GEOLOGICAL, GEOPHYSICAL, GEOTECHNICAL SERVICES AND INSTRUMENTS



# POINT LOADER

## Point Load Tester



#### <Abstract>

POINT LOADER is designed for obtaining uniaxial compressive strength from soft-rock to hard-rock.

It does not require any power supply besides a little manpower.

It is robust system and requires only easy maintenance.

Easy field operations.

#### Applications:

Mining

Civil constructions such as dam and tunnel and so on.

#### <Features>

- Light in weight, approx. 24kg including a housing case
- Apply to ISRM suggested method
- Easy handlings using oil driven hydraulic pressure with hand pump
- High-precision measurement for soil to hard-rock
- Easy measurement of size of core using the attached kit

### <Specification>

Maximum load : Max. 45kN

Maximum

specimen size : Max. 80mm

Maximum pressure : max.70MPa

Operating

temperature : -10degree C to 50degree C

Volume : 360H x 180W x 145Dmm

Weight :approx. 24.5kg

(including the case)

## <Equipment Configuration>

Point Load Tester

Main unit : 1 unit Storage case : 1 ea

Pressurizing Instruments

Hydraulic pump : 1 ea
Bourdon tube pressure meter: 1 unit
Hydraulic pressure hose : 1 ea
Storage case : 1 ea

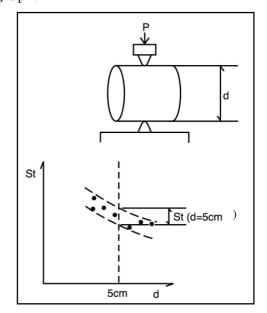
## <Configuration Diagram>

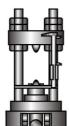


Calculation method for strength is as below.

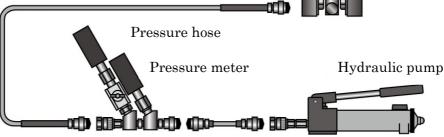
 $St = 0.9 \times P/d^2 \cdots$  (tension strength)

Since "St" varies depend on a specimen's size, it shall be determined on a basis of the time when d = 5 cm as standard. However, in case of irregular samples, its dimension would not be constant. Thus, "St" will be estimated by testing 5 to 8 specimens and organizing like following graph.



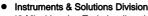


Point load tester





Please note specifications are subject to change without notice for the improvement.



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