

Vacuum evaporators

EnvoVap DRY HP



The Envovap vacuum evaporator is an evaporator system based on negative pressure combined with heat pump technology. Its capacity ranges from 10.5 to 42 l/hr. Thanks to the technologies combined in the system and its highly robust, simple design, Envovap is a sound investment in water purification and separation. Particularly when the conditions regarding the degree of contamination are relatively difficult to manage and it is hard to clean the water to an approved level.

Envovap is available in a number of different program models adapted to the conditions for both liquid and sludge-containing concentrates as residual products. The quality of the purified water after evaporation in Envovap is generally excellent thanks to our unique and highly effective demister function. The system boasts relatively low energy consumption, and this can also be further reduced using surplus energy from steam or hot water, for example. The Envovap technique is suitable for applications with acidic or basic flows, provided the right materials and models are chosen. Envovap is built for fully automated 24-hour operation and has good operational reliability

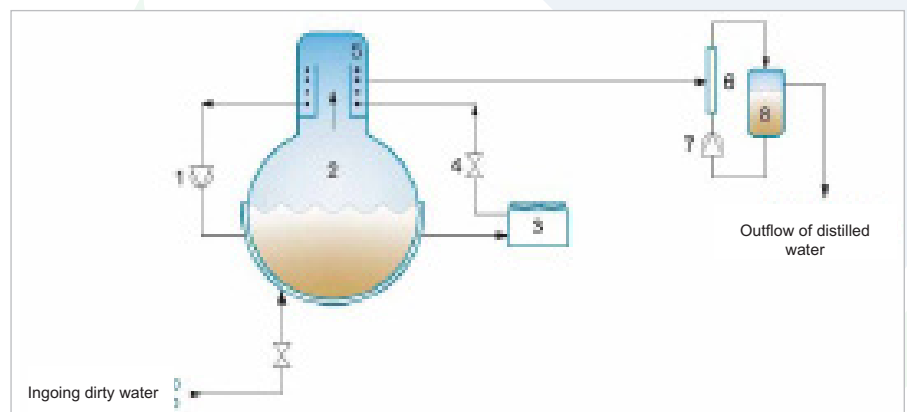
Benefits:

- Can be adapted for corrosive applications
- Can be adapted for flows containing sludge
- Highly robust construction and function principle
- Easy to maintain and operate
- Low operating costs for energy and service
- High efficiency for concentrate optimization
- High-quality purified process water
- Dewatering of process water containing sludge
- Can be adapted to use surplus energy

Envovap DRY HP	250	350	500	750	1000
Capacity l/hr	10,5	14,5	21	31	42
Energy consumption kWh/m ³	150	150	150	150	150
Length, cm	160	160	260	175	320
Width, cm	140	150	150	200	160
Height, cm	225	225	225	230	245

Flow chart

1. Freon compressor
2. Boiling tank
3. Cooler
4. Expansion valve
5. Condenser heat exchanger
6. Vacuum ejector
7. Pump
8. Distillate tank



Examples of applications



Examples of application fields:

- Water-based degreasing and process water from production processes
- Water-based emulsions containing oil
- Contaminated process water containing metal
- Water from cleaning floors
- Desalination
- Up-concentration from fluids, such as phosphoric acid
- Can be used to treat fluids with low pH values
- Dewatering of process water containing sludge
- Other dewatering