

Uniaxial and Triaxial Test Systems



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Size

- Choice of test load between: 1000 ... 10000 kN
- Max. surface pressure: 2000 bar
- Max. temperature inside cell: 300° C

Area of use

- Axial and triaxial rock testing
- Geomechanical investigations
- Compression tests and extension tests
- Standards-compliant testing
- Research purposes

Test fields

- Institutes of geotechnology
- Tunnel and bridge building
- Labs for geotechnics and geomechanics

Specimens

- Cylindrical rock specimens of varying dimensions

Standards

- DIN
- ASTM
- ISRM
- DGGT recommendations

Application

- Determining geomechanical values such as uniaxial compressive strength, tensile strength, elasticity and Poisson's ratio
- Triaxial test with and without strain measuring, direct longitudinal strain measuring and lateral strain measuring
- Triaxial multi-stage tests to investigate post-failure behaviour
- High-precision volume and in-situ measurements
- Stabilising or intermittently increasing surface pressure is possible

Accuracy

- In accordance with DIN EN ISO 7500-1 and DIN EN 12 390-4, class 0.5 (1)

Test frame

- 4-column load frame with an extremely high longitudinal and lateral stiffness to keep the material strain as low as possible for the first specimen fracture
- Double-acting test cylinder
- Electronic precision force transducer
- Special compression plates
- Protective equipment

