



cleaning
systems
for liquids

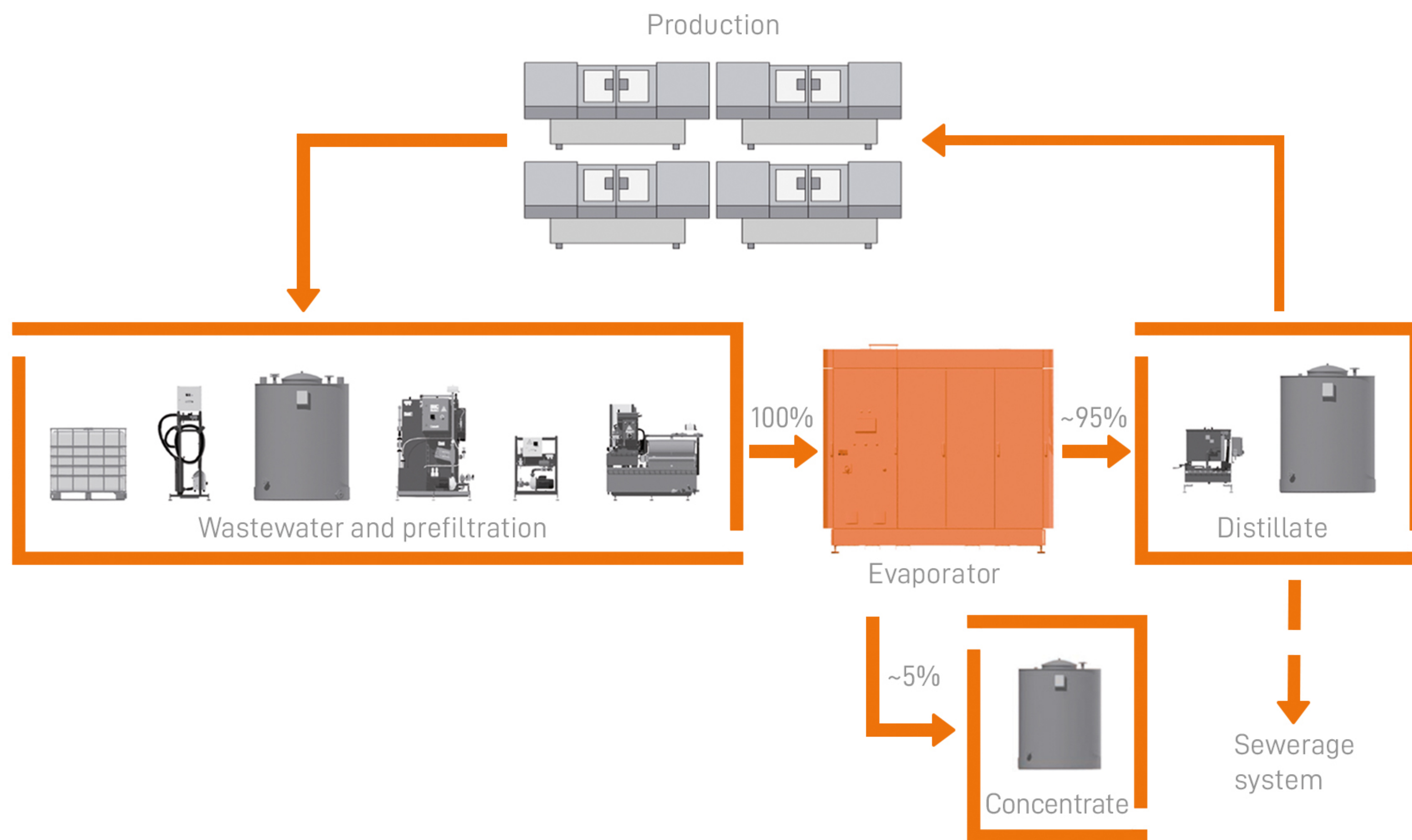


Atmospheric Evaporator Atmo-ET & ET MaXx ZLD

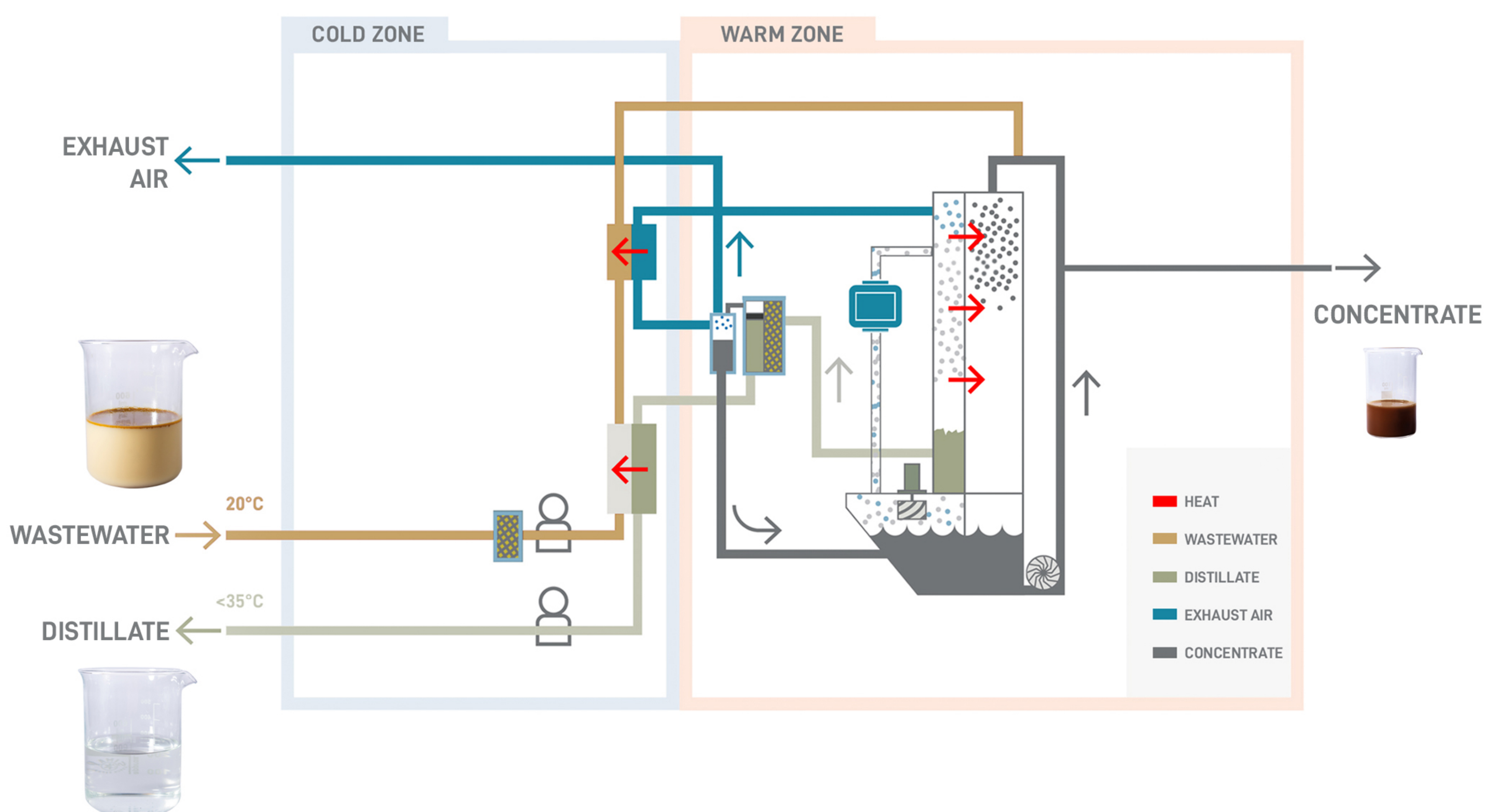
Evaporation Process

Our evaporator technology is unique, efficient and easy to use. Benefit from energy and material savings, high distillate quality, simple, fast maintenance and high performance.

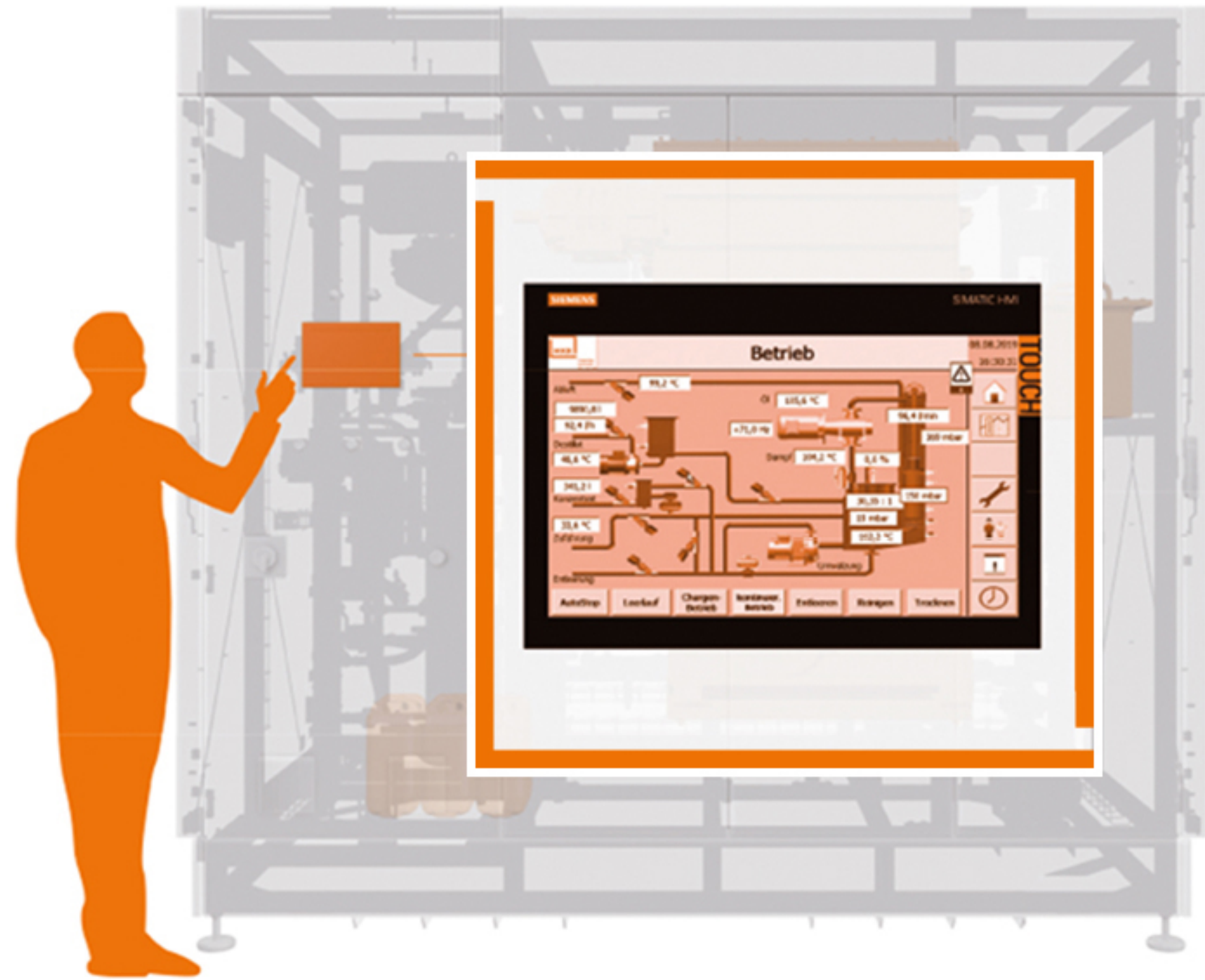
Closed-loop water recycling:



Evaporation in detail:

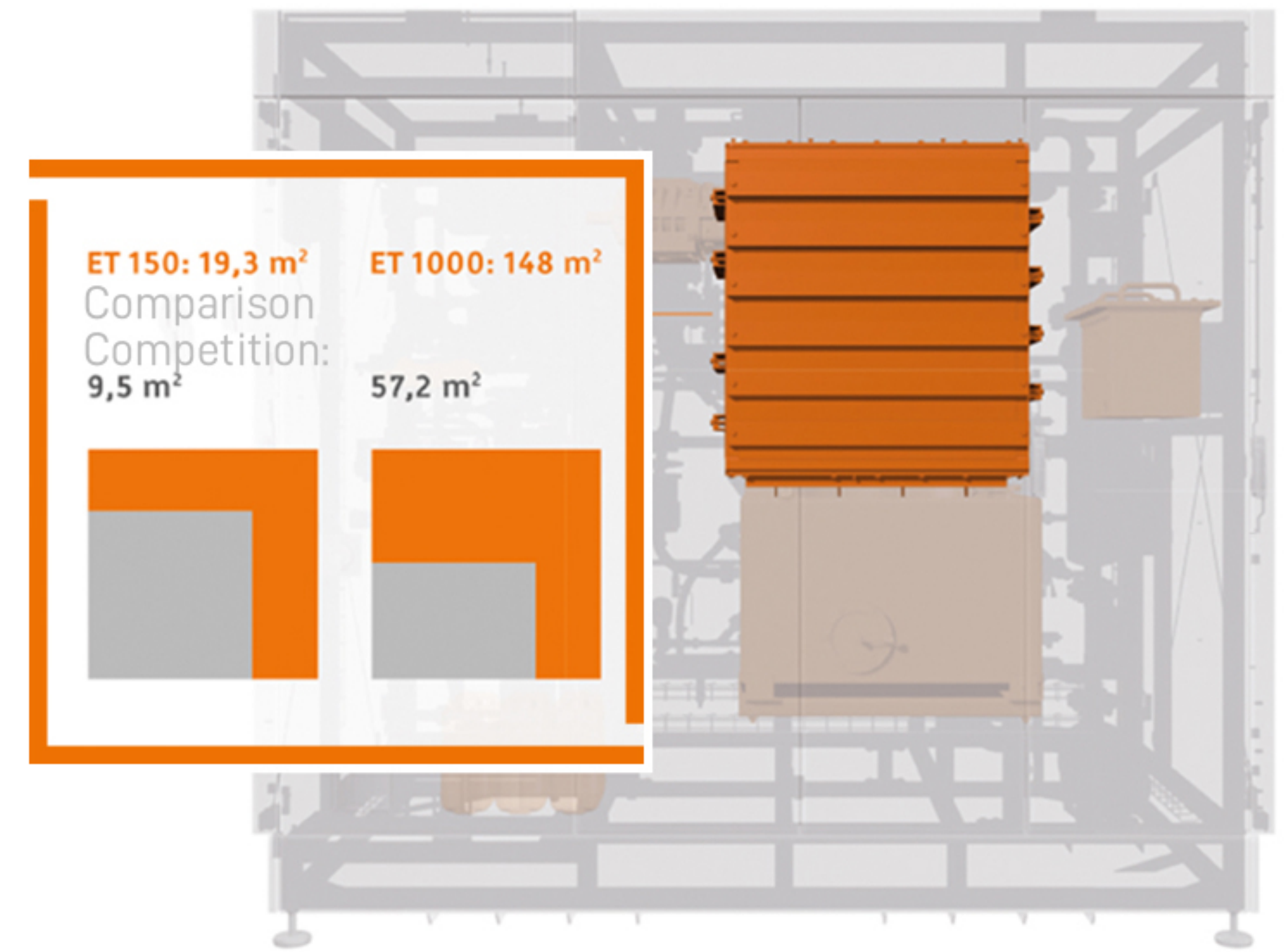


Evaporator Highlights



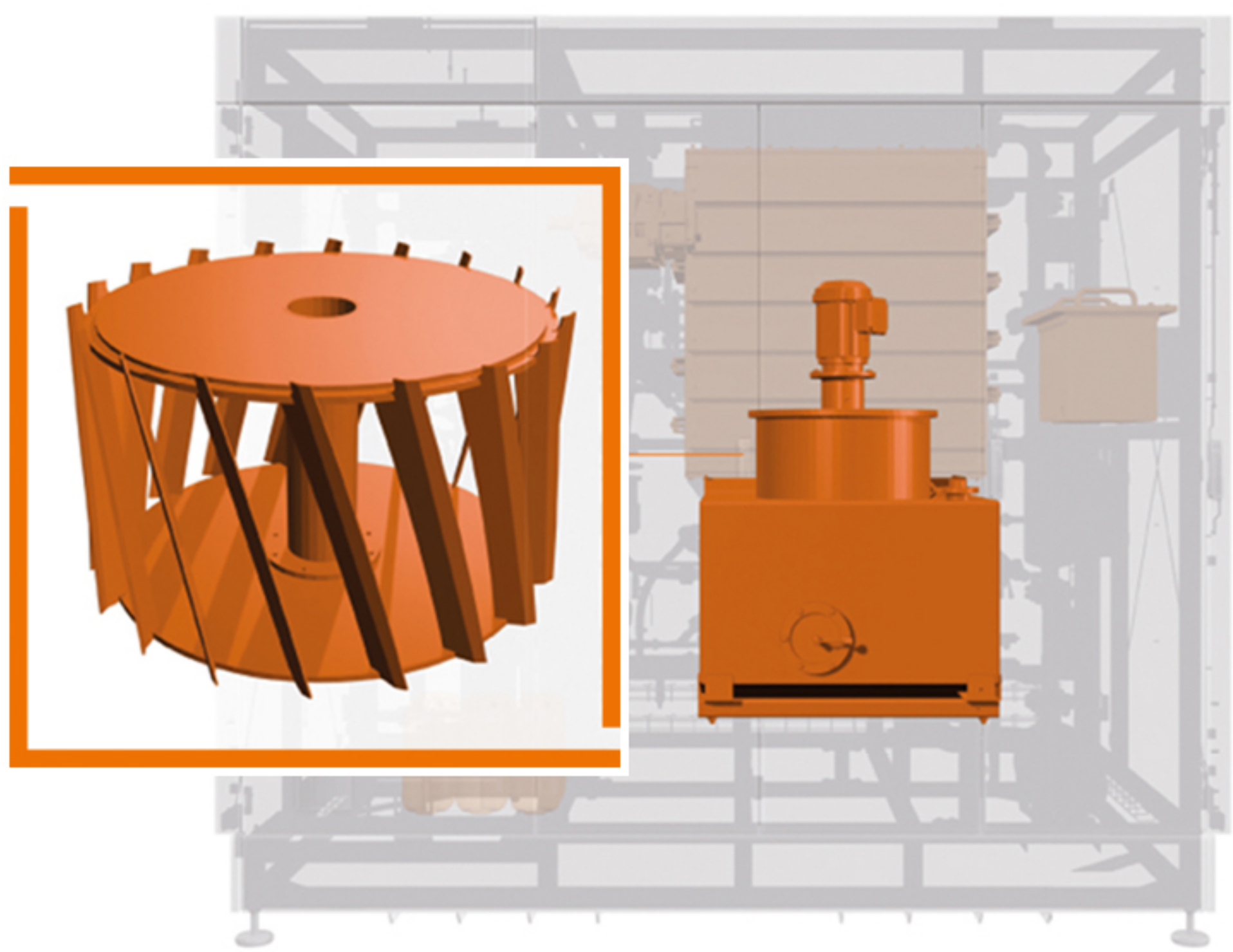
20 % MORE PERFORMANCE DUE TO INTELLIGENT CONTROL

An intelligent and simple system control enables the maximum utilization of the energy used.



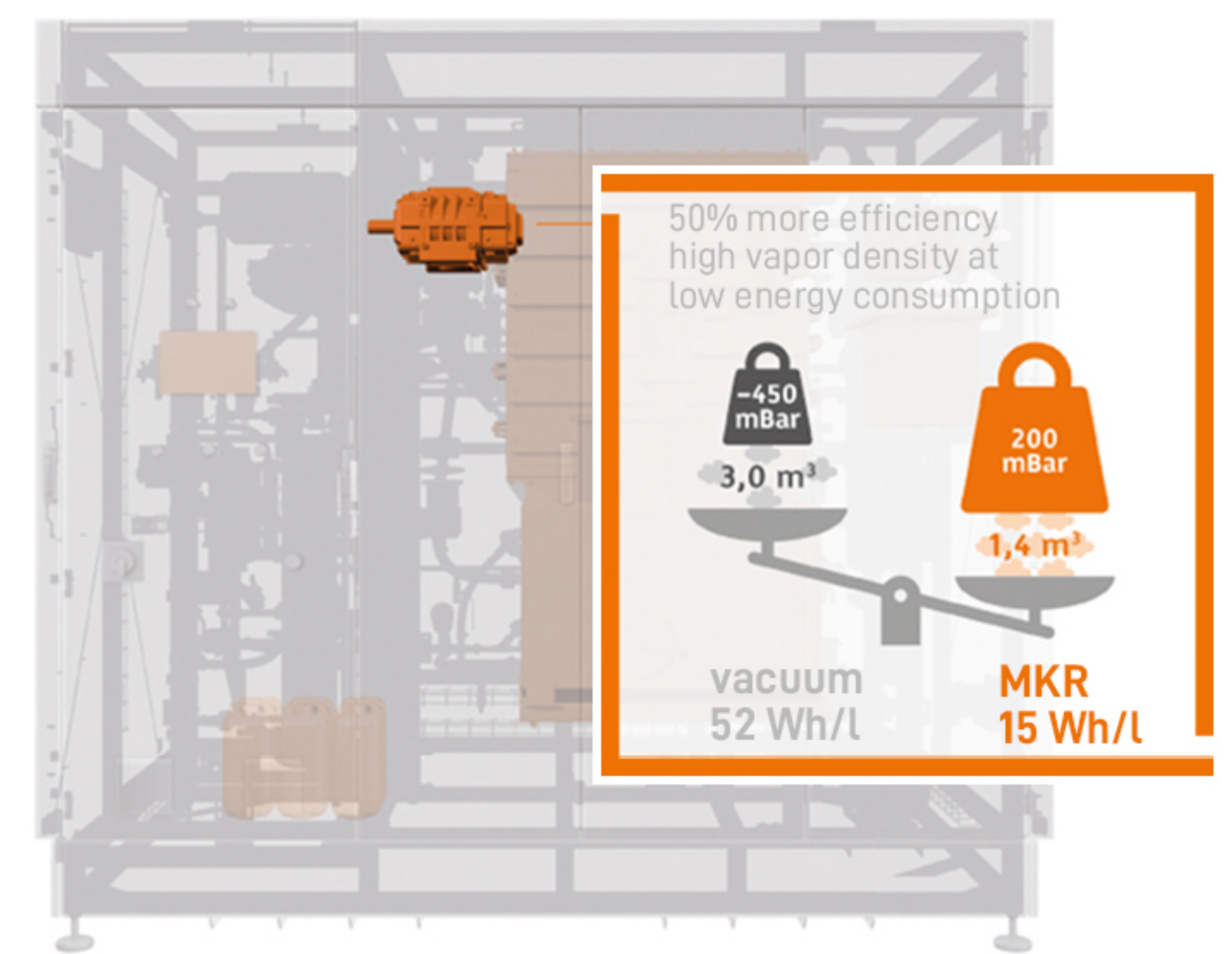
HIGH ENERGY RECOVERY

A 3-stage recuperation paired with the largest heat exchanger in its class enables a smooth and energy-saving evaporation.



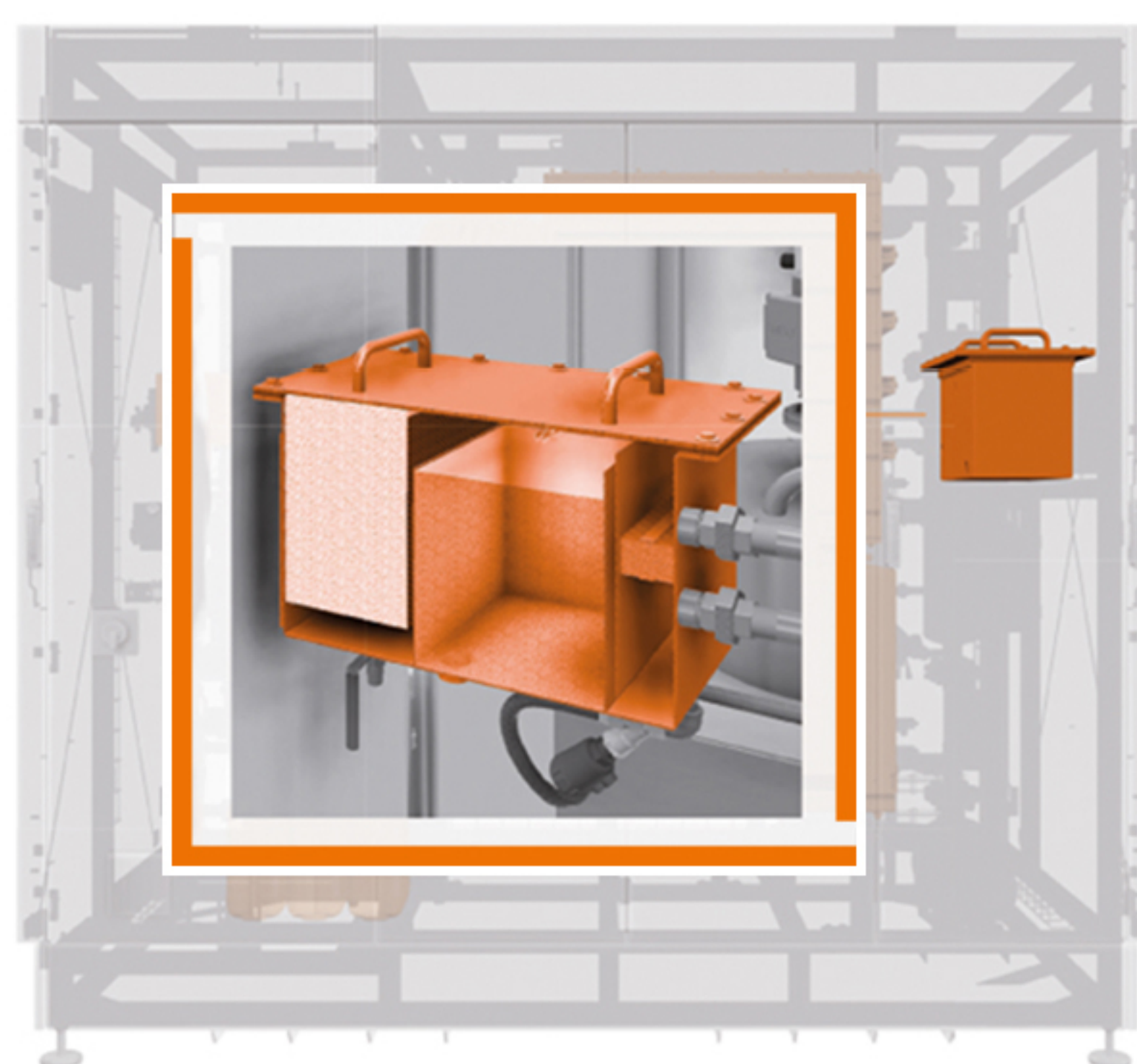
CENTRIFUGAL DEFOAMER

Centrifugal mechanical defoamer for steam preparation an reduction of antifoam chemicals.



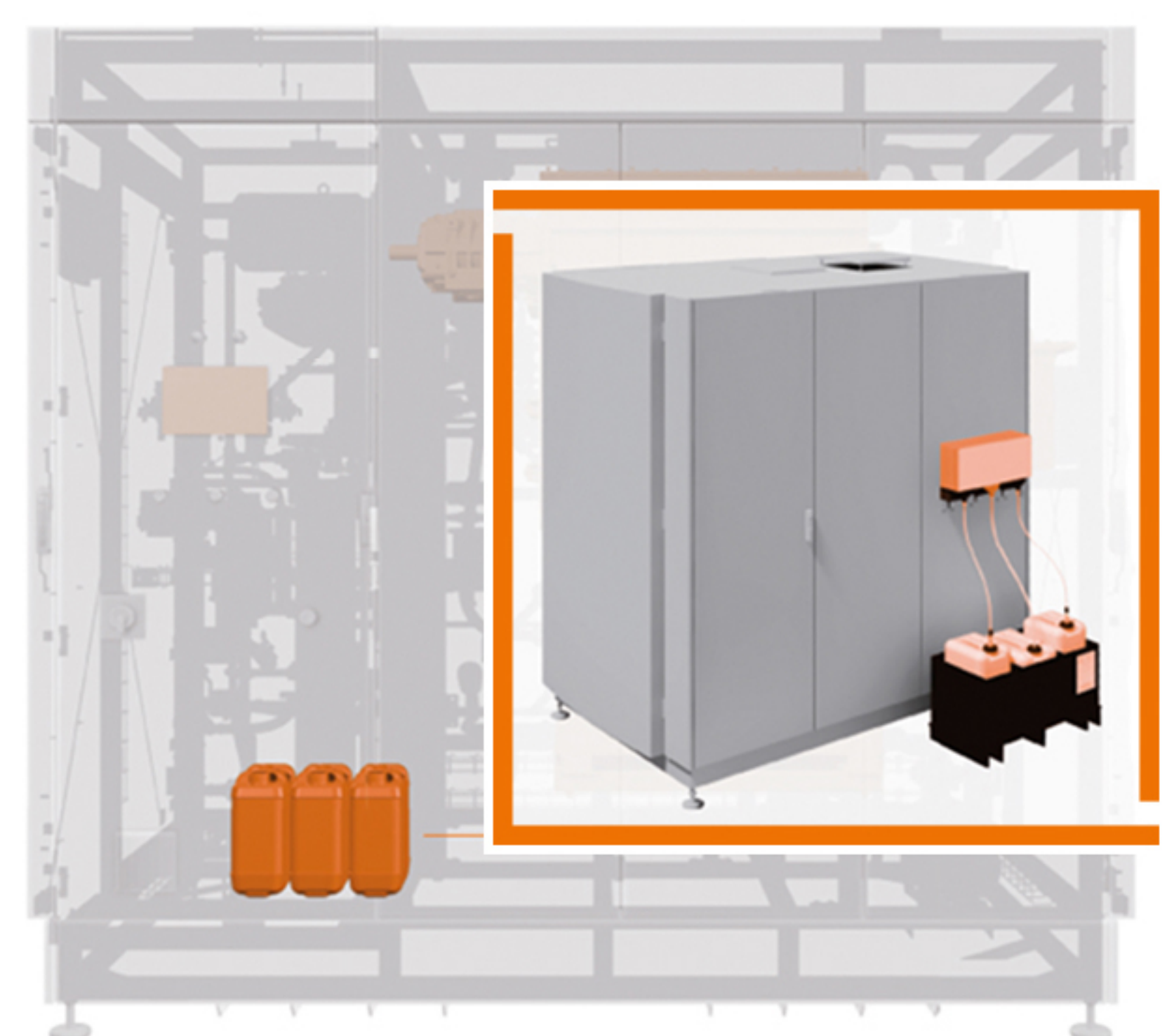
50% LESS ENERGY CONSUMPTION

The highest steam density requires less compressor capacity and thus a lower energy demand. (< 50%)



HIGHEST DISTILLATE QUALITY

The integrated Coa-Combi-Technology generates distillate with highest quality and a reduced COD value.



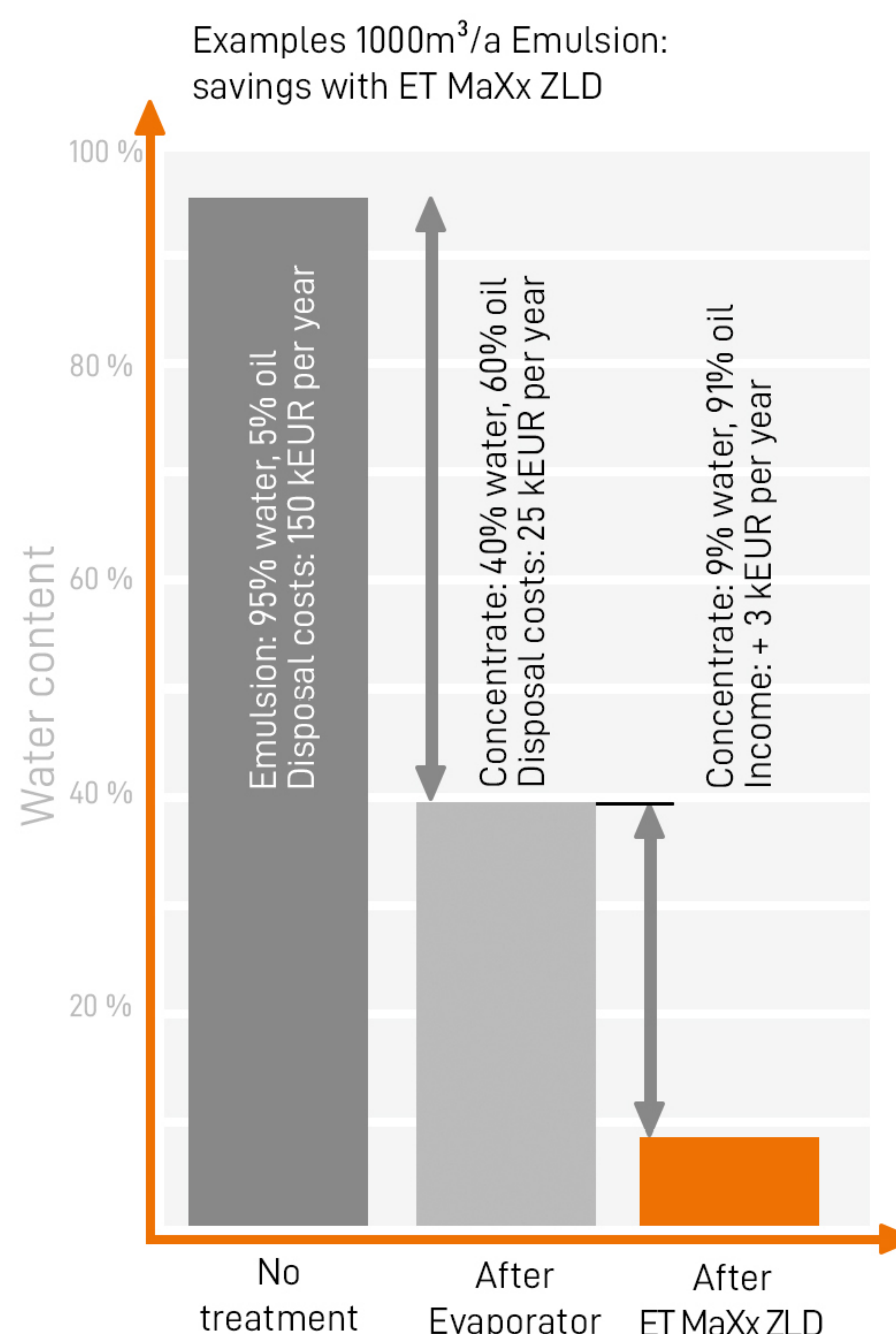
AUTOMATIC CLEANING & CHEMICAL DOSING

Integrated and forced-flow high-pressure cleaning plus an precise automatic dosing of chemicals.

ET MaXx ZLD

The MKR ET MaXx ZLD enables evaporation beyond conventional standards.

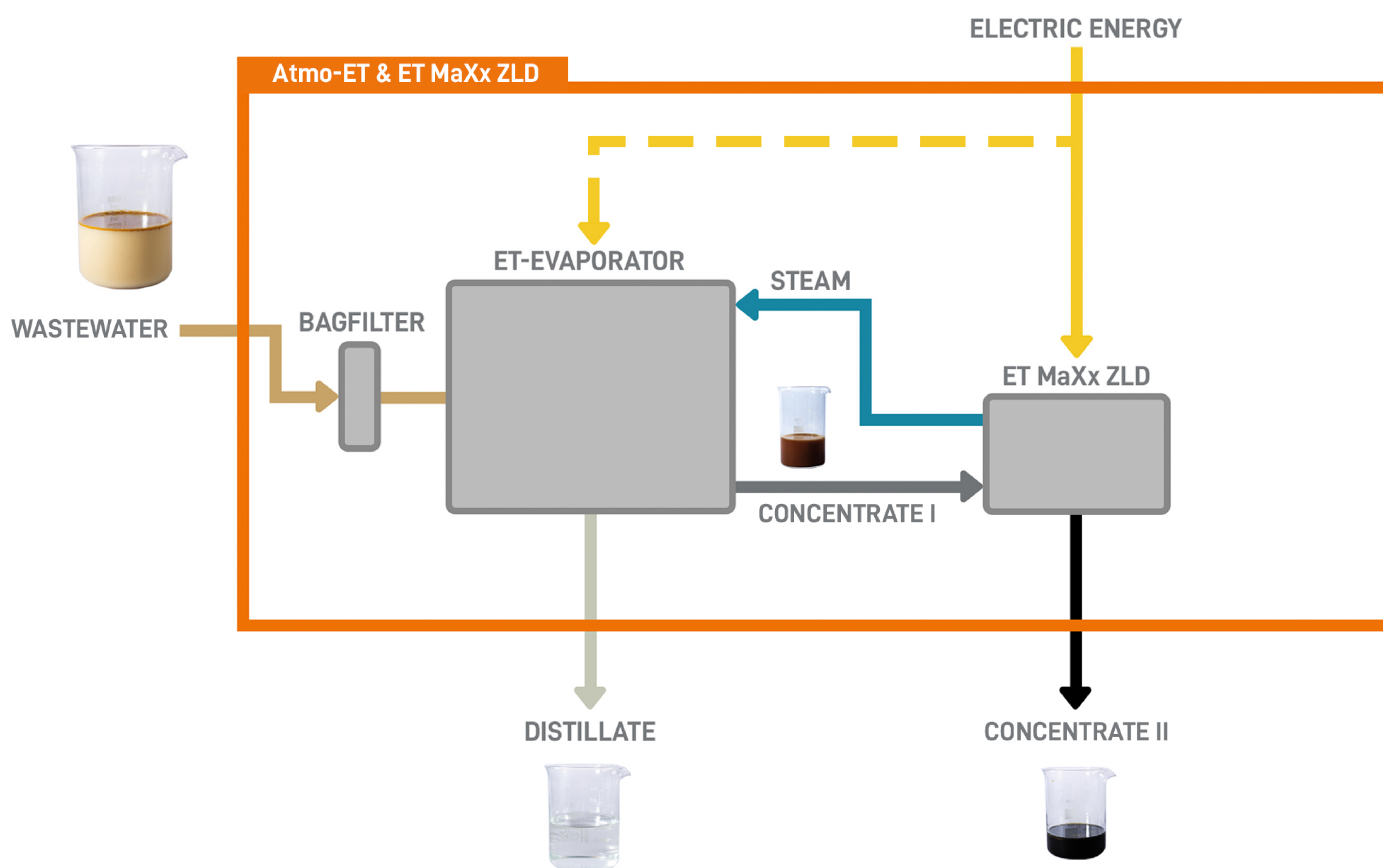
Thanks to intelligent energy recovery, it can reduce the water content to less than 10% with almost no additional energy input. This unique technology therefore delivers not only the most efficient but also a truly sustainable waste water treatment.



ET MaXx ZLD Highlights

- max. concentration paired with intelligent energy recovery
- efficiency >50% compared to conventional ZLD systems
- valuable raw materials (oils or dissolved salts)
- concentrate with water content to <10

ET MaXx ZLD Process



Atmospheric Evaporator

MKR evaporation technology is the leading process for modern wastewater treatment. Lowest energy consumption paired with highest performance is our standard.

ET-Series

S

50
100
150
200

ET-Series

M

250
350
500
750

ET-Series

L

1000
1500
1750
2000

Fields of application:

- Industrial (mixed) wastewater
- Coolant and emulsion (metalworking)
- Washing water (floor and parts cleaning)
- Active and rinsing bath (surface treatment)
- Emulsion and release agent (die casting)
- Electroplating and Coating
- and many more



What characterizes a MKR evaporator?

- atmospheric evaporation technology
- 50% less energy consumption vs. vacuum evaporator
- 20% more performance: > 200 - 400h continuous process
- plate heat exchanger for optimized heat transfer
- maximum concentration for maximum cost savings
- highest distillate quality with min. temperature increase (< 15K)
- fully automatic evaporation process and cleaning mode

The right size for your needs with capacities between 50 - 2.000 l/h. Wastewater up to 15.000 m³ per year can be treated per unit.

ET Series		S				M				L			
Nominal output	l / h	50	100	150	200	250	350	500	750	1000	1500	1750	2000
Capacity per year	m ³ / a	370	750	1100	1500	1850	2600	3700	5600	7500	11000	13000	15000
Energy consumption	kWh / m ³	65	60	55	50	48	45	35	35	35	35	35	35
Length	mm	1950		2500		2900		4450		4450		4850	
Width	mm	1260		1580		1750		2350		2800		2800	
Height	mm	2100		2600		2600		3100		3100		3100	
Weight	kg	2100		2300		2900		4800		8000		8000	
pH-Value	pH	6,5 - 11											
Liquid Temperature	°C	10 - 60											

The Success story Tradition becomes Innovation.



2023

ET MaXx ZLD
ET MaXx ZLD



2001

Fremdölabscheider
Tramp Oil Separator



1997

Verdampfer
Evaporator



1996

Ultrafiltration
Ultrafiltration



1992

Zentrifugen
Centrifuges



1990

Saug- und Filterwagen
Suction- and Filter Cart



cleaning
systems
for liquids

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