

MEMBRANE BIO REACTOR

REFERENCE : BRM



Non contractual photo

SERVICE :

WEIGHT : 200KG

The BRM pilot makes it possible to understand and manage the wastewater treatment process by denitrification and nitrification. The operation is visual, since the products are used in Altuglass containers.

Technical specifications :

- Operative part:
 - Feed tank (PE) with a capacity of 200L, equipped with a removable cover and a drainer.
 - Denitrification tank (altuglass) cylindrical shape, conical bottom, capacity 20 L, draining and removable cover with probe supports.
 - Nitrification / Aeration tank (altuglass) of cylindrical shape, conical bottom, capacity 40L, draining and removable cover with probe supports. Air distribution through a flexible porous tube, held at the bottom of the tank. - Conical bottom washing tank (stainless steel), capacity 20L with removable cover.
 - In-line chiller (2 coaxial tubes, 2 flexible, 1 solenoid valve (with option 3) for cold water or for the chiller (option 1)).
 - Dosing pump from 0 to 30 L / h from the supply tank to the denitrification tank.
 - Recycling pump from the denitrification tank to the nitrification tank, flow rate between 0 and 140 L / h.
 - Centrifugal pump (stainless steel), flow rate between 0 and 1000 L / h up to 4 bar with variable speed drive and centrifugal pump 0-400L / h.
 - Compressor with silencer at start-up 0-2000 L / h, 4 bars. Pressure gauge, control valve and filter.
 - Ceramic ultrafiltration membrane
 - Stainless steel pneumatic valve (can be replaced with an electric valve if you have a compressed air problem).
 - 3 pressure probes, display touch screen (options 2 and 3)
 - 2 flowmeters with float, or 2 electromagnetic flowmeters, 4-20 mA output, ranges 0-30 L / h and 0-1000 L / h (options 2 and 3)
 - 1 flowmeter with 0-2 L / h float and display on touch screen (options 2 and 3)
 - 1 flowmeter with float for gas 0-2000 L / h 2 bar, and display on touch screen (options 2 and 3)
 - 2 oxygen sensors and transmitter can work with the compressor (with option 3).
 - 2 pH probes with transmitter
 - 2 Pt100 ? temperature probes with converters.
- Electrical box:
 - Control buttons and protection pumps,
 - Touch screen: 2 pH transmitters,
 - 2 oxygen transmitters,
 - 1 temperature display, 1 temperature controller (option 1),
 - 3 pressure displays Flowmeter indicator (options 2 and 3),

- permeate flowmeter (options 2 and 3),
- Display of the electromagnetic flowmeter (options 2 and 3),
- PLC (option 3)
- Acquisition of parameters:
 - in real time and exporting data to Excel (available for options 2 and 3)
 - 3 presses
 - 2 temperatures
 - 4 flow rates
 - 2 pH
 - 2 O₂
 - RS485 Ethernet
 - Programming and acquisition software compatible with Windows 7
 - 1 computer (included in option 3)

OPTIONS :

Option 1: 3kW cooling unit Option 2: Acquisition system Option 3: Supervision system via a computer Option 4: reverse osmosis membrane filtration