



EVALED®
Evaporation Technologies

LENNTECH
WATER TREATMENT Solutions

WATER TECHNOLOGIES

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.



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For more information visit our website
www.evaled.com

Benefits

disposal cost reduction

wastewater volume reduction

water recycling and reuse

valuable components recovery

high quality outlet

ZLD (Zero Liquid Discharge)

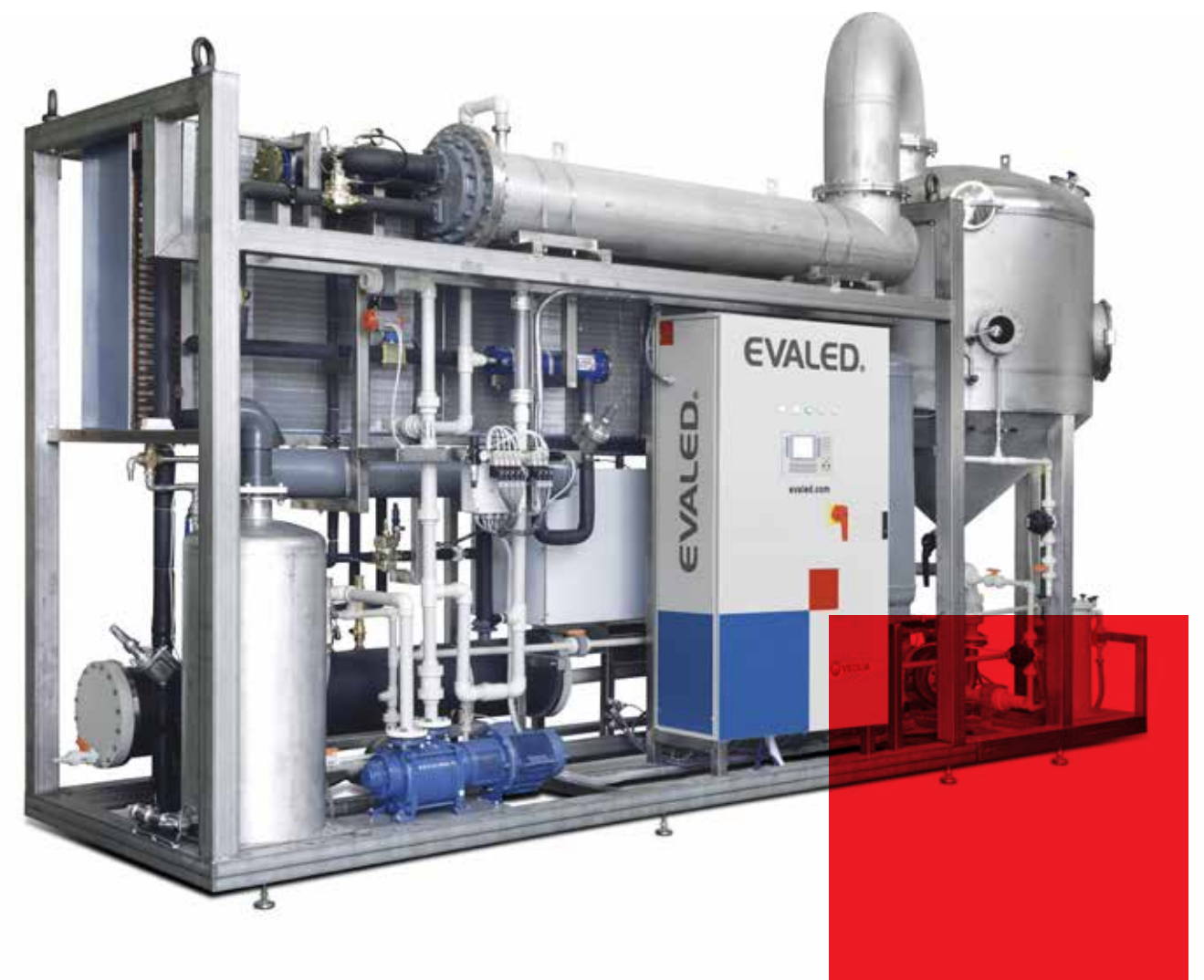
high level of automation

option for remote control

quality certification
(ISO 9001/2008)

Plug & Play (quick installation)

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



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.

Wastewater treatment capacities range from 1 to 200 tons per day.

SERIES		specifications	MODELS								ton/day
PC Heat pump		· power feeding · vacuum condition · low boiling temperature · recovery of heat- sensitive products · good distillate quality · low fouling and scaling	F	0.7	1.4	2.4	4	6	8	12	24
			R	0.1	0.5	1	2				
AC Hot/cold water		Ideal when waste thermal energy and cold water are available on site (cogeneration) · high concentration levels	F	20	40	60					
			R	3	6	12					
RV Mechanical vapour recompression		· power feeding · useful to treat high volumes of wastewater · low energy consumption	F	10	15	30	40	60	120		
			N	3	6						
			C	200							

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.)

Specifications

- standardized modular units
- fully automatized
- low energy consumption
- low CO₂ footprint

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.

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

Reliability

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

EVA life

- EVA Clean Automatic Washing System
- EVA Lab Analysis
- EVA Time Guarantee Extension
- EVA Link Remote Control
- EVA Heart Maintenance

Materials

The ultimate manufacturing materials to treat even the most aggressive effluents

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.

Austenitic stainless steel

Austenitic weakly bound 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>4) with a low percentage of chlorides, oil emulsions, liquids from flexographic printing.

Superduplex stainless steel

Austenitic-ferritic structure, magnetic.
The high percentage of chromium gives excellent resistance to localized corrosion.

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

Nickel alloy

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>2) with high content of chlorides, fluorides and metal, anodizing wastewater, special applications.

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.

Resourcing the world



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