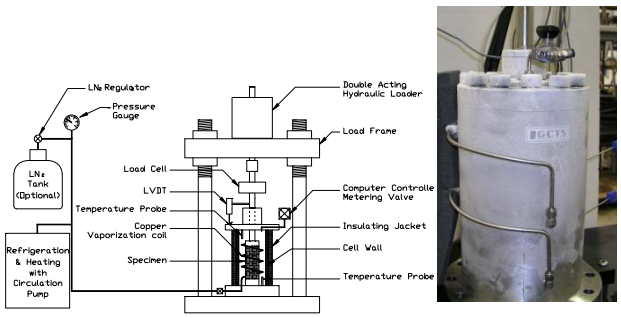
Frozen Soil Triaxial System (FSTX)

- 100 kN (22 kips) axial load & 20,000 kPa (3,000 psi) cell pressure capacity. Larger capacities available
- Computer temperature control to -30ºC & high temperatures up to +150°C
- Electro-hydraulic closed-loop digital servo control
- Software modules for the performance of UU, CU, and CD static tests with stress path control and dynamic tests such as liquefaction, modulus/damping measurement, cyclic strength, and resilient modulus
- Available options: Internal axial &circumferential deformation measurement system, platens with ultrasonic transducers for P-and S-wave velocity measurements



DESCRIPTION

The GCTS Frozen Soil Triaxial System uses a computer controlled metering valve and an internal copper vaporization coil for controlling test temperatures below the ambient room temperature. Measurements from two temperature probes are used to calculate and control the average temperature inside the triaxial cell. Included with this system is an efficient electrical heating and cooling unit for controlling the temperature inside the triaxial cell. This unit, unlike the LN_2 systems, offers a safe and low operating cost. A cascade digital temperature control is integrated with the testing software for precise temperature control while eliminating temperature overshoots.

The complete system also includes the load frame, triaxial cell, volume change device, pressure panel, sensors, digital signal conditioning, and software for complete integration of the testing system.

This system accepts specimens with diameters from 35 mm to 75 mm, and with specimen lengths of 2.25 times the diameter. Platens for 71 mm diameter specimens come standard with this system. An automatic lift is provided to rise and lower the metallic cell wall for easy specimen setup.

SPECIFICATIONS

For full specification contact GCTS.

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