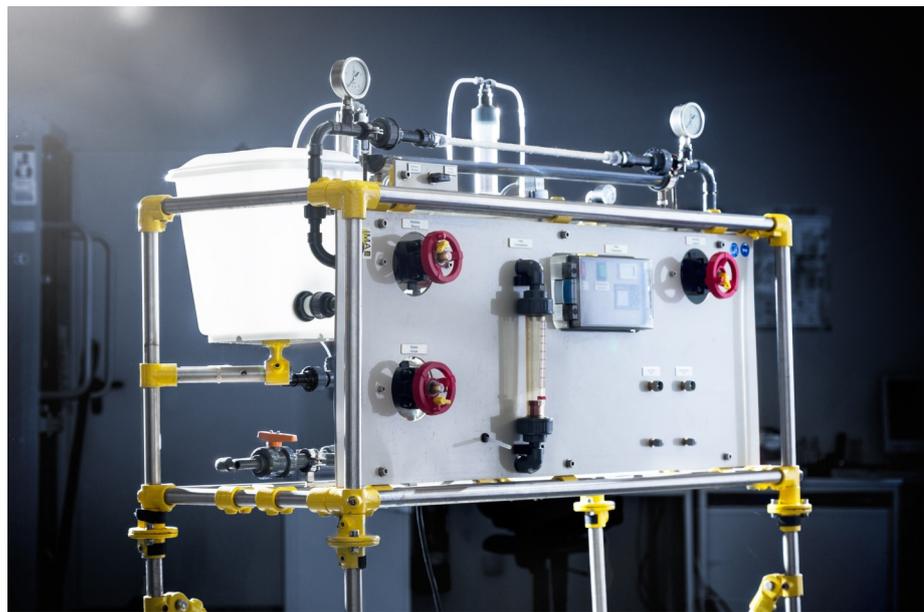


Laboratory-Membrane-Testplant LRo04

Microfiltration / Ultrafiltration



LRo04: Testunit for training and practical courses

The LRo04 is an universal laboratory test unit for experiments tubular modules in the field of micro- and ultrafiltration up to 4 bar. Because of its clear and transparent construction, the LRo04 is perfectly suitable for trainings and practical courses. The unit can be equipped with different tubular modules and membranes and has adaptable connections for different modules.

Two pressure sensors before and behind the membrane measure the transmembrane pressure. An installed rotameter for the feed volume flow moni-

tors the overflow velocity. Optionally is it possible to determine the permeate volume flow with an additional rotameter. A temperature sensor monitors the temperature of the medium. It is possible to install a backwash system (controlled with a small SPC system)

The equipment of the test plant and the flexible use of different membranes offer a wide range of application in the field of membrane technology

Features of the LRo04

- testplant for tubular and capillary membranes
- 100 bis 600 l/h feed flow rate
- max. 4 bar feed pressure
- flow rate measurement for feed and filtrate
- pressure control before and after membrane
- programmable backpressure unit
- 10 l tank
- pump bypass
- adaptable for special module geometries

Clear training experiments and practical courses

Options of the LRo04

- SPC controlled backwash including permeate backwash vessel
- Cooling coil in storage tank (1.4301, V2a)
- permeate volume flow measurement
- pressure tube with tubular membrane (suitable for permeate backwash)
- pressure tube with ceramic membrane (suitable for permeate backwash)
- open tubular membrane with dike



Picture 1: Open tubular membrane with dike

Open tubular membrane with visible permeation

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