



DESALT DRY

Thermal Vacuum Evaporator-Crystallizer

The DESALT DRY series vacuum evaporator-crystallizer is designed to obtain solid or semi-solid concentrates, as well as to recover valuable raw materials, such as metals and salts. The equipment can be manufactured to operate using saturated steam or hot water to heat the product to be concentrated. The condensation of the generated vapour is carried out by supplying cooling water.

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

Thermal Energy for Evaporation

Thermal Energy for Condensation

Vacuum

Evaporation Temperature

Evaporation Vessel

Droplet Separator

Heat Exchanger for Heating

Vacuum System

Control Unit*

Protection:

Electricity Supply**

Standard Manufacturing Material

Special Anti-corrosion Manufacturing Material***

Evaporation with thermal energy

Single-Effect

Saturated steam or hot water

Cooling water

≈ 200 mbar

≈ 60 °C

Horizontal

Raschig rings

Shell and tube

Venturi Ejector

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)

* Different PLC manufacturer available on request

** Different voltage supply available on request

*** Consult other available material options

TECHNICAL DATA

Parameter	Unit	500	750	1000	1500	3000
Capacity*	L/day	500	750	1000	1500	3000
Electricity Consumption	kWh	2,7	2,7	2,7	4,1	7,4
Thermal Energy for Evaporation	kWh	16	24	31	47	94
Thermal Energy for Condensation	kWh	16	24	31	47	94
Length	mm	2400	2810	3070	4230	4880
Width	mm	1670	1760	1970	1990	2450
Height	mm	2600	2680	2715	2965	3546

* Data refer to clean water when working continuously in standard conditions ($T = 20\text{ }^{\circ}\text{C}$, $P = 1013\text{ mbar}$).

DIAGRAM

