



APPLICATIONS

The point load strength index obtained from these tests is correlated with the uniaxial compressive strength of the rock tested. Being rapid and simple to perform, the point load test allows the user to easily delineate zones of rock through different strength properties. For this reason it becomes a most useful tool in large scale mining as well as civil engineering projects when classifying rock types and their strength.

FEATURES

- High pressure 10 ton or 98kN range
- Conical platens conform to ISRM suggested method
- Air driven hydraulic foot pump eliminating manual hand pumping & injury
- Automatic repetitive jacking action producing consistent & improved results
- Easy, reliable testing for large volumes of tests
- Large testing capacity of 0-102mm core samples
- Peak load digital manometer gauge
- Heavy duty with protective shield
- Extreme rigidity & solid heavy base prevents toppling
- Digital RS232 option available to record data on PC
- Logging version available

OPERATING PRINCIPLE

Three point load test configurations are available for core logging.

Diameter test

This test is the most reproducible and is independent of the core length provided that the length/diameter ratio is equal to or greater than 1.0

Axial test

When only rock discs are available or when discs are produced with the diametric test, the axial test can be performed on core specimens with length/diameter ratios between 0.3 and 1.0. This test is useful to evaluate strength anisotropy.

Irregular lump test

If irregular shaped rock pieces are the only specimens available, tests can still be performed on lumps having an equivalent core diameter close to 50 mm and an overall approximately cubical shape. In order to fit this requirement, specimens may be prepared from larger pieces by trimming or saw chisel cutting.



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Used in mining and civil construction this instrument is used to determine point load strength index of rock or concrete core samples. Point load strength provides a method for establishing rock strength classification. It also indicates rock anisotropy which assists in prediction of rock strength properties such as uniaxial tensile and compressive strengths. Model PLT-10 is a simple portable apparatus used for testing rock samples or cores. The PLT-10 has a maximum loading capacity of ten tons and accepts drill cores or rock lumps of different sizes having a maximum length of 102 mm.

TECHNICAL SPECIFICATIONS

MAXIMUM LOADING	Up to 98 kN or 10 ton
MAXIMUM SPECIMEN SIZE	Up to 102mm
ACCURACY	<0.2%
DIMENSIONS OF PLT-10 INCLUDING HARD CASE	45cmx27cmx25cm @ 35kg 78cmx35cmx34cm @ 50kg
DIGITAL PRESSURE GAUGE RANGE	0-1000 bar
DIGITAL PRESSURE GAUGE	Max and min pressure displayed
DIGITAL UNITS	Bar, psi, kPa, MPa, hPa and mbar

	AIR HYDRAULIC PUMP
MAX OPERATING PRESSURE	700 bar or 10152 PSI
AIR CONSUMPTION	255 l/min

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