

# EVALED®

Heat pump forced  
circulation vacuum  
evaporators

# PC F



- 0.7
- 1.4
- 2.4
- 4
- 6
- 8
- 12
- 24



**CO<sub>2</sub>**  
footprint

### Low running costs

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 F is a line of heat pump vacuum evaporators designed to treat liquids with a high content of dissolved solids while minimizing the fouling and scaling phenomena at low temperature evaporation.**

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 fouling and scaling liquids

Modular and flexible, short delivery time

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

Fully automatic, minimal manpower

Constant monitoring by remote control

User-friendly (intuitive HMI)

## Process diagram

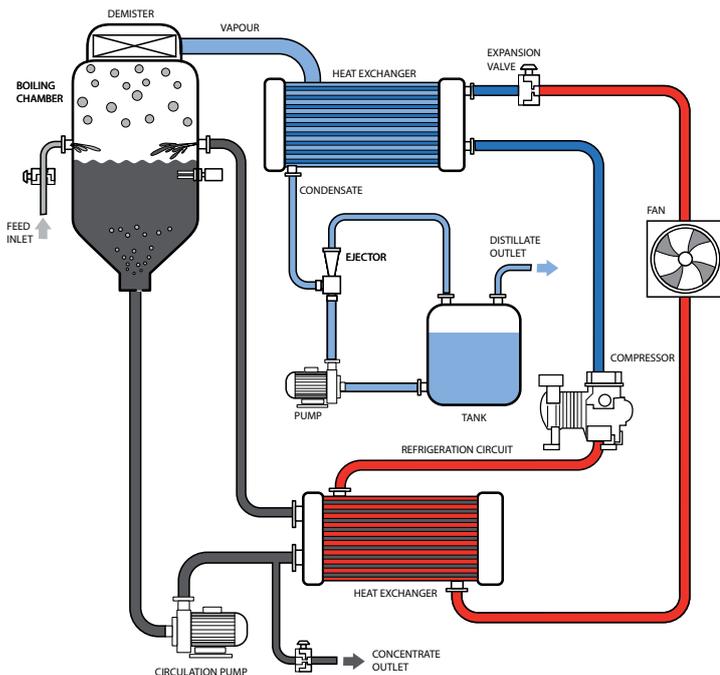
How does EVALED PC F work?

**High efficiency forced circulation shell & tube heat exchanger with horizontal tubes and the exchanged energy by the heat pump circuit: it allows that the wastewater concentration is achieved up to the salts solubility limits managing also scaling and fouling phenomena.**

Evaporation at a low boiling point is made possible by the vacuum condition generated by the pump and the ejector. Wastewater is constantly treated producing two streams: a distillate and a concentrate. The first is simply discharged through a pump or by overflow. The concentrate is separated and discharged in semi-batch mode through a valve according to a pre-set timer when the desired concentration level is achieved.

**Evaporation temperature: 40 °C (104 °F)**

**Achievable concentration in TS: 25 - 35%**



## Available models

Distillate production capacities

PC F 0.7	0.5-1 m <sup>3</sup> /day	0.1 - 0.2 gpm
PC F 1.4	1-2 m <sup>3</sup> /day	0.2 - 0.3 gpm
PC F 2.4	2-3 m <sup>3</sup> /day	0.3 - 0.5 gpm
PC F 4	3-5 m <sup>3</sup> /day	0.5 - 0.9 gpm
PC F 6	5-7 m <sup>3</sup> /day	0.9 - 1.3 gpm
PC F 8	7-10 m <sup>3</sup> /day	1.3 - 1.8 gpm
PC F 12	10-15 m <sup>3</sup> /day	1.8 - 2.7 gpm
PC F 24	20-30 m <sup>3</sup> /day	3.7 - 5.5 gpm

The line is available in different materials to treat different effluents and even the most aggressive salty wastewater (acid pH, chlorides, heavy metals). Typical industrial sectors of application:

Mechanical & Surface Treatments

Microelectronics and Photovoltaic

Chemical

Healthcare (Pharma and Cosmetics)

Food & Beverage

## Service Optional

### EVA life

**Your technology. Always powerful.**

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

### EVA Clean

Automatic Washing System

### EVA Link

Remote Control

### EVA Lab

Analysis

**Hydrex**

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