

ECOCV

Mechanical Vapour Recompression (MVR)
Evaporator

ECOTEAM®
Environmental Technologies



Fields of application

- Zero liquid discharge
- Surface Treatment
- Painting
- Die Casting
- Oily emulsions
- Soaped Water
- Landfill leachate treatment

INTRODUCTION

ECOCV is a type of evaporation equipment with a low operation cost. ECOCV equipment has the lowest total operation cost with respect to heat pumps and the hot water equipment.

EVAPORATION

Evaporation is a process that starts from a diluted solution and produces distillate water and a concentrate solution. Evaporation process can produce clean water from any water solution. Distillate water has a low conductivity that generally can be reused in productive processes. Concentrated solution can be reused in productive processes if it is permitted or given out by the evaporator as concentrated waste.

MVR

Mechanical Vapour Recompression is an evaporation process that uses a mechanically driven blower to increase the pressure of the vapour produced.

The blower increases the pressure and the temperature, with a polytropic function, that the vapour generates.

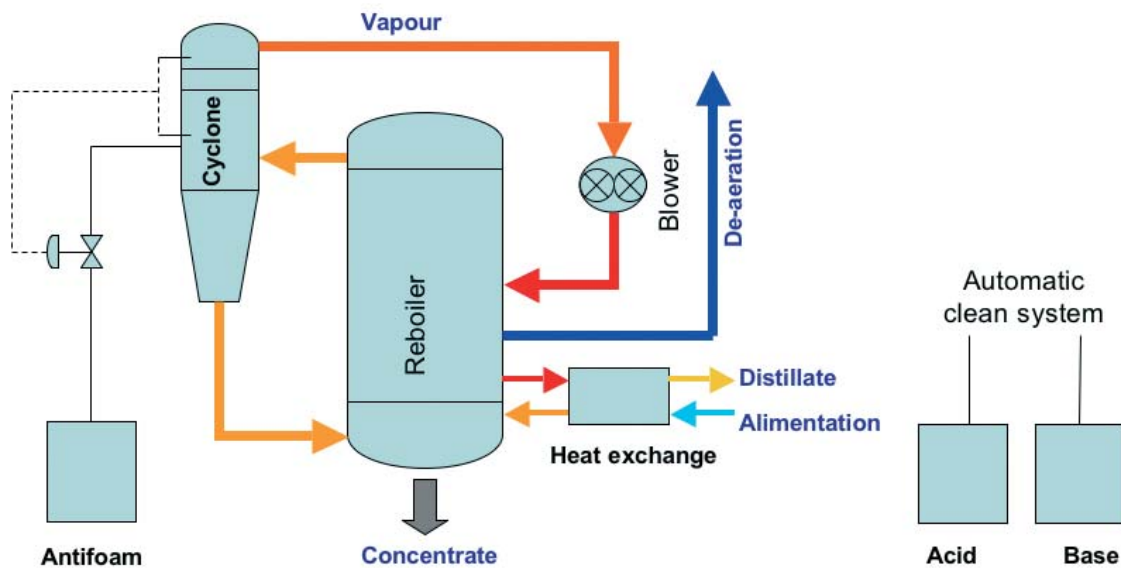
The vapour generated at the beginning can serve as the heating medium for the solution being concentrated.

OPERATION COST

ECOCV uses electrical power and the specific power required is 60-40 watts/litre.

EQUIPMENT	Daily Production	Hourly Production	Power Absorbed *
ECOCV-3000	3.000 l/day	135 l/h (22h/24)	10 kW
ECOCV-6000	6.000 l/day	275 l/h (22h/24)	18 kW
ECOCV-10000	10.000 l/day	450 l/h (22h/24)	25 kW
ECOCV-12000	12.000 l/day	550 l/h (22h/24)	30 kW
ECOCV-15000	15.000 l/day	700 l/h (22h/24)	45 kW
ECOCV-24000	24.000 l/day	1.100 l/h (22h/24)	70 kW
ECOCV-30000	30.000 l/day	1.400 l/h (22h/24)	85 kW
ECOCV-48000	48.000 l/day	2.200 l/h (22h/24)	130 kW

(*) Specific technical information on require.



Ecoteam also provide evaporation system like:

- Heat pump system
- Hot water/steam system
- Dryer
- Crystallizer

Heat pump and hot water/steam system are available with single or multi stage

Ecoteam in order to guarantee wide resistance to the corrosion, in relation to the characteristics of the solution with which they are in contact, propose evaporation system constructed in several material:

- AISI 316L
- AISI 904L
- SAF 2507
- Hastelloy

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