

Standalone all-in-one de-airing water system

A de-airing water system removes the dissolved air from water present in soils and is used for soil mechanics tests including triaxial and permeability tests. Wykeham Farrance's all-in-one unit will de-air water quickly and efficiently down to levels of dissolved air that are acceptable for geotechnical test methods.

How it works

- Simply place the De-airing Water Apparatus on a bench and fill the de-airing tank with water from the inlet valve.
- Start the de-airing procedure. As the pump applies vacuum to the de-airing tank, the magnetic system will begin to stir the water at high speeds (~1000rpm). Cavitation will then occur allowing water to be de-aired much faster than when only using vacuum.
- Once finished, stop the cycle. The tank can be brought to the standard pressure, so it is ready to be pumped for filling the triaxial cell, pressure systems and hydraulic circuits. This procedure does not rely on gravity feeding.



Initial water vortex during cavitation and vacuum application



Standalone all-in-one de-airing system

Benefits

Space saving

Clever all-in-one design with vacuum pump, tank and control valves all integrated into one single unit needing only a small laboratory space.

Easy to install

Turn-key self-pumping system replaces the more cumbersome gravity feed design.

Time saving

20 liter batch of de-aired water can be produced in 15 minutes thanks to the smart combination of vacuum pumping and cavitation.

Environmentally-friendly

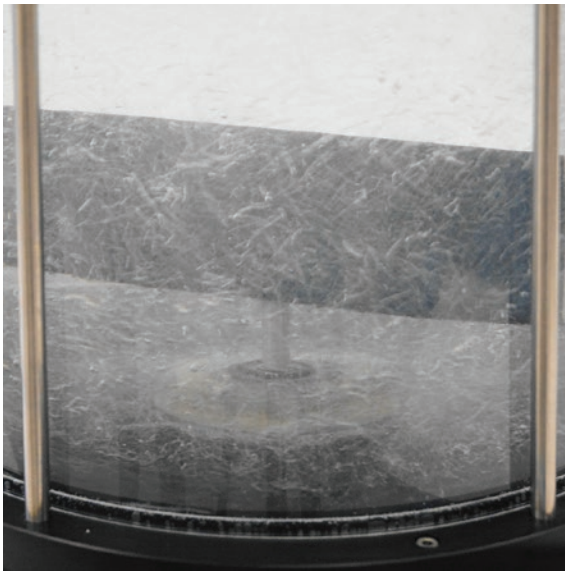
Diaphragm vacuum pump requires no oil.

High productivity

It takes 15 minutes to produce 20 liter batch of de-aired water thanks to the smart combination of vacuum pumping and cavitation.

Small footprint

The system can be used on a bench with no need to fit on the wall a separate water tank to fill the triaxial cell.



Detail of cavitation system, it allows water to be de-aired much faster than when only using vacuum

Ordering Information

28-WF4212

Standalone all-in one bench solution de-airing water system with vacuum and cavitation technology. 220-110V, 50-60Hz, 1Ph

- 20 liter volume capacity
- VDC Diaphragm vacuum pump
- High speed magnetic stirring for creating cavitation
- Control panel for filling

Technical specification

Dimensions and Weight

Tank volume capacity: 20 l

Tube dimension: ID: 6 mm OD: 8 mm

VDC Diaphragm vacuum pump

Weight: 23 kg

Dimensions (w x d x h): 340 x 410 x 680 mm

Voltage: 220-110 V, 50-60Hz, 1ph

Accessories

28-WF4191

- Nylon tubing 8x6 mm (OD-ID) 10 m coil.

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