



Reverse osmosis membrane cleaning unit **Ecosoft CIPSEP2030** *

Clean in place (CIP) procedure restores flux and rate of water purification of used reverse osmosis membranes. During operation, RO membranes are clogged with mineral (scaling), organic (fouling) and microbial (biofilm) deposits.

Before CIP, the reverse osmosis system must be stopped, and the CIP unit’s feed and return ports must be connected to the RO system’s CIP in, CIP out, and CIP permeate ports with connection hoses. Cleaning solution tank is filled with purified water and the required quantity of cleaning chemical. The resulting solution is mixed, then circulated through the membrane vessel, while controlling pH, temperature, and color of the solution carefully.

Most cleaning protocols require first applying caustic, then acid cleaner.

The cleaning unit can also be used to fill the membrane vessels with preservative solution when the RO system is shut down for an extended period.

Components

- Grundfos CRN 32-3-2 stainless steel pump, 5.5 kW
- 1000 l Poly tank for cleaning solution
- 7 × 40” stainless steel multi-filter housing
- In-line electrical heater, 6 kW
- Electrical panel
- Powder coated steel frame
- Piping, valves, pressure and flow gauges

Technical specifications *

Electrical requirements	3 × 400 V, 50 Hz
Total power requirement	12 kW
Connection port size	DN65 flange
Pump flow rate @ pressure	20 m ³ /h @ 4.4 bar 30 m ³ /h @ 3.6 bar
Overall dimensions (Width × Depth × Height)	3.0 × 1.2 × 1.7 m
Tank dimensions (Diameter × Height)	1.0 × 1.4 m

* Ecosoft reserves the right to amend the product's architecture provided that its functionality and usability will not deteriorate.