Triaxial Rock Testing System (RTX-1000)

- 1,000 kN (225 kip) axial load and 70 MPa (10,000 psi) confining pressure capacity
- Direct closed-loop digital servo control of axial stress, axial strain, radial strain, and several other calculated triaxial variables
- GCTS High Pressure Triaxial cell with internal instrumentation to measure local axial & radial strains
- Ideal for performing unconfined compression, triaxial, bending, indirect tension, fracture, creep, post failure behavior, & other compression tests
- Available options: High stiffness loading frame, platens with ultrasonic transducers, high temperature control subsystem, and upgrades for axial loads up 4,500 kN and confining pressures up to 210 MPa.
- Economical "turn-key" systems built to customer specifications.

DESCRIPTION

GCTS Triaxial Rock Testing Systems are manufactured according to your design specifications (load capacity and system stiffness, sample size, confining and pore pressures, internal instrumentation, temperature testing, and ultrasonic velocity measurements). The top cross head height can be adjusted to accommodate a wide variety of test specimens and triaxial cells. The RTX-1000 meets the specifications of the International Society for Rock Mechanics (ISRM) for triaxial testing of rock samples.

The system is capable of performing static and dynamic closed-loop strain or stress controlled as well as post failure behavior tests. Included with this system is our true 32-bit Windows XP Software. It allows sending directly your test data to any computer connected to your local network. Our new software includes a database system to keep track of all the data generated at your lab with any of our testing systems. Using a Windows network system in your lab facilitates the transferring of your test data directly into other Windows programs such as Word or Excel for report generation as well as to easily backup your important test results.

The Graphical User Interface with context-sensitive on-line help and intuitive color windows helps minimize learning time and enables laboratory personnel to conduct more complex, but realistic, testing programs at substantially lower operating cost and also with minimal operator error. The system manages all the instrumentation and continuously monitors sensor outputs to accurately account for uplift pressures acting on the loading piston, area changes, deformation and volume change sensors setup and re-positioning, etc.

SPECIFICATIONS

Contact GCTS