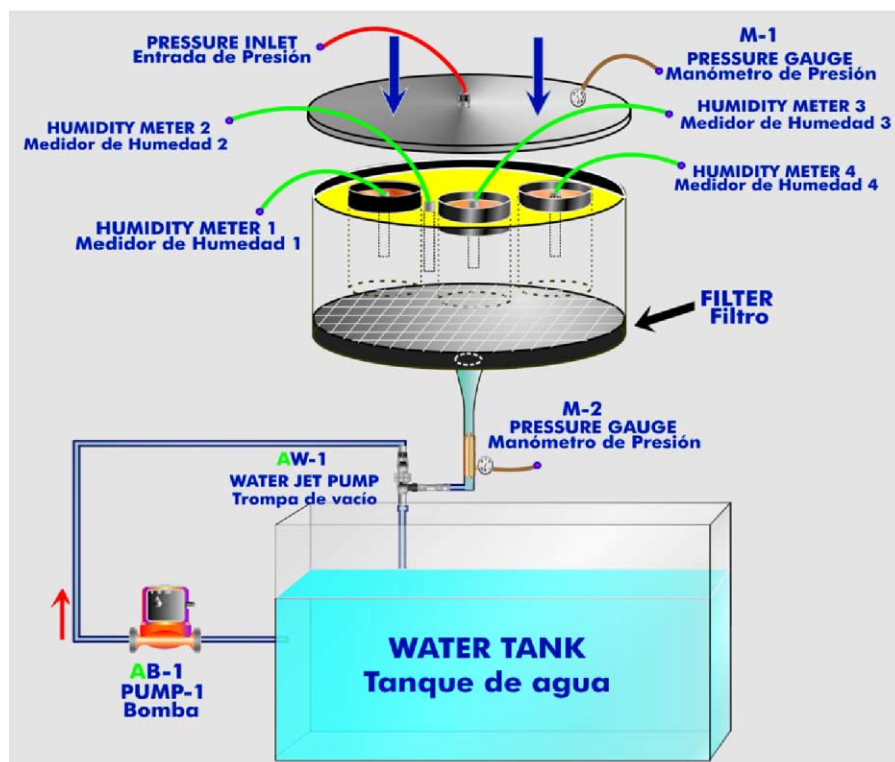


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13.-Environment



**PROCESS DIAGRAM AND ELEMENTS ALLOCATION**



## DESCRIPTION

Unit designed to study and understand the water retentivity principles, in terms of soil suction, as well as for the derivation of characteristic curves of the ground's humidity.

Basically it is composed by:

- Suction system, composed by a water circuit (including a water tank), that is impelled by a pump that makes the water flow through a water jet pump, that sucks the water of the soil container. It has a pressure meter.
- Soil container, it is composed by a cylindrical tank that contains the wet sand. Inside of the sand you must introduce the soil samples and the water volume meters. It also has a pressure meter and an air inlet (to pressure the environment).

## SPECIFICATIONS

Anodized aluminium structure.

Panels and main metallic elements in stainless steel.

Diagram in the front panel with similar distribution that the elements in the real unit.

Suction system, including:

Water circuit.

Water tank, capacity: 5 l.

Water pump, range: 3 l/min.

Water jet pump.

Pressure meter, range: -1 to 0 bar.

Soil container, including:

Filter.

Transparent circular tank for filling with sand. Capacity: 15 l.

4 soil sample retaining rings. Capacity of each one : 0.3 l.

4 water volume meters (humidity), range: 0.5 l.

Pressure meter, range: 0-2.5 bar.

Air inlet (pressure inlet).

Cables and Accessories, for normal operation.

Manuals:

This unit is **supplied with the following manuals**: Required Services, Assembly and Installation, Starting-up, Safety, Maintenance & Practices.

## EXERCISES AND PRACTICAL POSSIBILITIES

Some Practical Possibilities of the Unit:

- 1.- To understand the relationship between water retentivity and soil.
- 2.- To understand the basic principles of water retentivity in terms of soil suction.
- 3.- Derive soil moisture characteristic curves for several soils.
- 4.- Effect of the atmospheric pressure.

## REQUIRED SERVICES

- Electrical supply: single phase, 220V/50Hz or 110V/60 Hz.
- Water supply.
- Drainage system.
- Sand.

## DIMENSIONS & WEIGHTS

- Dimensions: 400 x 500 x 1200 mm. approx.
- Weight: 90 Kg. approx.

## AVAILABLE VERSIONS

Offered in this catalogue:

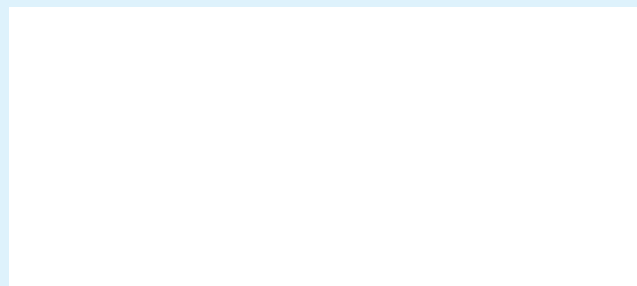
-PAHS. **Soil Moisture Sand Unit.**

Offered in other catalogue:

-PAHSC. **Computer Controlled Soil Moisture Sand Unit.**

\* Specifications subject to change without previous notice, due to the convenience of improvements of the product.

REPRESENTATIVE:



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