELE Direct Shear Apparatus accepts specimens 60 mm, 100 mm square or 2.5 inches in diameter. The use of a microprocessor controlled drive system and keyboard entry gives the apparatus a wide range of features that include pause and speed reset during test, RS 232C interface, operator programming of speed and control functions, self test diagnostics and many other features. A return to start datum provides a positive means of reversing the shearbox when either preparing for a new test or continuing with residual testing procedures.

Safety forward/reverse travel limit switches are fitted as standard and monitored through the electronics system control.

The electronics are housed in a modern moulded shroud, which includes a large LCD display and keyboard entry. The apparatus is enclosed in a robustly constructed case, has been designed for floor mounting and is supplied complete with carriage, loading hanger and 10:1 lever loading device.

#### Standards

ASTM D3080, AASHTO T236, BS 1377, EN 1997-2

#### **Further Information**

for 220 - 240 V AC, 50 - 60 Hz, 1 ph.

## Specification

Sample Size

Speed Range

Accepts either 2.42 ", 2.5" diam.; 60 mm square samples using accessory shear box assemblies, not included. Variable in either English or Metric units





	between 0.000001" (0.00001 mm) to 0.399999" (9.99999 mm) per minute.
Shear Force	1,000 lbf. (4.5 kN) maximum.
Vertical Load	2,200 lbf. (1,000 kN) using 10:1 lever ratio.
Dimensions	44.7" l. x 12 .6" w. x 49.6" h. (1,135 x 320 x 1,260 mm).
Weight	Net 181 lbs. (82 kg).

## Spares/Consumables



Dial Indicator - 1.0" Range

Code: 88-4100



Electronic Digital Indicator, 0.600"/15 mm range

Code: 88-4210



Vertical Dial Indicator, English

Code: 25-0445





### **ELE Sieve Shaker**

Code: 80-0200/01 Product Group: ELE Sieve Shaker

The ELE sieve shaker is powered by an electromagnetic drive that has no rotating parts to wear making it maintenance free and extremely quiet in operation.

The unit features a triple Vertical-Lateral-Rotary vibrating action that moves the sample over the sieve producing faster more efficient sieving, while the rapid vertical movements also help keep the apertures from blinding.

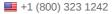
The shaker is ideal for laboratory or on site use. It is robust, compact and sufficiently lightweight to be portable. The separate digital microprocessor controlled console unit incorporates a keypad for setting the sieving program and is isolated from any effects of vibration from the shaker.

As standard the shaker includes, timer 0-999 minutes, adjustable vibration intensity and adjustable intermittent or continuous operation.

#### Further Information

\*\*NOT AVAILABLE FOR SALE IN THE USA\*\*

The unit accepts up to ten 200 mm or 8 inch, full height, diameter sieves and lid and receiver, or up to six 300 mm or 12 inch diameter sieves and lid and receiver. Complete as specified. Dimensions  $(I \times w \times h)$  380 x 440 x 1085 mm. For 220 - 240 V AC, 50 Hz 1ph.





# Automatic Soil Compactor BS 220-240V 50Hz 1Ph.

Code: 24-9090/01 Product Group: Automatic Compactors

Preset blow pattern ensures an even compaction, includes solid state controls for reliability and maintenance. An automatic digital counter resets to zero on the completion of a test. An selectable rammer with a drop height of 300-450mm, a selectable rammer weight of 2.5 or 4-5kg. A preset number of blows per layer can be set by thumb wheel control. A compaction rate of approximately 26 blows per minute. Accepts BS Standard Compaction and CBR moulds; also meets the requirements of BS1377. Voltage 220-240V 50hz 1ph.

Standards BS 1377, EN 13286-2, EN 13286-47

### Specification

Dimensions (I x w x h)	430 x 240 x 1400 mm
Rammer BS/EN	Circular faced, 50 mm dia,
	selectable
	to 2.5 kg or 4.5 kg weight.
Rammer ASTM	Circular faced, 2 in (50.8 mm)
	dia,
	selectable to 5.5 lb (2.5 kg) or
	10 lb
	(4.5 kg) weight.
Drop BS/EN	Adjustable to 300 mm or 450
	mm
Drop ASTM	Adjustable to 12 in (305 mm)
	or 18
	in (457 mm)
Weight kg	150

