

POINT LOAD TESTER

MODEL 6500

The Geotechnical Systems Australia Pty Ltd [Point Load Tester](#) is a portable instrument used for the evaluation of the Point Load Strength Index of rock specimens.

FEATURES

- Microprocessor control for superior load measurements.
- Compact, aluminium construction, including robust carry case for transportation.
- Direct load measurement in kilonewtons or pounds force.
- Adjustable platen separation scale.
- Hardened stainless steel ball set into the platen points to provide a true 5mm. point radius.
- Safety screen for operator.
- Open design, facilitating cleaning of instrument.
- 15 hours battery life, auto power off.
- Automatic zero setting.
- Hold down holes in base plate allow fixing to bench or anchor plates.
- Optional recording of data via RS 232 link to custom software.



BACKGROUND

The Point load strength test is an index test for rock strength classification. The test can measure the Point Load Strength, I_s , of rock specimens and the Strength Anisotropy Index, I_a , which is the ratio of Point Load Strengths in directions which give the greatest and least values. Diametral and axial tests are performed on core samples, while block and irregular lump tests may be done on prepared and unprepared samples respectively. The specimen is fractured by applying load through a pair of uniaxial, conical platens.

If necessary, size corrections may be applied to core specimens to yield the standard $I_s(50)$ value for a 50mm diameter core. Correlations between $I_s(50)$ and the Unconfined Compressive Strength have been documented.

DESCRIPTION

The instrument is based on a two column anodized aluminium and stainless steel loading frame so as to minimize size and weight yet maintain rigidity and load capacity. Load is applied through the hand operated hydraulic jack mounted on the reaction plate. The travel of the bottom platen is guided by closely toleranced bushings on the columns while platen separation is measured by a sliding scale with adjustable datum. The load measuring device is a strain gauge load cell located above the top platen. The intelligent display allows the operator to control the Point Load Tester frame through its front panel keypad. Alternatively a computer can run a custom software package to record test data. Peak hold values are shown on both display and monitor.

The battery life of at least 15 hours ensures prolonged field or laboratory testing without the need for recharging. A transparent safety screen protects the operator from rock fragments during the test.



GEO TECHNICAL SYSTEMS AUSTRALIA PTY. LTD.

Specialists in Geotechnical Instrumentation

ACN 006 720 887
ABN 28 006 720 887



SPECIFICATION	POINT LOAD TESTER	Model 6500
LOAD CELL		HYDRAULIC JACK
Range: 0-50 kN		Capacity: 67 kN
Accuracy: < 0.2%		Stroke: 76 mm
Temperature Range: 0-50 Deg C		POWER
Separation: 76mm max		Battery: 8 x 1.25V Rechargeable
FUNCTIONS		Life: 15 hours continuous
Peak Retain peak load during testing		Charge Period: 14 hours
Track Very low strength testing		FRONT PANEL
Recall Recover last 5 values		Display: Intelligent LCD
Configure Sets readout option		DIMENSIONS / WEIGHT
PLATENS		Inst: 180 x 205 x 475mm / 14Kg
Stainless steel with hardened stainless steel ball points		Box: 250 x 300 x 525mm / 6.5 Kg



Because Geotechnical Systems is continually improving its products and processes, information contained within this brochure is subject to change without notice.

For more information or to discuss your application, contact...

1/72 Bayfield Road
Bayswater
VIC 3153
Australia

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ACN 006 720 887
ABN 28 006 720 887

Phone
+61 3 9720 5950
Fax
+61 3 9720 5942
E-mail