

FILTRATION ON MEDIA - FILTER PRESS



Non contractual photo

SERVICE: (2-PART CHASSIS)

DIMENSIONS: 1200 X 830 X 1700 MM + 830 X 1200 X 1100 MM

REFERENCE: MP140

This pilot allows the study of the filtration on support. The method comprises circulating a fluid containing solid particles through a support (web, felt, membrane, ...) on which the particles are deposited in the form of a cake of increasing thickness. The more or less pure filtrate according to the texture of the support and the dimensions of the particles passes through the support, it is the filtration on cake. The operation is performed here discontinuously.

- Study of the resistance of the support and the filter.
- · Checking the law of DARCY.
- Determination of the curve P = f (Q) and identification of the various flow regimes (for a "concentration" of pollution to treat and a given pressure, we can draw t / v = f(v)).
- Determination of the clogging point.
- Estimate of the porosity of the cake.

Technical specifications:

- Filter press: frame surface 250 x 250 mm
- · cast iron frame
- · filter on wheels
- 7 trays for 15mm cakes
- Pneumatic pump with polypropylene membrane,
- · 2 tanks with drain and withdrawal valves
- 1 Variable speed stirrer, 2 propellers
- 2 manometers
- · Regulator regulator with filter
- 3 Float flow meters (feed, permeate, filtrate at the filter outlet)
- The pilot is mounted on a stainless steel frame with aluminum nuts. The supply circuit of the pump is made of flexible PVC.

This filter press makes it possible to study the variations of performances for different hydraulic conditions imposed (constant flow, variable pressure or constant pressure and variable flow).

The pneumatic diaphragm pump offers a wide range of flow rates. It works up to 5 bars.

This type of pump is suitable for receiving viscous, filled or abrasive solutions and is not damaged in case of operation without any liquid.

OPTIONS:

Recommended products: Kieselguhr or Clarcel solution Compressed air supply (minimum 2 bar / maximum 5 bar) 220V power supply single phase -200W