

Hydraulic Fracturing Tester (HFT-70)





SPECIFICATIONS

- Performs hydraulic fracture, well bore stability, thermo fracking, and rock permeability tests
- 70 MPa cell and fracture pressure capacity
- Hydraulic balance for can be used to apply deviatoric stresses for anisotropic stress state with up to 140 MPa vertical stress on an NX diameter specimen
- 24 electrical feed-through lines for in-vessel instrumentation
- Four fluid ports (2 specimen, 2 cell)
- Lift mechanism to facilitate specimen setup
- Optional temperature control up to 200°C
- Systems built to customer specifications

DESCRIPTION

The GCTS Hydraulic Fracture Tester allows for the performance of various fracture tests using a hydraulic pressure intensifier. This system is typically used for hydraulic fracture, well bore stability, thermo fracking, and permeability tests. Tests can be performed with or without confining pressure. Typically fracturing pressure is ramped up at a constant rate while radial strain is measured on the specimen during the fracturing test to determine the fracturing stress.

The HFT triaxial cell comes with a hydraulic balance for the application of a hydrostatic stress state, but it can also be used for applying deviatoric stresses for anisotropic stress states with up to 140 MPa vertical stress on NX diameter specimens. A loading frame can be used to induce larger axial loads. There are 4 fluid ports (2 specimen, 2 cell). The system can also be upgraded with temperature control option for up to 200 °C (392 °F).