

# Vacuum evaporators

## EnvoVap VS HP, 3000 - 15000



The Envovap VS HP vacuum evaporator is an evaporator system based on negative pressure combined with heat pump technology. Its capacity ranges from 125 to 625 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.

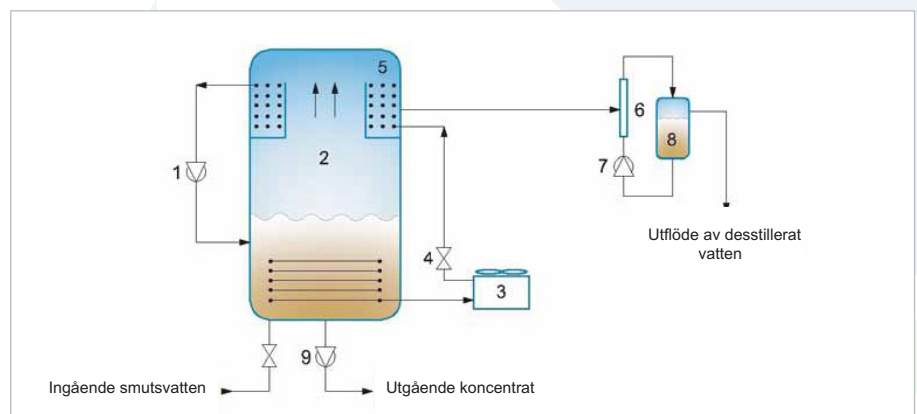
### Benefits:

- 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 VS HP	3000	4000	5500	7000	10000	12000	15000
Capacity l/hr	125	165	230	290	375	500	625
Energy consumption kWh/m <sup>3</sup>	150	150	150	150	150	150	150
Length, cm	340	360	370	410	425	465	465
Width, cm	150	150	165	150	200	200	200
Height, cm	255	265	280	315	425	430	440

### 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
9. Concentrate pump



### 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
- Up-concentration from fluids, such as phosphoric acid
- Can be used to treat fluids with low pH values
- Water from cleaning floors
- Desalination
- Dewatering of process water containing sludge
- Other dewatering