

## Cellule de consolidation hydraulique pour échantillons non saturés



L'appareil de consolidation Hydrocon SWCC est utilisé pour déterminer l'amplitude et la vitesse de tassement et la pression des échantillons de sol non saturés

### Fonctionnalités

- Spécifique pour les échantillons de sol non saturés
- Chargement hydraulique
- Aucun poids requis
- Convient pour un échantillon de 100 mm
- Convient à l'argile compactée
- Conception compacte, occupe moins d'espace que les oedomètres conventionnels
- Possibilité de mesurer à la fois la pression des pores et la contre-pression pendant les tests
- 4 lines pressures ( axial load, upper and two lower drainage for air and water)
- Additinal High Air Entry Stone (1,5, 15 Bar) available as option
- Two testing mode with automatic data acquisition

### Specifications

- Manufactured from anodized light alloy, complete with 4 valves and vent, top loading porous disk, compensator ring, 3 bar High Air Entry Stone sealed on aluminium ring.
- For 100 mm dia. soil samples
- Maximum working pressure: 3500 kPa
- Overall dimensios (dxh): 260×450 mm
- Weight approx.: 10 kg

### Highlights

The **Hydrocon SWCC consolidation apparatus** is used to determine the magnitude and rate of settlement and pressure of unsaturated soil specimens. Because of the low permeability of some materials, performing a drying and wetting stage can take several weeks. The Hydrocon SWCC cell is a flexible soil testing apparatus capable of applying uniaxial pressures of up to 3500 kPa to a 100 mm diameter specimen. Its base is fitted with a High Air Entry Stone (HAES) which enables a soil/water characteristic suction curve to be obtained.

This type of stone allows water to pass through but not air so that the soil matrix potential can be controlled at various values: 1,5 and 15 bar. During a test it is possible to load the soil specimen in such a way that the overburden pressure in the field is recreated, whilst measuring the chamber and pore water pressure using a pressure transducer and the vertical settlement using a linear strain transducer.

As the Hydrocon SWCC is a confined consolidation system, it is possible to measure both pore and back pressure during testing and to make accurate permeability measurements.

The complete test configuration includes: Hydrocon cell (SWCC) , Water and air pressure system, Water de-airing system and electronic measuring system with Geodatalog data acquisition system.

For a complete test configuration (pressure system, pore pressure, displacement transducer, volume change and other accessories) see the related products and ask for the cooperation of our specialist.

## Models

- 26-WF0346/ Hydrocon SWCC for 100 mm dia. unsaturated samples for Soil Water Characteristic Curve. Maximum pressure 3500 kPa, 4 valves, top loading porous disc, compensator ring, High Air Entry Stone sealed on aluminium ring.

## Accessories

- 26-WF0346/1B/ 1 bar High Air Entry Stone for 100 mm dia. sample suitable for Hydrocon SWCC mod. 26-WF0346
- 26-WF0346/15B/ 15 bar High Air Entry Stone for 100 mm dia. sample suitable for Hydrocon SWCC mod. 26-WF0346
- 26-WF0346/5B/ 5 bar High Air Entry Stone for 100 mm dia. sample suitable for Hydrocon SWCC mod. 26-WF0346