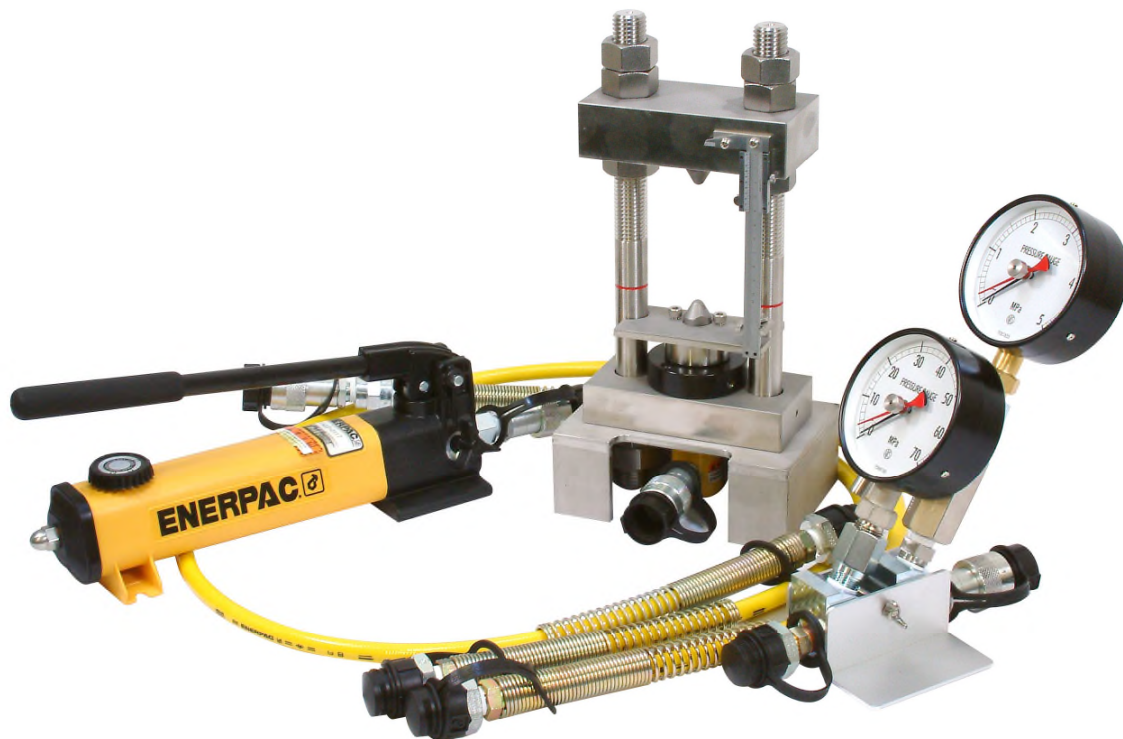


Point Loader

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 requires only easy maintenance and is robust. Easy field operations.

Applications:

Mining

Civil constructions such as dam and tunnel and so on.

<Feature>

- Light in weight, 24 kg including a housing case
- Confirming 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. 45 kN

Maximum Specimen Size
: Max. 80 mm

Maximum Pressure : Max.70 MPa

Operating Temperature
: -10 to +50 °C

Volume : 180 (W) x 360 (H) x 145 (D) mm

Weight : 24.5 kg (including the case)

<Configuration>

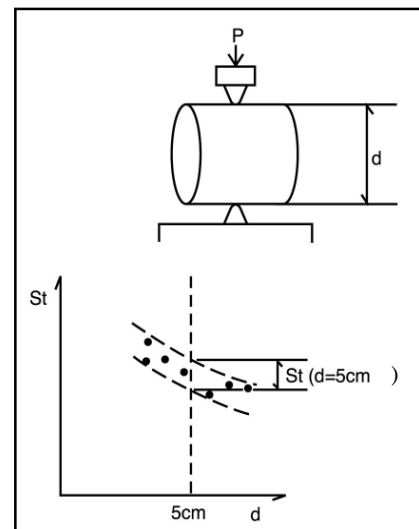
- Point Load Tester
 - Main Unit : 1 unit
 - Storage Case : 1 ea
- Pressurizing Instruments
 - Hydraulic Pump : 1 ea
 - Bourdon Tube Pressure Meter : 1 unit
 - Hydraulic Pressure Hose : 1 ea
 - Storage Case : 1 ea

<Data Acquisition Method>

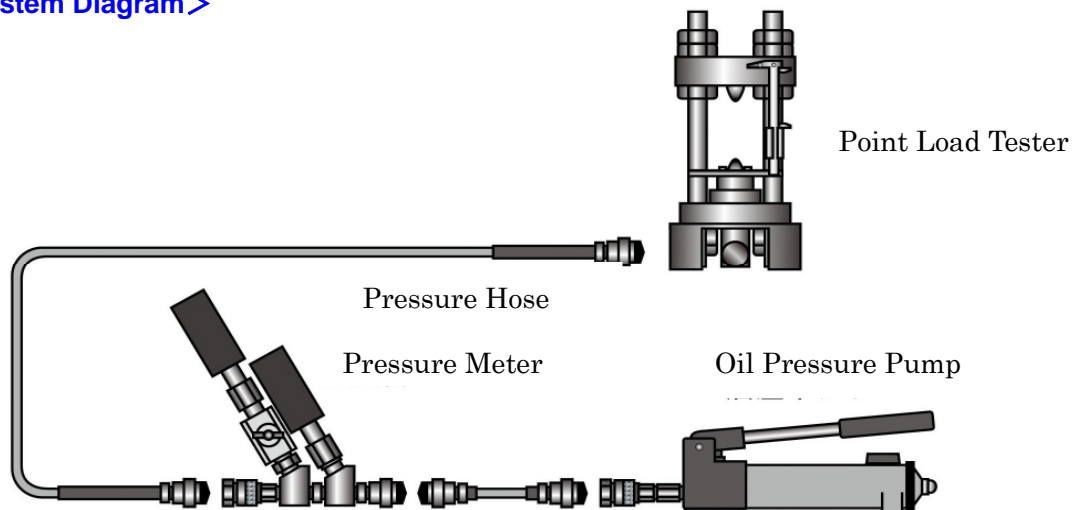
Calculation method for strength is as below.

$$St = 0.9 \times P/d^2 \dots (\text{tension strength})$$

Since "St" varies depend on a specimen's size, it shall be determined on a basis of the time when $d = 5 \text{ cm}$ 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.



<System Diagram>



JQA-2772

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

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