MEMBRANE INNOVATION CENTRE

PILOT UNIT RO/NF/UF

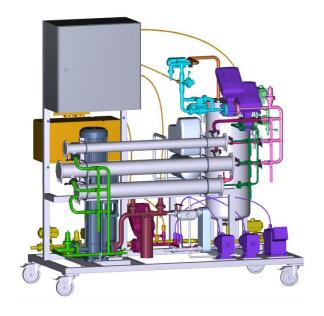
BASIC DESCRIPTION

Pilot unit RO/NF/UF is used for pilot tests of reverse osmosis (RO), nanofiltration (NF) and ultrafiltration (UF) processes. Pilot tests are necessary prior industrial scale application design for validation of proposed technology and scale-up data gathering.

The pilot unit can work in batch, feed-and-bleed or continuous mode. In pressure vessels can be loaded several types of spiral wound modules. Flow is provided by two centrifugal pumps controlled by frequency converters at the required pressure. The feed solution can be cooled in a heat exchanger before entering the membrane module, the solution is filtered on a safety filter and can be chemically modified by addition of up to three chemicals. The unit allows measuring and recording all the important operating parameters (flow, pressure, temperature, conductivity, pH, turbidity, SDI). Remote access provides control of the unit and data by a network interface. The unit is equipped with an automatic cleaning; the cleaning sequence is set by the user.

SPECIFICATION

Parameter	Value
Housings	1pc 4"x40"; 1pc 3,8"x38"; 1pc 2,5"x40"
Storage reservoirs	3 x 130 l
Flow injection	3 m³/h
Pressure injection	max. 25 bar
Power Consumption	max. 3.5 kW
Total unit dimension	1720 x 720 x 1850 mm
Unit weight	approx. 320 kg



Unit RO/NF/UF