

A photograph of industrial water treatment equipment in a warehouse. The equipment includes a large black motor on a vertical shaft, a control panel with a digital display and buttons, and several large white cylindrical tanks. The background shows high industrial shelving units filled with boxes. The entire image has a blue gradient overlay.

Chassis units



Rue de la Cale Sèche 34 - 4684 Haccourt | BELGIUM
Tél. : 0032 (0)4 374 25 00 | www.water-tech.be



Separator filter

Coarse filtration at 100 micron.



AFG filter

Different layers of sand and a gravel support super imposed in a tank make up this filter.



Automatic dosing unit for chlorine

Elimination of any bacteriological contamination that could clog the osmosis membranes.



AFG system has been designed for a continuous flow and sufficient, a backwash is provided every 24-48h. The free volume required for this phase is 40%. The interval will be confirmed during commissioning. The different steps of this filter cleaning will be done automatically.



Automatic sodium bisulfate doser

Neutralization of chlorine to prevent deterioration of the membranes.



Automatic antiscalant doser

To avoid clogging membranes with Ca^{2+} or Mg^{2+} ions and with $\text{Ca}^{2+}\text{Co}_3$ or $\text{Mg}^{2+}\text{Co}_3$ salts.



Cartridge filter

After injection of anti-scale and filtration, the cartridge filter will retain the remaining suspended solids with 5 micron fineness. This will protect the equipment of the reverse osmosis plant. The profitability of these cartridges depends on the particles in suspension. If the cartridges are saturated, the input pressure switch will trigger the low pressure alarm signal. Using the manometers at the input and output of the filter, the saturation can be followed.



High pressure pump

The pressure required to remove the water will be provided by the high pressure pump.

An energy recovery unit will be integrated into the high pressure circuit. The discharge water pressure (concentrate) being very high, it will be redirected to the energy recovery unit to increase the pressure, part of the feedwater will be under pressure with this discharge water, the other part will be overpressed with the pump.



Membranes

The membranes used are spiral type and high efficiency.



Cleaning pump

Type: Vertical Grundfos

Quantity: 1 Pcs

Flow rate: 60 m³ / h

Pressure: 3 bar

Pump material: Stainless Steel

Voltage: 380 V 50 Hz

Brand: Grundfos



Control panel

Voltage: 380V / single phase + earth / 50 Hz

Protection: IP 55, AT standards

Brand: Simiens S7

CE marking