

# Surface treatments



[evald.com](http://evald.com)

# EVALED®

Evaporation Technologies

**WATER TECHNOLOGIES**

## Your challenge

### Reducing waste water disposal costs complying with environmental legislations

Waste water from the surface treatments are often characterised by a high content of:

heavy metals

salinity

toxic substances such as cyanides

Successful treatment of these wastewater has the added complexity of comprehensive environmental legislations as well as the need to minimise discharge volumes and disposal costs.



Using “clean” separation technology, EVALED evaporators offer a complete solution to surface treatments waste water.

## Our technologies

### A partnership with your process

The evaporation technique is based on the separation of water from an aqueous solution. The products of this process are:

the condensate, representing the majority of the original flowrate, and is basically water

the concentrate, a small flow, containing the majority of the pollutants substances

The condensate produced by an evaporator treating wastewater from surface treatment processes is usually recycled into the rinsing baths, becoming a resource; the concentrate can be recovered as a valuable matter and recycled into the process tanks or sent to a super-concentration stage prior to disposal.



## Our solution



### Turning waste into a resource

The application of a “clean” separation technology to this sector is well established and offers the following benefits:

a significant **reduction in disposal volume** and therefore in cost

water recycling

in some applications, particularly those including chrome and nickel, **the product** can be **recovered** and sent back to the production

a **reliable and flexible** technology suitable for a wide variety of waste streams

a major **reduction of contaminants** in the condensate, including toxic substances such as cyanides

In the surface treatments EVALED evaporators can often offer the benefit of Zero Liquid Discharge (ZLD). In certain applications, both liquid and solids can be recovered.

## Our know-how

### Standard solutions for any specific need

Client’s needs assessment

Complete treatment solutions

Mobile and modular units

Commissioning and start-up support

Training

After sales services and **EVA life** program

## EVALED

### A complete plant includes

pre-treatment

forced circulation evaporation

possible super-concentration with dryer

The most common evaporators used in such applications are EVALED PC, vacuum heat pump evaporators, EVALED AC powered by hot/cold water and EVALED RV, MVR evaporators.

# Resourcing the world

**Veolia Water Technologies Italia**  
Via Pra' di Risi, 3 • 33080 Zoppola (PN) • Italy  
tel. +(39) 0434 516311 • fax +(39) 0434 516310  
[www.evaled.com](http://www.evaled.com)