An effective solution for concentrating and removing salts, heavy metals and a variety of hazardous components.

**Technology**

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

Evaporation is not only a natural phenomenon but also a clean separation technology that has been recognized as a “Best Available Technique” in several wastewater treatment processes.

**Benefits**

- disposal cost reduction
- wastewater volume reduction
- water recycling and reuse
- valuable components recovery
- high quality outlet
- ZLD (Zero Liquid Discharge)
- high level of automation
- option for remote control
- quality certification (ISO 9001/2008)
- Plug & Play (quick installation)

**KEYWORDS**

Reliability, effectiveness in wastewater volume reduction, high quality distillate, water reuse (ZLD).
Three different evaporation technologies adapted to suit our clients' water treatment needs.

<table>
<thead>
<tr>
<th>SERIES</th>
<th>specifications</th>
<th>MODELS</th>
<th>ton/day</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>• high concentration levels • power feeding • vacuum condition • low boiling temperature • recovery of heat-sensitive products • good distillate quality • low fouling and scaling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC</td>
<td>Ideal when waste thermal energy and cold water are available on site (cogeneration) • high concentration levels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RV</td>
<td>• power feeding • useful to treat high volumes of wastewater • low energy consumption</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Wastewater treatment capacities range from 1 to 200 tons per day.
**Markets and applications**

- Mechanical & Surface Treatments (Automotive, Aviation, Appliances, Furniture)
- Healthcare (Pharma, Cosmetics)
- Chemicals
- Waste (Incineration, Landfill, Collectors)
- Biogas & Biofuels
- Photovoltaic & Microelectronics
- Food & Beverage
- Graphic Arts
- Power
- Oil & Gas
- Mining & Primary Metals
- Other industrial processes (Textile, Pulp & Paper, etc.)

**Reliability**

All evaporators undergo a Factory Acceptance Test (FAT) with water before shipment.

- **Veolia Water Technologies Italia** has a firm commitment to reduce the CO₂ emissions of its technological offer. Careful analysis enable to calculate the CO₂ emissions of EVALED solutions.

**Specifications**

- Standardized modular units
- Fully automated
- Low energy consumption
- Low CO₂ footprint

Contact us for a customized Carbon Footprint Assessment: www.evaled.com

**Materials**

Veolia has worked together with renowned materials research centers in order to select the most suitable materials to safely treat aggressive liquids.

Resistance to corrosion is a strong feature of every Evaled evaporator, essential when dealing with extremely concentrated liquids.

<table>
<thead>
<tr>
<th>Austenitic stainless steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austenitic-ferritic structure, non-hardening, 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&gt;4) with a low percentage of chlorides, oil emulsions, liquids from flexographic printing.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Superduplex stainless steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austenitic-ferritic structure, magnetic. The high percentage of chromium gives excellent resistance to localized corrosion. Uses: acid liquids (pH&gt;3) with high chlorides and metals content, galvanic wastewater, landfill leachate.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nickel alloy</th>
</tr>
</thead>
<tbody>
<tr>
<td>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 localized corrosion, both in oxidizing and reducing environments, even at high temperatures. Uses: very acid liquids (pH&lt;2) with high content of chlorides, fluorides and metal, anodizing wastewater, special applications.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Silicon Carbide (SiC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC type only (KT-Series)</td>
</tr>
<tr>
<td>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.</td>
</tr>
</tbody>
</table>