

EVALED®

Heat pump
scraped vacuum
evaporators

PC R

0.1

0.5

1

2



CO₂
footprint



Maximum volume reduction

allow a return on investment often measured in months.

Low boiling temperature

ideal in case of very aggressive salty wastewater. Suitable for temperature sensitive products.

Benefits

EVALED PC R is a range of heat pump vacuum evaporators designed to treat liquids with a high content of dissolved solids at low temperature and able to manage a high level of fouling and scaling phenomena (viscous liquids, sediment presence).

The line is dedicated to water reuse.

Maximum water recovery, minimum quantity of waste to be disposed of

High quality of recovered water suitable for reuse

Low energy consumption

Suitable for very scaling and fouling liquids

Modular and flexible, short delivery time

Skid mounted (small footprint) and ready to use (plug & play unit)

Fully automatic, minimal manpower

Constant monitoring by remote control

User-friendly (intuitive HMI)

Process diagram

How does EVALED PC R work?

The heat transfer is possible thanks to the heat pump system via a conical jacket at the base of the boiling chamber. The inner heating surface is continuously cleaned by scrapers, which also act to stir the concentrate: this allows a waste concentration achieving the highest viscosity levels also in presence of sediment.

The evaporation at a low boiling point is made possible by the vacuum condition generated by the pump and the ejector. The unit operates in semi batch operation: wastewater is constantly treated, the distillate is continually separated and then discharged through a pump, while the concentrate is discharged at the end of the cycle through a pump as well.

Evaporation temperature: 40 °C (104 °F)

Achievable concentration in TS: 25 - 35%

Available models

Distillate production capacities

PC R 0.1	0.1-0.2 m ³ /day	0.02 - 0.04 gpm
PC R 0.5	0.3-0.6 m ³ /day	0.05 - 0.10 gpm
PC R 1	0.6-1.2 m ³ /day	0.1 - 0.2 gpm
PC R 2	1.2-2.2 m ³ /day	0.2 - 0.4 gpm

The line is available in different materials to treat different effluents and even the most aggressive salted wastewater (acid pH, chlorides, heavy metals), in particular those produced by sectors as:

Mechanical & Surface Treatments

Waste (Collectors, Incinerators, Landfills)

Microelectronics and Photovoltaic

Chemical

Healthcare (Pharma and Cosmetics)

Service Optional

EVA life

Your technology. Always powerful.

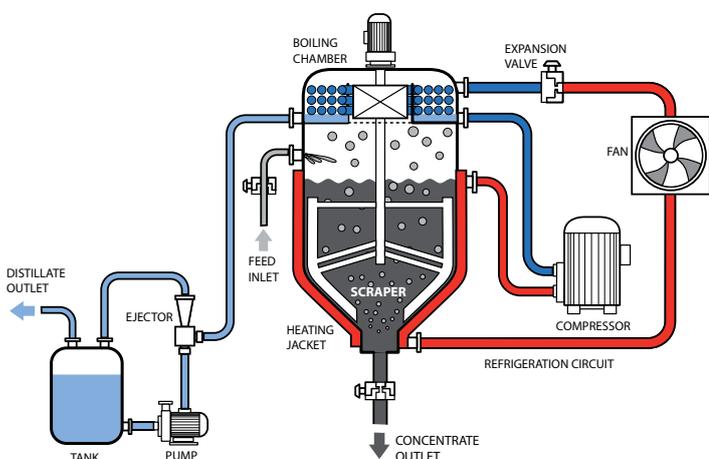
The program which makes your unit perfectly performing for its entire life.

EVA Link

Remote Control

EVA Lab

Analysis



Hydrex

In case of foaming effluent, Ehaled evaporators are designed to be operated with Hydrex antifoams.