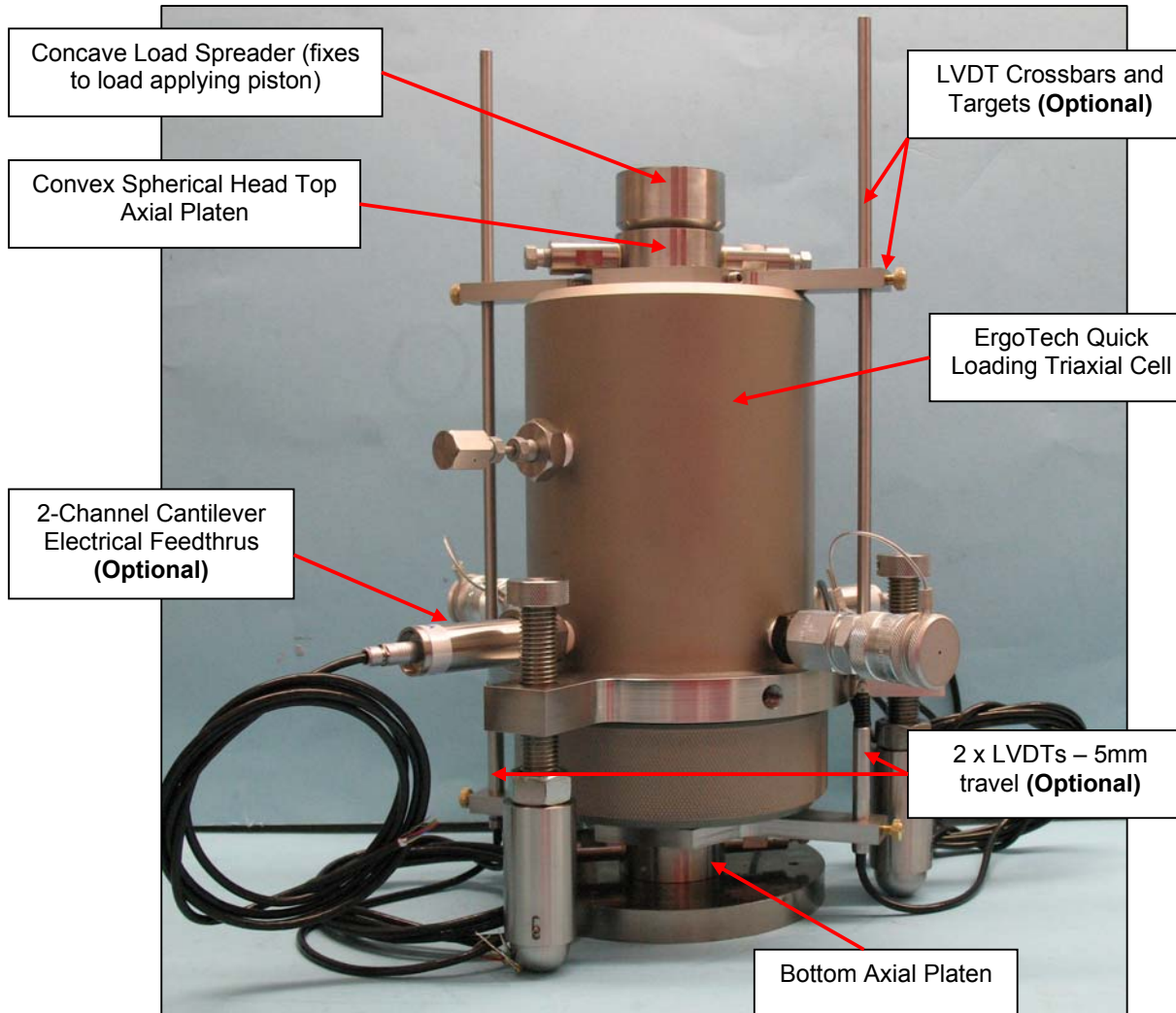


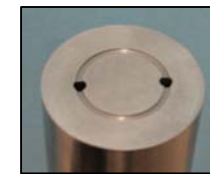
## INSTRUMENTED TRIAXIAL QUICK LOADING CELL WITH OPTIONS FOR Ø1” (Ø25.4mm), Ø1.5” (Ø38.1mm), Ø2” (Ø50.8mm) CORE SAMPLES

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### Features:

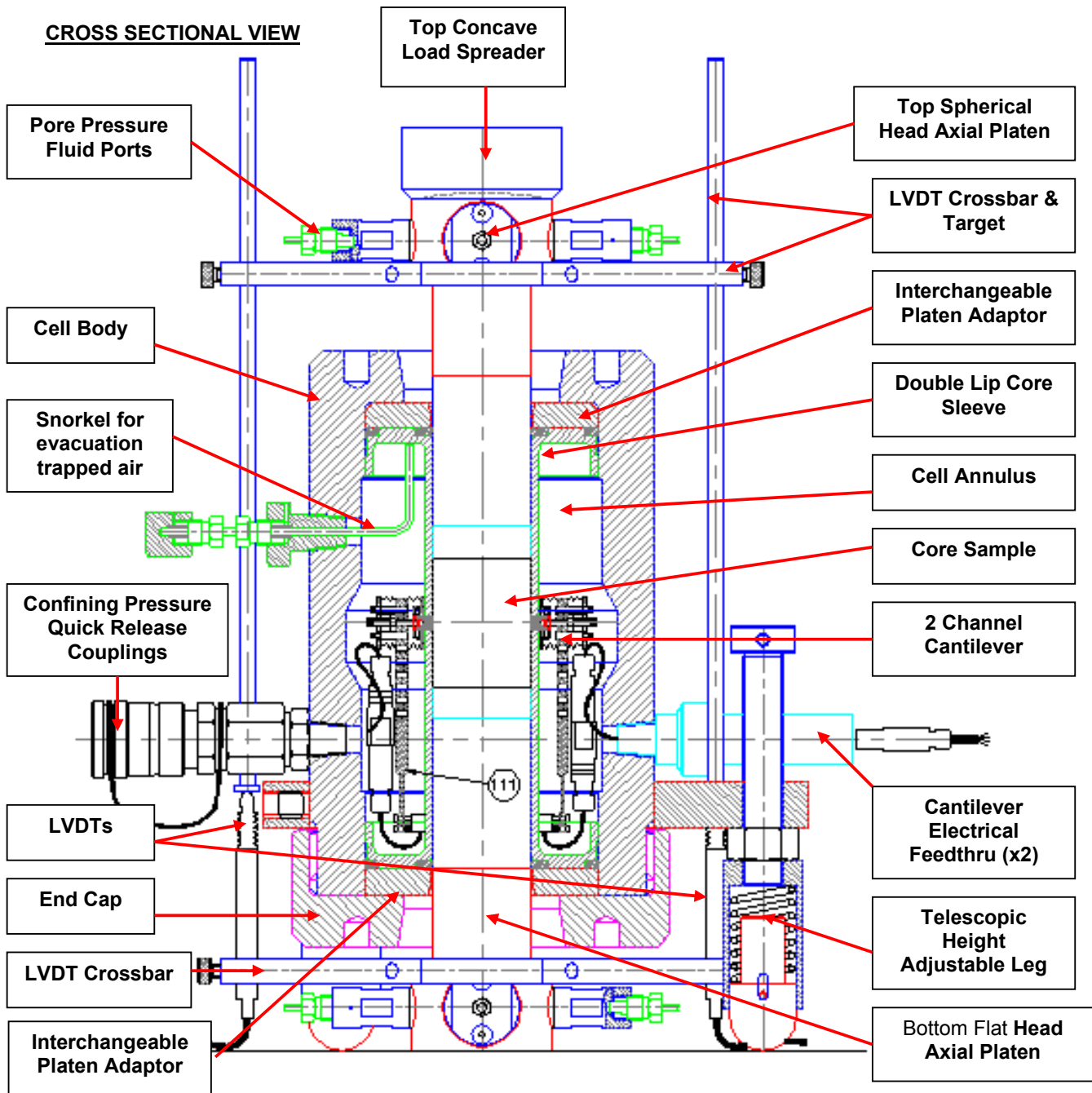
- Accommodates sample diameter Ø1” (Ø25.4mm), Ø1.5” (Ø38.1mm), Ø2” (Ø50.8mm)
  - Optional sample sizes to Geotechnical Core Drills EX (Ø21.5mm), AX (Ø30.1mm), BX (Ø42mm) and NX (Ø54.7mm) - **OPTIONAL**
  - Standard 69MPa (10,000PSI / 690BAR) Confining Pressure (Higher Pressures on Request)
  - Standard 67MPa (9,700PSI / 670BAR) Pore pressure. Pore pressure is applied through two flow ports to flow distribution grooves on the axial platen face plates
  - **OPTIONAL:** 2 channel strain gauged cantilever in the cell annulus for radial deformation measurements.
  - **OPTIONAL:** 2 LVDTs externally mounted on the axial platens for axial deflection measurement
  - **OPTIONAL:** Signal conditioning / data capture electronics and Software with full configured laptop / PC
  - This apparatus can be used in conjunction with the clients Load / Straining Frame; alternatively a Straining Frame can be supplied by ErgoTech (**OPTIONAL**)
  - **OPTIONAL:** Acoustic P-S1-S2 Axial Load applying transducers / platens.
  - **OPTIONAL:** Internal Heater capable of 200°C (requires the Software and Electronics option)
  - **OPTIONAL:** Resistivity measurement option
  - **OPTIONAL:** Confinement and Pore fluid pumping options
- NOTE:** If all / most of the options are required, please see the “Floor Standing Acoustic System (FSAS) specification



Pore Fluid Distribution Groove

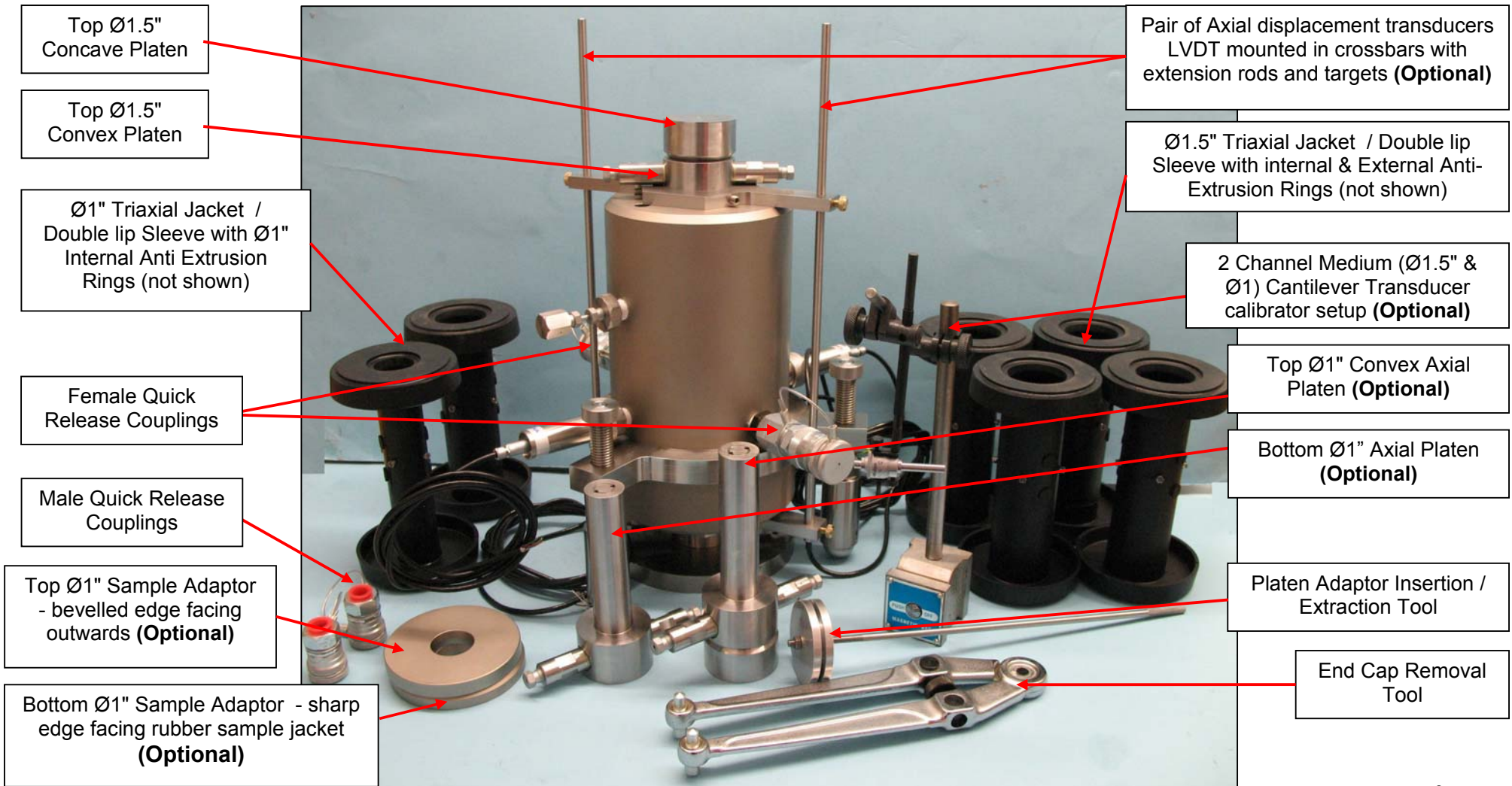
**INSTRUMENTED TRIAXIAL QUICK LOADING CELL  
 WITH OPTIONS FOR Ø1" (Ø25.4mm), Ø1.5" (Ø38.1mm),  
 Ø2" (Ø50.8mm) CORE SAMPLES**

**CROSS SECTIONAL VIEW**



- This unique design allows rapid loading / unloading of samples without the necessity to drain the confinement fluid and remove the core sleeve.
- The core sleeve is only be removed when adapting the cell for other sample diameters (Ø1.5" setup shown here) or to replace a damaged / worn core sleeve.
- The platen adaptors are interchangeable, as a result this one cell can be configured to accept the specified sample diameters listed on the previous page.
- This Triaxial system allows independent axial and confinement pressures. Note: Axial pressure must always be maintained approx 2MPa above Confinement Pressure to avoid damaging the Double Lip Core Sleeve

## INSTRUMENTED TRIAXIAL QUICK LOADING CELL WITH OPTIONS FOR Ø1" (Ø25.4mm), Ø1.5" (Ø38.1mm), Ø2" (Ø50.8mm) CORE SAMPLES



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## INSTRUMENTED TRIAXIAL QUICK LOADING CELL WITH OPTIONS FOR Ø1” (Ø25.4mm), Ø1.5” (Ø38.1mm), Ø2” (Ø50.8mm) CORE SAMPLES

### FLOOR STANDING STRAINING / LOADING FRAME OPTIONS

#### OTHER APPARATUS – FLOOR STANDING ACOUSTIC SYSTEM

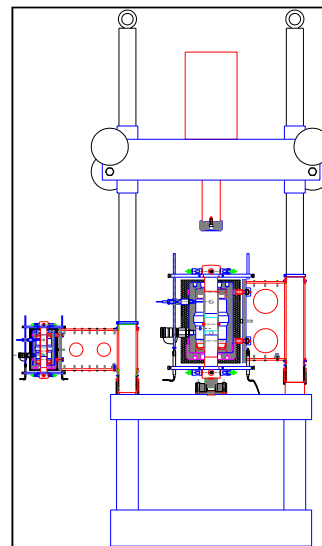
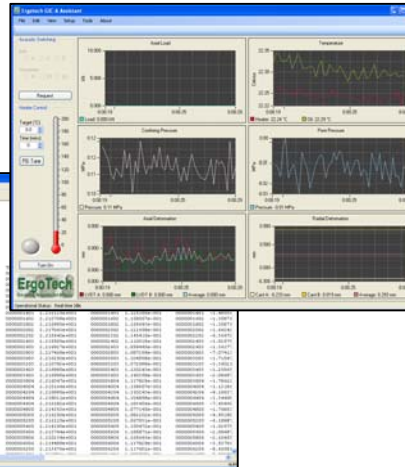
Should you require the all / most of the optional extras detailed in this technical information document; you may wish to consider the “FLOOR STANDING ACOUSTIC SYSTEM” pictured here which contains all options on a robust floor standing 100kN frame



- Stiff St. Steel / Aluminium constructed 100kN (standard) load frame. (Higher load capabilities on request)
- Custom designed to accommodate ErgoTech Slender Instrumented Triaxial Cell
- Accommodates Servo Hydraulic pressure control OR manual hand pumps (as illustrated)
- Lightweight versions available on request

#### OTHER APPARATUS – DOUBLE CELLED FLOOR STANDING FRAME

- This option accommodates two cells on one high integrity floor standing frame.
- The smaller Cell accepts Ø1”, Ø1.5” & Ø2” Core Samples
- The Large Cell accepts Ø2.625”, Ø3”, Ø3.5” & Ø4”
- Axial loads up to 1MN as standard (higher loads can be requested).
- Servo – hydraulic systems for Confinement Pressure, Pore Fluid Pressure and Axial load control.



#### OTHER APPARATUS – ELECTRONICS & SOFTWARE FEATURES:

- PID control heater temperature and ramp control
- Acoustic P-S1-S2 waveform selection control
- On screen graphical and numerical representation of sensory inputs including:
  - 2 axial LVDTs
  - 2 channel cantilever
  - Pore Pressure
  - Confining Pressure
  - Confining oil temperature
  - Optional axial load cell input
- Automatic on screen calculation of radial and axial strain based on deflection and initial sample dimensions
- Logging capability for post test analysis via data export feature. Exports to all common data processing tabulated formats (MS Excel, Notepad, \*.doc etc)
- Optional analogue outputs for remote logging by clients independent data acquisition electronics
- USB output to optional supplied PC / 19” rack mounted PC
- All data acquisition units can be supplied either in 19” rack form or as stand alone bench top units

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