RDS-100 Digital Rock Direct Shear System

Brand: GCTS
Product Code: 379-00
Availability: Call for availability

Description

The GCTS Direct Shear System for Testing Rocks is a simple and inexpensive device for testing a wide range of rock specimen configurations. Cylindrical cores, cubes, prisms, and rock fragments can be used to determine the shear strength. This system features electronic sensors and digital displays to monitor the loads and deformations. A standard A/D automatic data acquisition with USB interface is included with the system to automatically log and reduces the test data. The included software program accepts inputs from the shear and normal load sensors, the shear deformation, and up to four normal deformation sensors (the software calculates automatically the average normal deformation). Two air/oil booster pumps operating from 800 kPa (100 psi) compressed air allow the user to easily set and maintain the normal load and the shear displacement rate. Pressure sensors are used to monitor the loads but load cells are also offered as an option. The shear pump includes a 4-way valve to easily reverse the loading direction. The air/oil booster pumps, digital displays, and all the control valves are set on an easy-to-use front panel housed in a metal cabinet. Specimens are cured within removable specimen rings and then drop inside the shear box allowing the preparation of multiple specimens using additional rings to increase test production. <h2>Features</h2> Manual control of double acting (push/pull) 100 kN (10 ton) shear load actuator with 25 mm stroke & 50 kN (5 ton) normal load capacity with 25 mm stroke Normal load stiff reaction frame mounted on sliding bearings to minimize horizontal friction while keeping the normal load vertical throughout the full shear displacement 150 mm (6") inside diameter sample rings for specimens up to 150 mm high Precise Digital Display with Peak Value Memory A/D Automatic Data Acquisition with USB interface Windows 98/NT/2000/XP software for automatic data logging and reporting of direct shear tests with real time

graphical display of test progress Economically priced