Condorchem
Enviro Solutions

DESALT MVR FC

Electrical Vacuum Evaporator-Crystallizer by Mechanical Vapor Recompression

The DESALT MVR FC series vacuum evaporator-crystallizer is an innovative solution for the treatment of aqueous-based streams, standing out for its energy efficiency thanks to Mechanical Vapor Recompression (MVR) technology.

This equipment is ideal for the treatment of aqueous-based streams with a high contaminant load and allows the precipitation of salts from dissolved solids. The high-speed recirculation pump plays a crucial role in preventing scale formation on the main heat exchanger.

The operation of the equipment is fully automatic - 24 hours a day.

FEATURES

Technology	Mechanical Vapor Recompression (MVR)
	Forced Circulation (FC)
Single/Multi-Effect	Single-Effect
Thermal Energy for Evaporation	Small amount of saturated steam
Vacuum	≈ 700 mbar
Evaporation Temperature	≈ 90 °C
Evaporation Vessel	Vertical conical bottom
Droplet Separator	Mesh Demister
Heat Exchanger for Heating	Shell and tube
Vacuum System	Roots Compressor
Control Unit*	PLC Siemens with HMI touch screen
Protection:	IP54
Electricity Supply**	400 V III + PE 50 Hz
Standard Manufacturing Material	1.4401/1.4404 (AISI 316/AISI 316L)
Special Anti-corrosion Manufacturing Material***	1.4410 (Superduplex 2507)

* *Different PLC manufacturer available on request*
** *Different voltage supply available on request*
*** *Consult other available material options*

TECHNICAL DATA

Parameter	Unit	600	800	1000	1500	2000	2500
Capacity*	L/h	600	800	1000	1500	2000	2500
Electricity Consumption**	kWh/m³	64	64	64	64	64	64
Thermal Energy for Evaporation***	kWht	36/54	48/72	60/90	90/136	121/181	151/226
Length	mm	6000	6000	7000	7300	7700	8100
Width	mm	1700	2385	2200	2200	2450	2450
Height	mm	5300	5590	6500	6500	7000	7520

* *Data refer to clean water when working continuously in standard conditions (T = 20 °C, P = 1013 mbar).*
** *Electricity consumption expressed in kWh per m3 of distillate produced.*
*** *Thermal energy for evaporation expressed in thermal kWh during operation/heating phase.*

DIAGRAM