Your supplier of high pressure laboratory instruments

SHEARTEST-SERIES AUTOMATED ROCK DIRECT SHEAR TESTER

ASTM D5607and ISRM suggested method

Description

The SHEARTEST is a versatile direct-shear system designed for conventional, incremental, and residual shear tests. This closed-loop, servo-controlled device applies simultaneous hydraulic normal and shear forces to a rock specimen housed in a shear box. It incorporates direct shear specimen rings capable of accommodating cylindrical cores, cubes, prisms, or rock fragments. A dedicated computing station records both force and displacement data in real time. The system operates under constant normal load (CNL), constant normal stiffness (CNS), or constant normal displacement (CND) modes while it can simultaneously apply constant incremental or ramped shear loads or displacements. Data collected during testing allows for the determination of key shear strength parameters, such as cohesion (c) and friction angle (Ø). Each unit can be custom-configured to specific needs, offering a wide range of shear and normal load capacities as well as specimen sizes—ensuring a tailored and precise solution for every user. The unit complies with ASTM D5607 and ISRM standards.

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Specifications

Model	Shear load (kN)	Normal load (kN)	Shear stroke (mm)	Normal stroke (mm)	Ring diam/side (mm)	Ring Height (mm)
SHEARTEST 200-10	200	10	+/-50	50	150	150
SHEARTEST 100-50	100	50	+/-50	50	150	150
SHEARTEST 500-300	500	300	+/-50	50	150	150
SHEARTEST 1000-500-L	1000	500	+/-50	100	300x300	100

Benefits

High Precision – Servo control ensures accurate, reliable force application.

Versatile – Supports CNL, CNS, CND, and various shear test modes.
Customizable – Adjustable load and size for different materials and needs.