



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

This wishlist was generated on 18/02/2019, and contains the following Products:

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25-1833/01

**De-Aired Water Apparatus 15 Litre Capacity**

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

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

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27-1500/01

**GDU 8 Channel Data Acquisition Unit 220-240 V 50/60 Hz, 1 Ph.**

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27-1561

**S-Type Load Cell 5 kN.for Use with Direct/ Residual Shear Machine. Fitted with 5 Pin Din Plug.**

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**Pressure Transducer Assembly 1700Kpa Fitted with 5 Pin DIN Plug.**

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**Vertical Displacement Transducer Assembly 15mm Travel with 5 Pin Din Plug Bracket for Shear Box**

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**DS7.3 Undrained Triaxial Shear Strength for Windows 10**

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**DS7.3 CU/CD Triaxial Shear Strength for Windows 10**

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83-1730/01

**Air Compressor**



## De-Aired Water Apparatus 15 Litre Capacity

Code: [25-1833/01](#)

Product Group: [De-Aired Water](#)

Complies to BS 1377-1



This compact self-contained unit will de-air water quickly and efficiently down to levels of dissolved oxygen acceptable for geotechnical test methods. Air is removed from the water by a vacuum system, which continuously circulates the water in the tank. The unit is supplied with a clear water container, which will hold a maximum of 15 litres of water. Input and output lines are formed using standard 6 mm tube connectors.

## Standards

BS 1377-1

## Specification

Dimensions l x w x h (mm)      380 x 356 x 470



## 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

Complete with RS 232C interface.

## Specification

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

# Product Sheet

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

## Accessories



### 50kN Clamped Boss Load Ring

Code: [78-0860](#)



### Adaptor kit, to perform CBR on the Tritest 50 load frame

Code: [25-3518/10](#)



### Clamped Boss Load Ring - 10.0 kN

Code: [78-0460](#)



### Clamped Boss Load Ring - 28.0 kN

Code: [78-0760](#)





## Clamped Boss Load Ring - 3.0 kN

Code: [78-0160](#)



## Clamped Boss Load Ring - 4.5 kN

Code: [78-0260](#)

## Alternatives



## MultiPlex 50 Load Frame

Code: [25-3700/01](#)



## Versa-Loader

Code: [25-3525/02](#)



## 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

## Accessories



## 100 mm Base Adaptor for 100 mm Triaxial Cell.

Code: [25-4186](#)





## Pressure Interface Chamber

Code: [25-0695](#)

## Alternatives



## 50mm Triaxial Cell 1700Kpa with 5 Pressure/ Drainage Ports. Supplied with Two Valves.

Code: [25-4047](#)



## 70mm Triaxial Cell 1700Kpa with 5 Pressure/ Drainage Ports. Supplied with Two Valves.

Code: [25-4117](#)



## Membrane Sealing Ring 100mm Diameter. Pack of 10.

Code: [25-7631](#)

Product Group: [Membrane Sealing Rings, Sealing Rings, Tri-Flex 2 Permeability Test Cell](#)

100 mm diameter membrane sealing ring (Pack Of 10).

## Standards

ASTM D2850, ASTM D4767, ASTM D5084, AASHTO T296, AASHTO T297

## Accessories



### 1.4" (35 mm) Sealing Rings

Code: [25-4281](#)



### Membrane Sealing Ring 70mm Diameter Pack of 10.

Code: [25-6461](#)



### Membrane Sealing Rings 2.8"

Code: [25-6641](#)

## Alternatives



## 1.4" (35 mm) Sealing Rings

Code: [25-4281](#)



## Membrane Sealing Ring 70mm Diameter Pack of 10.

Code: [25-6461](#)



## Membrane Sealing Rings 2.8"

Code: [25-6641](#)



## Bladder-Type Air/Water Pressure Assembly. 1000 Kpa Maximum Working Pressure.

Code: 26-1746

Product Group: [Air/Water Pressure Systems - up to 1000 kPa](#)

With transparent plastic chamber for operating continuously at pressures up to 1000 kPa. A length of tubing is provided for connecting the air/water cylinder outlet to a pressure measuring system.

- Used to supply hydraulic pressure from a pneumatic pressure source.
- Prevents air entering the hydraulic pressure system.
- Maximum working pressure 1000kpa.
- Supplied with connectors and tubing for fitting to pressure measuring systems.

## Accessories



### Nylon Tubing 30 Metre Length.

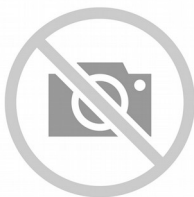
Code: 26-1769

## Spares/Consumables



### Pneumatic Pressure Reducing Panel. Provides Two Independent Pressure Outlets 1000 kPa Max.

Code: 26-1760



### Replacement Bladder Wide Neck (38mm Id)

Code: 26-1746/10



## 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

Accepts either 2.42", 2.5" diam.; 60 mm square samples using accessory shear box assemblies, not included.

Speed Range

Variable in either English or Metric units

Shear Force  
Vertical Load

Dimensions

Weight

between 0.000001"  
(0.00001 mm) to 0.399999"  
(9.99999  
mm) per minute.  
1,100 lbf. (5.0 kN) maximum.  
2,200 lbf. (10.0 kN) using 10:1  
lever ratio.  
44.7" l. x 12 .6" w. x 49.6" h.  
(1,135 x 320 x 1,260 mm).  
130 kg

## Accessories



### Clamped Boss Load Ring - 2.0 kN

Code: 78-0060



### Clamped Boss Load Ring - 3.0 kN

Code: 78-0160



### Clamped Boss Load Ring - 4.5 kN

Code: 78-0260



### Dial Gauge 10mm Travel X 0.002mm Divisions.

Code: 25-0440





## Digital Proving Ring, 1,000 lbs (4.5 kN)

Code: [78-0264](#)



## Digital Proving Ring, 450 lbs (2.0 kN)

Code: [78-0064](#)



## Horizontal Displacement Transducer Assembly 15mm Travel 5 Pin Din Plug Mounting Pillar

Code: [27-1697](#)



## Mechanical Dial Indicator - 25 mm Range Clockwise Movement

Code: [88-4110](#)



## S-Type Load Cell 5 kN.for Triaxial Tests. Fitted with 5 Pin Din Plug.

Code: [27-1551](#)



## Set of Weights 50 kg Slotted.

Code: [26-2132](#)



## Vertical Displacement Transducer Assembly 15mm Travel with 5 Pin Din Plug Bracket for Shear Box

Code: [27-1689](#)



## Weight Set A

Code: [25-0535](#)



## Weight Set B

Code: [25-0537](#)

## 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

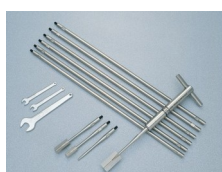
Code: [25-0445](#)

## Alternatives



## Digital Direct/Residual Shear Apparatus Complete with Lever Loading Assembly. 110-120V 50/60Hz 1Ph.

Code: [26-2114/02](#)



## H60 Field Inspection Vane Tester 0-200Kpa In Carrying Case. includes calibration and certificates.

Code: [26-3335](#)



## Hand Vane Tester

Code: [26-3346](#)



## Laboratory Vane Apparatus with 4 Springs and 12.7mm Vane; Hand Operated.

Code: [26-2270](#)

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## Pocket Shearmeter with 3 Vanes 0 to 1Kgf/Cm2 X 0.5Kgf/Cm2.

Code: [26-2261](#)

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## Shear Box Assembly 100mm Sq.

Code: [26-2197](#)

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## Shear Box Assembly 2.5 Inch Diameter

Code: [26-2213](#)

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## Shear Box Assembly 60mm Sq.

Code: [26-2181](#)



## GDU 8 Channel Data Acquisition Unit 220-240 V 50/60 Hz, 1 Ph.

Code: 27-1500/01

Product Group: Data Logging with the GDU, Geotechnical Data Acquisition Unit (GDU), Automatic Data Acquisition - Triaxial, Automatic Data Acquisition - Consolidation, Automatic Data Acquisition - Direct Shear, Automatic Data Acquisition - CBR

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 and following), 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
- PC link via RS232 (DS7.1 only), or RS232 and Ethernet P2P/LAN (with DS7.2 and following)
- Extended warranty

## Specification

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.
Dimensions	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).

## Accessories



## 8-Channel Expansion Analog Input Module

Code: [27-1505](#)



## USB to Serial Adapter

Code: [27-1701](#)

## Alternatives



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

Code: [27-1500/02](#)



## RS232/USB Cable, GDU

Code: [27-1510](#)





## S-Type Load Cell 5 kN.for Use with Direct/Residual Shear Machine. Fitted with 5 Pin Din Plug.

Code: [27-1561](#)

Product Group: [Load Measurement, Measurement of Load \(Shear Stress\)](#)

- Repeatability better than  $\pm 0.02\%$  of rated output
- Non-Linearity better than  $\pm 0.03\%$  of rated output
- Supplied complete with 5-pin DIN type connector for connection to GDU

Ideally suited for a wide range of applications, ELE S-type load cells provide high accuracy and minimum deformation. Various models are available, with the necessary adaptors, for use with ELE Triaxial Load Frames, Multiplex 50/Marshall Test 50/CBR Test 50 and Direct Shear machine.

## Standards

BS 1377, ASTM D3080

## Accessories



## S-Type Load Cell 5 kN.for Triaxial Tests. Fitted with 5 Pin Din Plug.

Code: [27-1551](#)

## Alternatives



## S-Type Load Cell 5 kN.for Triaxial Tests. Fitted with 5 Pin Din Plug.

Code: [27-1551](#)



## Pressure Transducer Assembly 1700Kpa Fitted with 5 Pin DIN Plug.

Code: [27-1633](#)

Product Group: [Pressure Measurement](#), [Tri-Flex 2](#)  
[One-Cell Permeability Test System](#), [Pressure](#)  
[Transducer](#)

Pressure Transducers are used to measure the cell, pore and back pressures during triaxial testing. Assemblies are supplied complete with a de-airing block, valve, 5-pin DIN plug connector and calibration certificate

### Specification

Construction	Stainless Steel
Excitation	10 V DC
Output	143 mV full range
Thread	1/4" BSP



## Vertical Displacement Transducer Assembly 15mm Travel with 5 Pin Din Plug Bracket for Shear Box

Code: [27-1689](#)

Product Group: [Displacement Measurement, Measurement of Horizontal and Vertical Movement, Displacement Transducers](#)

0 to 10 mm range. For use with Direct/Residual Shear Machines. •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 accurate displacement measurements. They are supplied complete with a 5-pin DIN type connector for direct connection to the GDU.

## Specification

Construction	Fully encapsulated electronics, sealed in a stainless steel case
Excitation	12 V DC
Connector	5-pin DIN type
Mounting bracket	Included as standard
Weight kg	0.45
Construction	Fully encapsulated electronics, sealed in a stainless steel case.
Excitation	10vDC.
Connector	5-Pin DIN type.
Mounting Bracket	Included as standard.
Weight	Net 1 lb. (0.45 kg).

## Accessories



## Axial Strain Transducer Assembly 50mm Travel Fitted with 5 Pin Din Plug.

Code: [27-1617](#)



## Horizontal Displacement Transducer Assembly 15mm Travel 5 Pin Din Plug Mounting Pillar

Code: [27-1697](#)

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### Spares/Consumables



## CBR Displacement Transducer

Code: [27-1706](#)

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### Alternatives



## Axial Strain Transducer Assembly 50mm Travel Fitted with 5 Pin Din Plug.

Code: [27-1617](#)



## Horizontal Displacement Transducer Assembly 15mm Travel 5 Pin Din Plug Mounting Pillar

Code: [27-1697](#)



## DS7.3 Undrained Triaxial Shear Strength for Windows 10

Code: [27-2753](#)

Product Group: [Automatic Data Acquisition - Triaxial, DS7.3 for Windows 10, DS7.3](#)

- Options for single or multi-stage testing on a sample
- Mohr circles produced for graphical analysis

Options are available for a single test on one sample, standard three-sample procedure with linking of the results, or for a multi-stage test on one sample. Load and strain are monitored through transducers. Various printouts and graphical plots are available including basic sample data, moisture content and density. The program tabulates shearing data and plots stress against strain. Mohr circles are produced for graphical analyses.



## DS7.3 CU/CD Triaxial Shear Strength for Windows 10

Code: [27-2763](#)

Product Group: [DS7.3 for Windows 10](#), [DS7.3](#)

- Complete package for consolidated drained and consolidated undrained triaxial tests

This advanced package includes procedures for consolidated drained and consolidated undrained tests. Standard options are available for saturation, consolidation and shearing with automatic monitoring of the various parameters through transducers linked to the system. Load, strain, volume-change, pore-pressure, cell pressure and back pressure can all be monitored. Various prints and graphical plots are available to the engineer and include saturation data such as pore pressure build-up and B values, consolidation, volume change against time, shearing load versus strain with pore pressure monitoring.





## Air Compressor

Code: 83-1730/01

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

## Further Information

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

## Specification

Dimensions (l x w x h)	483 x 457 x 864 mm
Free air delivery	2.0 cfm
Receiver capacity	50 litres
Maximum pressure	1000 kPa
Continuous working pressure	700 kPa
Electrical supply	220 – 240 V AC 1 ph 50 Hz
Water Trap	No
Weight	57 kg