



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 Single/Multi-Effect Vacuum **Evaporation Temperature**

Evaporation Vessel Droplet Separator

Heat Exchanger for Heating

Refrigeration Circuit

Vacuum System Control Unit* Protection: Electricity Supply Standard Manufacturing Material** Special Anti-corrosion Manufacturing Material***

* Different PLC manufacturer available on request

** Different voltage supply available on request

*** Consult other available material options

Heat Pump (Freon R-513A)

Single-Effect \approx 60 mbar ≈ 35 °C Horizontal Raschig rings

Single heat pump unit or primary and secondary heat pump unit (depending on the model)

Venturi Ejector

External iacket

PLC Siemens with HMI touch screen

IP54

400 V III + PE 50 Hz

1.4401/1.4404 (AISI 316/AISI 316L) 1.4410 (Superduplex 2507)

■ TECHNICAL DATA

Parameter	Unit	250	350	500	750	1000
Capacity*	L/day	250	350	500	750	1000
Electricity Consumption**	kWh/m³	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 ($T = 20 \, ^{\circ}$ C, $P = 1013 \, \text{mbar}$).
- ** Electricity consumption expressed in kWh per m3 of distillate produced.

■ DIAGRAM

