



DESALT LT DRY

Electrical Vacuum Evaporator-Crystallizer by Heat Pump

The DESALT LT DRY series vacuum evaporator-crystallizer is designed to produce solid or semi-solid concentrates, as well as to recover valuable raw materials, such as metals and salts. The equipment operates with electrical energy and its heating and condensation system is based on a heat pump (HP) unit.

This evaporator can be manufactured with a screw conveyor inside the evaporation vessel to homogenize the product during the concentration phase, which facilitates the automatic discharge of the final product.

The operation of the equipment is semi-automatic or automatic (depending on the model) - 24 hours a day.

FEATURES

Technology	Heat Pump (Freon R-513A)
Single/Multi-Effect	Single-Effect
Vacuum	≈ 60 mbar
Evaporation Temperature	≈ 35 °C
Evaporation Vessel	Horizontal
Droplet Separator	Raschig rings
Heat Exchanger for Heating	External jacket
Refrigeration Circuit	Single heat pump unit or primary and secondary heat pump unit (depending on the model)
Vacuum System	Venturi Ejector
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	250	350	500	750	1000
Capacity*	L/day	250	350	500	750	1000
Electricity Consumption**	kWh/m ³	270	270	270	270	270
Length	mm	1420	1640	2550	2900	3200
Width	mm	1480	1520	1570	1600	1600
Height	mm	2220	2220	2250	2300	2450

* 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

