Your supplier of high pressure laboratory instruments

QRT-SERIES QUICK RELEASE TRIAXIAL CELL

The Quick Release Triaxial Cell enables streamlined testing for rock specimens with diameters that vary from 21.5 mm (EX) to 54 mm (NX). The rock sample, along with the top and bottom platens, is enclosed in a heat-shrinkable sleeve. This entire setup is then precisely positioned and centered in the cell using a guiding tool. After alignment, three instrumented lateral actuators equipped with pressure-compensated LVDTs make contact with the sleeve to accurately measure diametral strains. Axial strains are gauged using two averaging vertical LVDTs. For effective operation, the QRT series cell needs to be integrated into a system that includes an external axial load actuator, such as a load frame, and one or more high-pressure pumps for fluid injection and confining pressure application.

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Specifications

Maximum confining pressure	70 / 140 MPa
Maximum temperature	150°C
Specimen diameter	up to 54.7 mm (NX)
Specimen height	twice the diameter
Confining and pore ports	1/8 inch
Wetted part material	Stainless steel

Benefits

Quick specimen setup.

Axial and radial strain measurements.

Upper platen provided with a spherical seat to compensate for non-parallel specimen ends.

Hardened stainless steel construction.

Bottom pore pressure plumbing provided for effective stress measurements.

Includes triaxial software and automatic data acquisition

The LVDTS eliminate the time-consuming task of gluing strain gages onto the specimen to measure radial strains

Ideal for the classroom.

Video presentation: