

# Biaxial Chamber

HOEK CELL & PRESSURISATION SYSTEM

## FEATURES

- Multi core capability
- Robust design
- No disassembly required
- Electroplated to prevent corrosion
- Spare membranes readily available
- High pressure hand pump with quick connect fitting

## APPLICATIONS

- Mining & civil applications
- Laboratory testing
- Core testing

ES&S' Biaxial Chamber and pressurisation system has been designed for biaxial compression testing both in the laboratory and on site. It is particularly suited to site testing of cores immediately following overcoring of the CSIRO Hollow Inclusion Stress Cell in the determination of Poissons Ratio and Young's Modulus of elasticity.

LAB EQUIPMENT



geotechnical  
solutions

## TECHNICAL SPECIFICATIONS

### Core Diameters

A 110-150mm diameter (0-30 MPa)

B 70-110mm diameter (0-40 MPa)

C 40-70mm diameter (0-40 MPa)

### Core Lengths

Minimum 200mm

### Cell Type

Hoek

### Pressurisation System

Enerpac hand pump with gauge and 1.5m hose

### Housing Dimensions

500 x 700 x 450mm—35 Kg

### Fittings

¼" BSP

## OPERATING PRINCIPLE

A Multi-core diameter capability within each unit is achieved by obtaining different size dedicated end caps and membrane from ES&S.

The biaxial chamber is robust and does not require disassembly to insert or remove the core or to conduct a multi test program. The chamber is electroplated to prevent corrosion. The maximum safe working pressure of the larger chamber is 30 MPa and the two smaller sizes 40 MPa respectively.

The chamber is supplied with a membrane fitted as well as a quick connect hydraulic fitting and bleed valve. Spare membranes are readily available. The pressurisation system comprises of a hand pump, pressure gauge and high pressure hose with quick connect fitting. The pressure gauge is supplied with a calibration chart. When ordered together, the biaxial chamber and pressurisation system are supplied in a rugged, reusable transport case.

The Biaxial chamber is generally manufactured and supplied to operate with a core of particular diameter. The design is such that three basic units can be easily adapted to accommodate core diameters within the most commonly required ranges:

Model	A	110-150mm diameter (0-30 MPa)
	B	70-110mm diameter (0-40 MPa)
	C	40-70mm diameter (0-40 MPa)