# **EVALED**<sup>TM</sup>

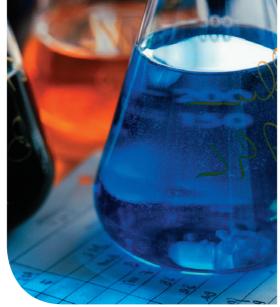




Evaporation technology:

A valuable and natural solution to reducing wastewater volume











# **EVALED**<sup>™</sup>

**Evaporation technology** 

Evaled™ evaporators are industrial systems that accelerate the natural evaporation process.

Evaled are a range of highly reliable evaporators, which are effective in reducing wastewater volume that help you save costs, whilst producing a high quality reusable distillate.

The evaporators' capacities range from 1 to 200 tons per day of distillate water from wastewater treatment.

before installation.

### **About Evaporation**

Evaporation is not only a natural phenomenon but also a clean separation technology that is recognised as the "Best Available Technique" for waste water volume reduction in wastewater treatment processes.

They are fully automated standardised modular units, that are low in energy consumption and have low CO2 footprint. They are also an effective solution for concentrating and removing salts, heavy metals and a variety of hazardous components. All evaporators undergo a Factory Acceptance Test (FAT) with water

### **Benefits**

- Disposal cost reduction
- Wastewater volume reduction
- Water recycling and reuse
- Valuable components recovery
- High outlet quality
- ZLD (Zero Liquid Discharge)
- High level of automation
- Option for remote control
- Quality certification (ISO 9001/2008)

## Materials

### Manufacturing materials designed to treat even the most aggressive effluents

Veolia has worked together with renowned materials research centres to select the most suitable materials to safely treat aggressive liquids. Resistance to corrosion is a strong feature of every Evaled evaporator, which is essential when controlling extremely concentrated liquids.

### Austenic stainless steel

Austenic is a weakly bound structure, which is non-hardening and non-magnetic.

The low percentage of carbon in this alloy reduces the risk of intergranular corrosion at high temperatures.

Uses: alkaline liquids, acid liquids (pH>4) with a low percentage of chlorides, oil emulsions, liquids from flexographic printing.

### Nickel alloy

Nickel alloy is a high flexibility Cr-Ni-Mo steel.

The low carbon content ensures resistance to the formation of carbides at zones exposed to thermal variation. It has excellent resistance to localised corrosion, both in oxidising and reducing environments, even at high temperatures.

Uses: very acid liquids (pH>2) with high content of chlorides, fluorides and metal, anodising wastewater, special applications.

### Superduplex stainless steel

Austenic-ferritic structure, magnetic.

The high percentage of chromium gives excellent resistance to localised corrosion

Uses: acidic liquids (pH>3) with high chlorides and metals content, galvanic wastewater, landfill leachate.

### Silicon Carbide (SiC)-PC type only (KT-Series)

Chemically inert material resistant to almost all aggressive substances.

It is usually matched with another chemically inert material, PTFE, a fluoride co-polymer used for coating the inner surfaces of the boiling chamber.

Uses: pickling wastewater, chromic acid recovery and aggressive liquids.

# EVALED<sup>TM</sup> evaporation technology. The valiant and natural solution, November 2015

# Markets and applications

Pharmaceuticals and Cosmetics

Chemical

Waste, biogas, biofuels

Photovoltaic and Microelectronics

Automotive and Aviation

Food and Beverage Power Oil and Gas Mining and Primary Metals

Other industrial processes

Resourcing the world