ENVIDEST MVR FF

Electrical Vacuum Evaporator by Mechanical Vapor Recompression

The ENVIDEST MVR FF series vacuum evaporator is designed to treat oily waters and aqueous-based streams with a low contaminant load. Its distinctive energy efficiency is achieved through Mechanical Vapor Recompression (MVR) technology and Falling Film (FF).

This evaporator stands out for its compact design and its small footprint. The easy access to the different parts of the equipment facilitates its maintenance and enhances the equipment's practicality.

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

FEATURES

Technology	Mechanical Vapor Recompression (MVR) Forced Circulation (FC) Falling Film (FF)
Single/Multi-Effect	Single-Effect
Vacuum	≈ 700 mbar
Evaporation Temperature	≈ 90 °C
Evaporation Vessel	Horizontal
Droplet Separator	Cyclone 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	100	150	200	250	300	350
Capacity*	L/h	120	180	230	288	345	403
Electricity Consumption**	kWh/m³	60	60	60	50	50	50
Length	mm	2407	2407	2407	2753	2753	2753
Width	mm	1350	1350	1350	1430	1430	1430
Height	mm	2355	2355	2355	2500	2500	2500

Parameter	Unit	400	550	750	1000	1400	1800
Capacity*	L/h	460	633	863	1100	1540	1980
Electricity Consumption**	kWh/m³	50	40	40	35	35	35
Length	mm	2753	3564	3564	4202	4202	4202
Width	mm	1430	1950	1950	2430	2430	2430
Height	mm	2500	3320	3320	3550	3550	3550

* *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.*

DIAGRAM