

# EVALED AC R

## Hot/cold water scraped vacuum evaporators

EVALED AC R is the heat pump vacuum evaporators line designed for low temperature evaporation and to treat liquids with high content of dissolved solids, able to manage **high grade of fouling and scaling phenomena** (viscous liquids, sediment presence). The line is dedicated to water separation and possible reuse and it is aimed at achieving the maximum disposal cost reduction thanks to the high concentration ratio. It is also suitable to treat pre-concentrated liquids.

The line is manufactured with superduplex steel and it is suitable to treat even the most aggressive liquids. Some typical applications:

- Power
- Mechanical & Surface Treatments (Automotive, Aviation)
- Waste (Collectors, Incinerators, Landfills)
- Microelectronics and Photovoltaics
- Chemicals
- Oil & Gas

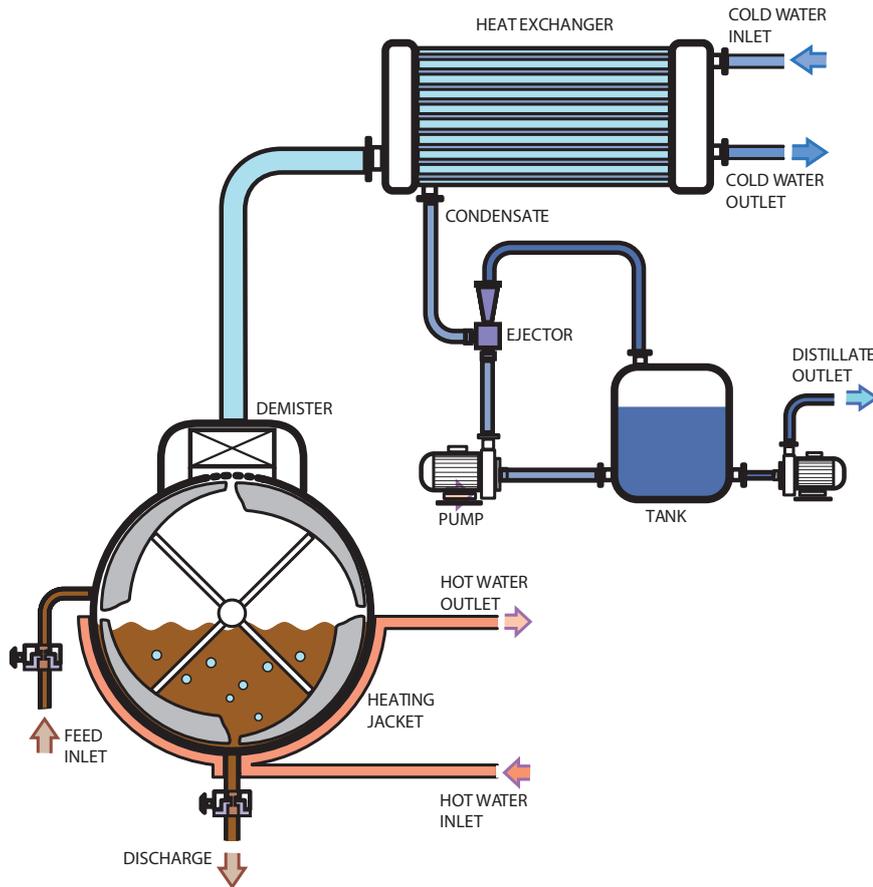
### BENEFITS

- Maximum water recovery, minimum quantity of waste to be disposed of
- Useful when thermal energy (steam/hot water) and cold water are available at low cost (cogeneration)
- Suitable for very scaling and fouling liquids
- High quality of recovered water suitable for reuse (with distillate conductivity meter for an indirect measure of quality)
- Skid mounted (small footprint) and ready to use (plug & play unit)
- Fully automatic, continuous operation, minimal manpower
- Complete necessary instrumentation and remote control
- User-friendly (intuitive HMI)
- Heat pump device available for the production of hot/cold water
- Short delivery time
- Modular and flexible



**Low running costs allow a return on investment often measured in months.**

## Process Diagram. How does AC R work?



The heat transfer occurs realized in a stirred and scraped heating chamber that transfers heat by the heating jacket containing circulating hot water.

Wastewater, rich in dissolved and suspended solids, is stirred continuously by a screw type scraper preventing any fouling of the heat exchanger surface.

Evaporation at a low boiling point is made possible by the vacuum condition generated by the pump and the ejector.

The unit operates in batch or continuously depending on the type of concentrate to be obtained: wastewater is treated in continuous, the distillate is separated and simply discharged through a pump, while the concentrate is discharged at the end of concentration cycle.

**Evaporation  
temperature: 30-70°C**  
**Min hot water  
temperature: 80 °C**

## AVAILABLE MODELS

• AC R 3	2-3 ton/day	600-1000 ton/year
• AC R 6	4-6 ton/day	1000-2000 ton/year
• AC R 12	8-12 ton/day	15000-20000 ton/year

## EVA-life

**Your technology. Always powerful.**

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



### EVA-Link Remote Control

The remote control access allows immediate support and troubleshooting, periodical unit check-up, report and parameters optimization, periodical back-up of the unit data and software modification.



### EVA-Lab Analysis

Inlet effluents analysis allows the client to be aware of effluent changes, if any, and to optimize the results by resetting the unit.

**Hydrex**

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