



cleaning
systems
for liquids



Wastewater recycling

Wastewater recycling: effective - sustainable - environmentally conscious

MKR evaporator technology

atmospherical pressure - mechanical compression

Fields of application:

- Coolant and emulsion (metalworking)
- Washing water (floor and parts cleaning)
- Active baths and rinses up to deionised water (surface treatment)
- Emulsion and release agent (die casting)
- Coating
- and much more

ET-Series 50
100
S 150
200

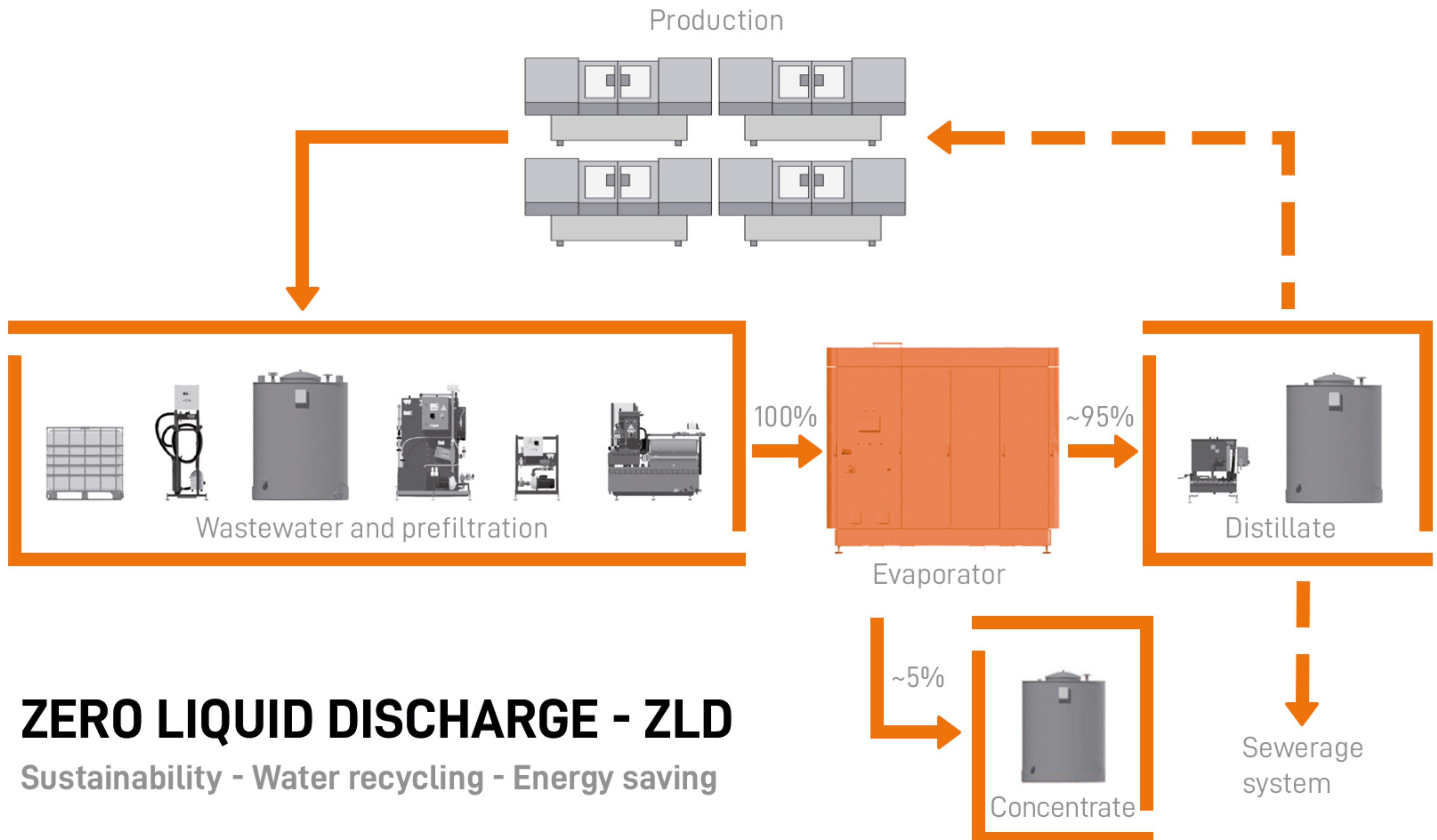
ET-Series 250
350
M 500
750

ET-Series 1000
1500
L 1750
2000



MKR Evaporator Highlights

- Latest evaporation technology: atmo-Tech with ULE
- 50% less energy consumption (compare to vacuum evaporator)
- 20% more efficiency: >200 h continuous process
- max. concentration (up to >99% distillate)
- highest distillate quality due to Coa-Combi technology
- Fully automatic process and cleaning mode



ZERO LIQUID DISCHARGE - ZLD

Sustainability - Water recycling - Energy saving

MKR evaporator technology

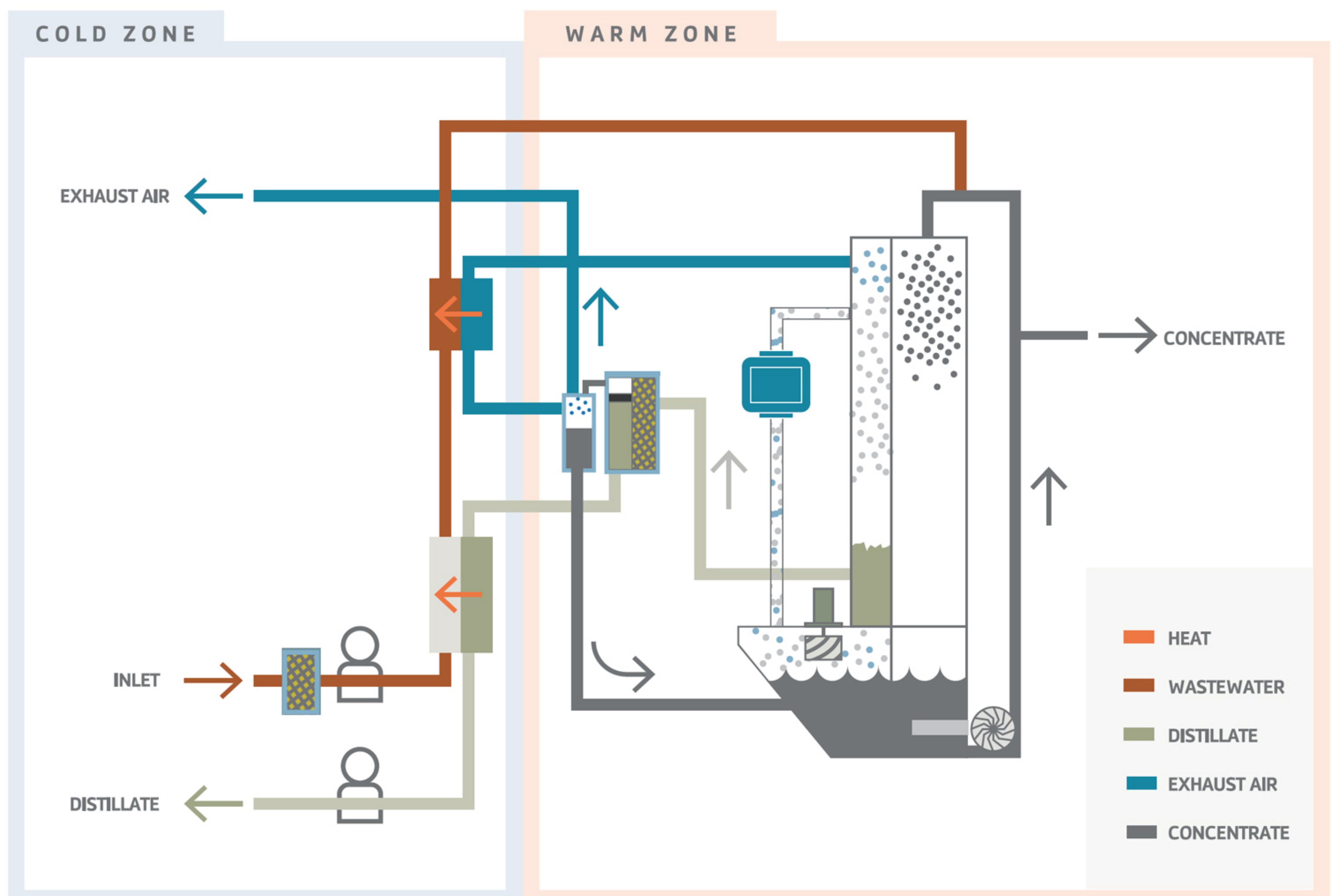
Our evaporator technology is unique and quick and easy to use. Benefit from energy and material savings, high distillate quality, simple, fast maintenance and high performance.

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	400	800	1200	1600	2000	2800	4000	6000	8000	12000	14000	16000
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											

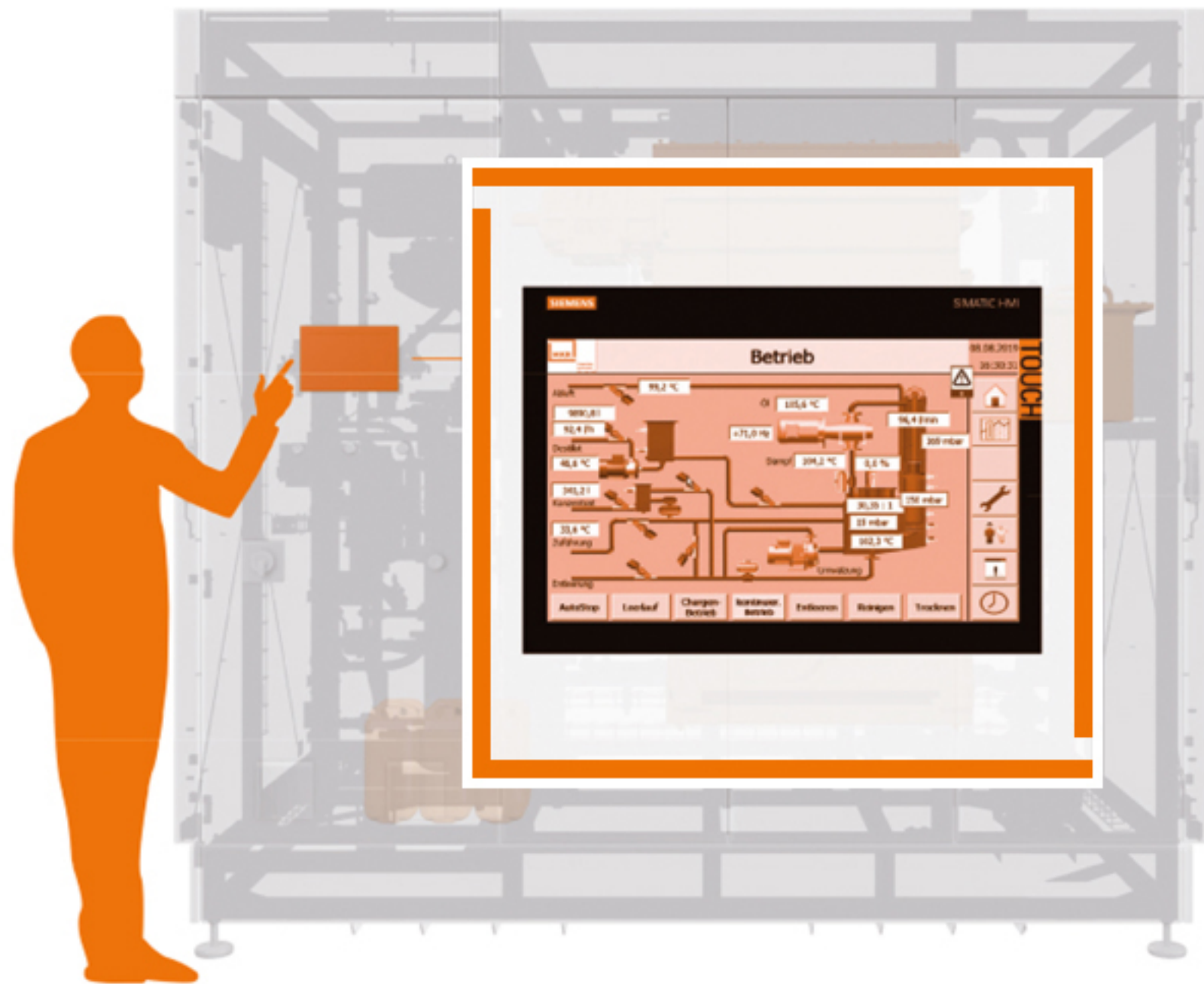
Performance characteristics:

- low specific energy consumption
- very short downtimes for cleaning
- low power consumption
- mechanical foam breaker
- compact design
- hygienised distillate
- recovery of process water
- Low inlet temperature

Functionality:

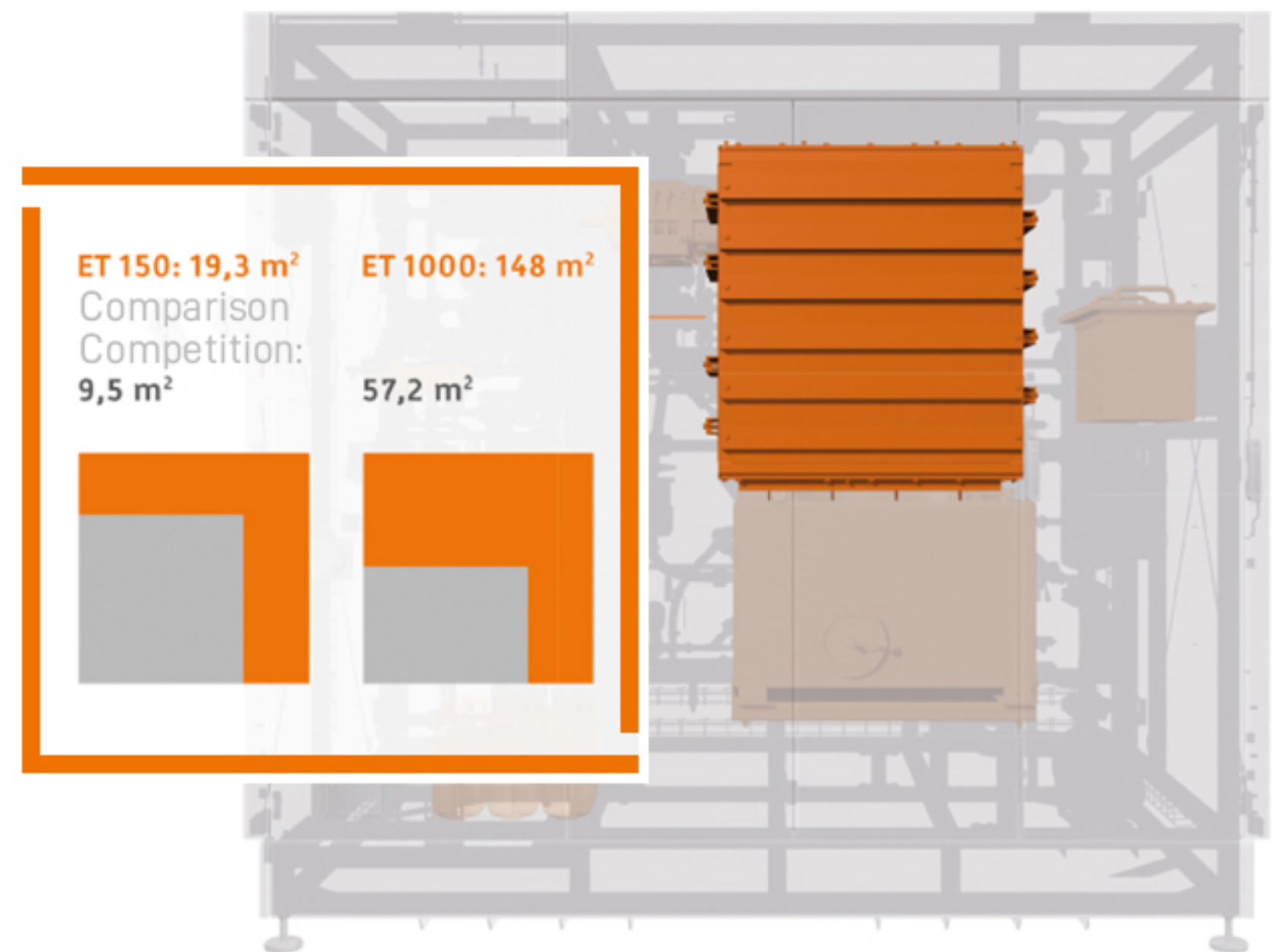


Insight into the technology:



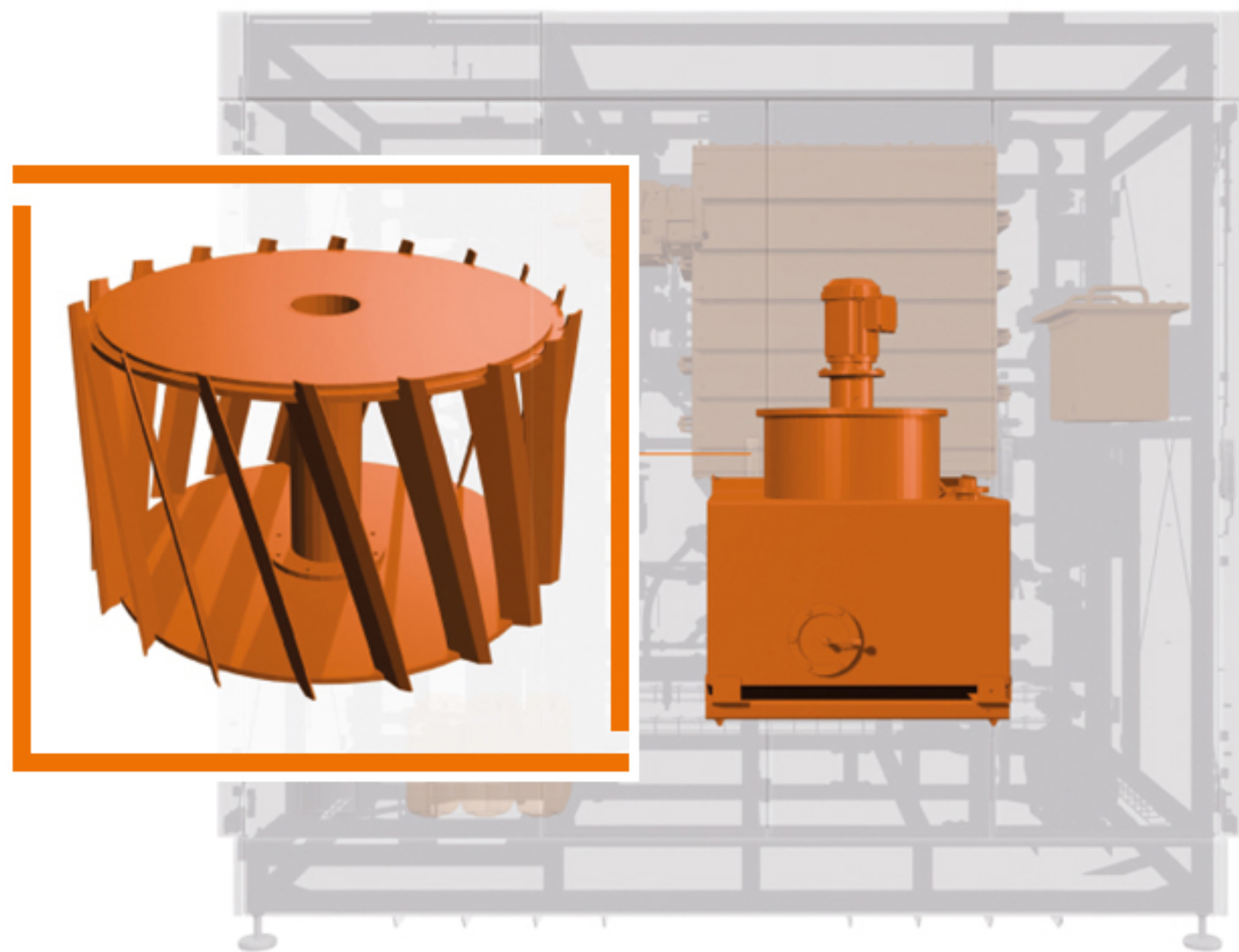
20 % MORE POWER THROUGH INTELLIGENT CONTROL

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



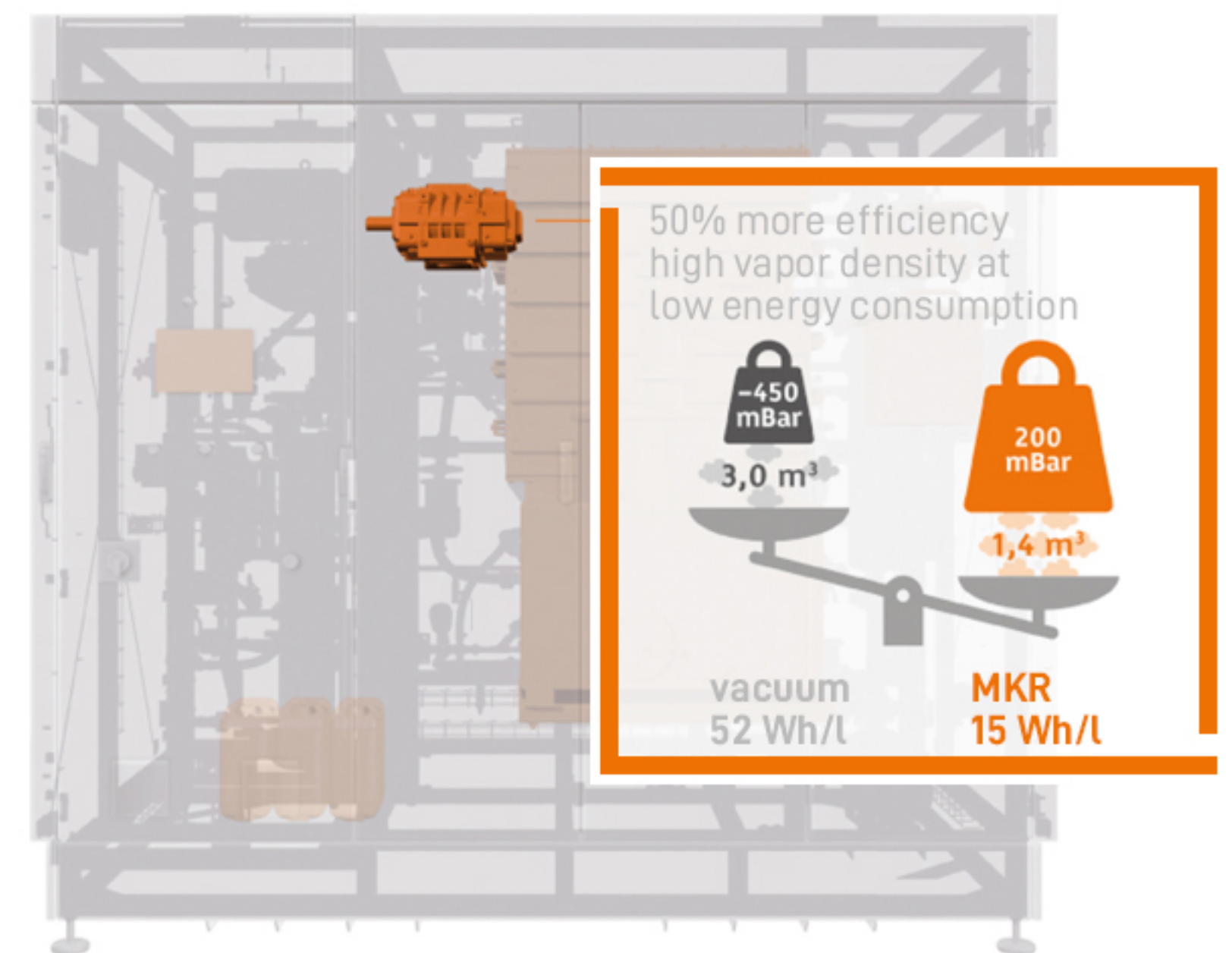
50% MORE EFFICIENT THROUGH LOWER ENERGY COSTS

Largest evaporation heat exchanger in its class. Gentle evaporation with high energy recovery extraction.



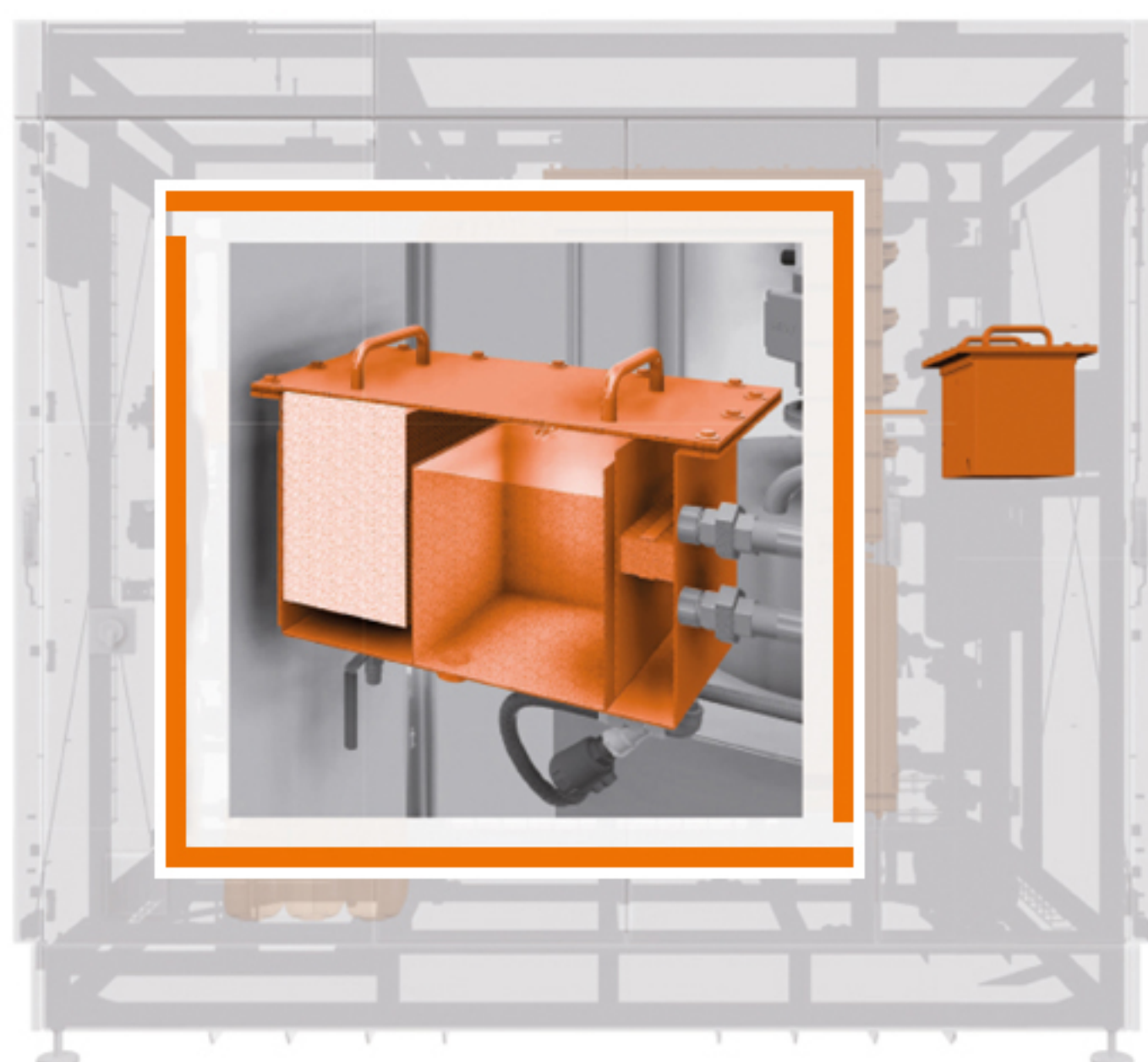
CENTRIFUGAL DEFOAMER

Centrifugal mechanical defoamer for steam preparation. This creates the highest distillate quality.



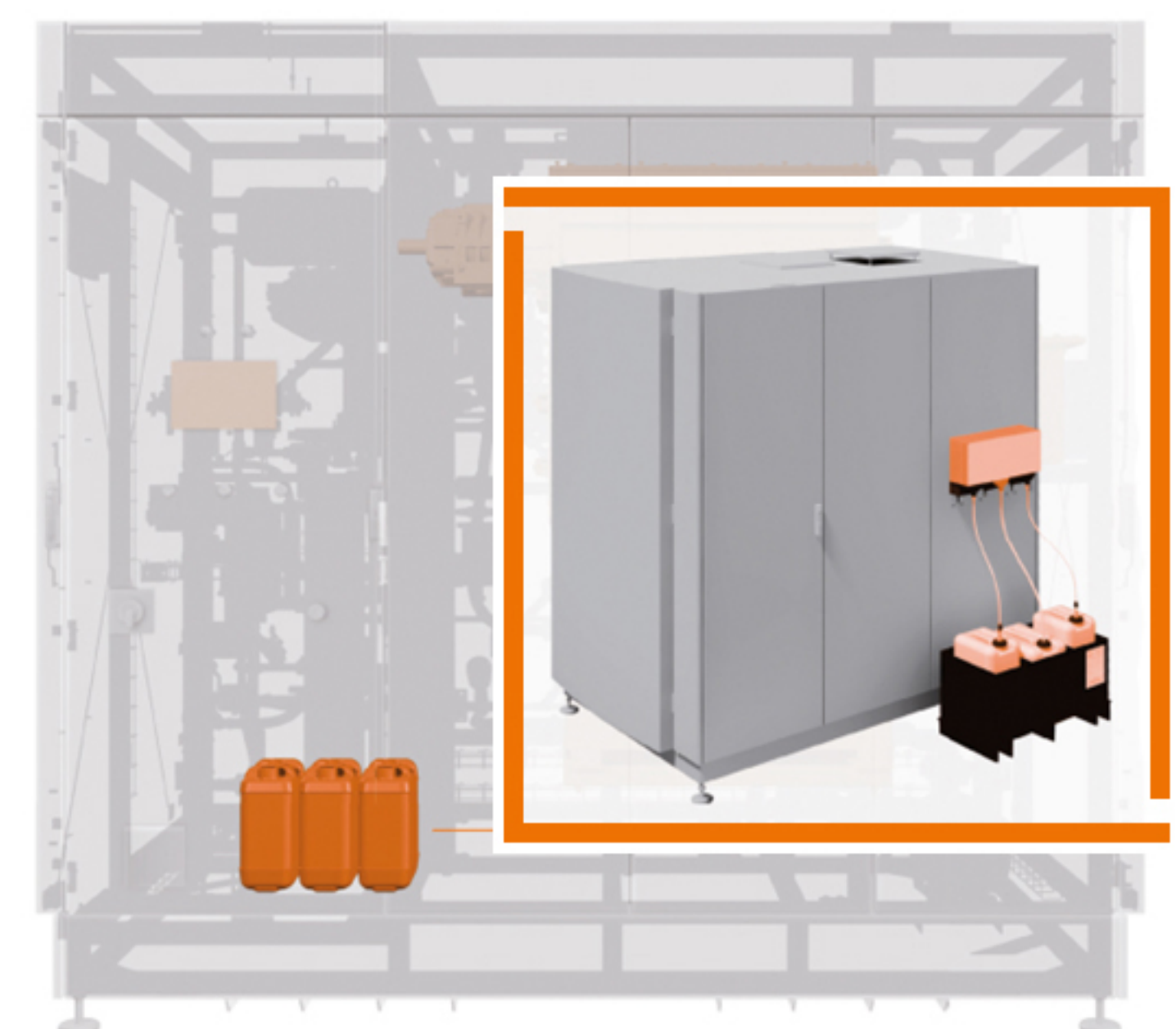
HIGH ENERGY RECOVERY

The 3-stage recuperation ensures a low energy loss is achieved, which means low energy costs.



HIGHEST DISTILLATE QUALITY

Highest distillate quality through Koa-Combi-Technology.



AUTOMATIC CLEANING / LOW COSTS

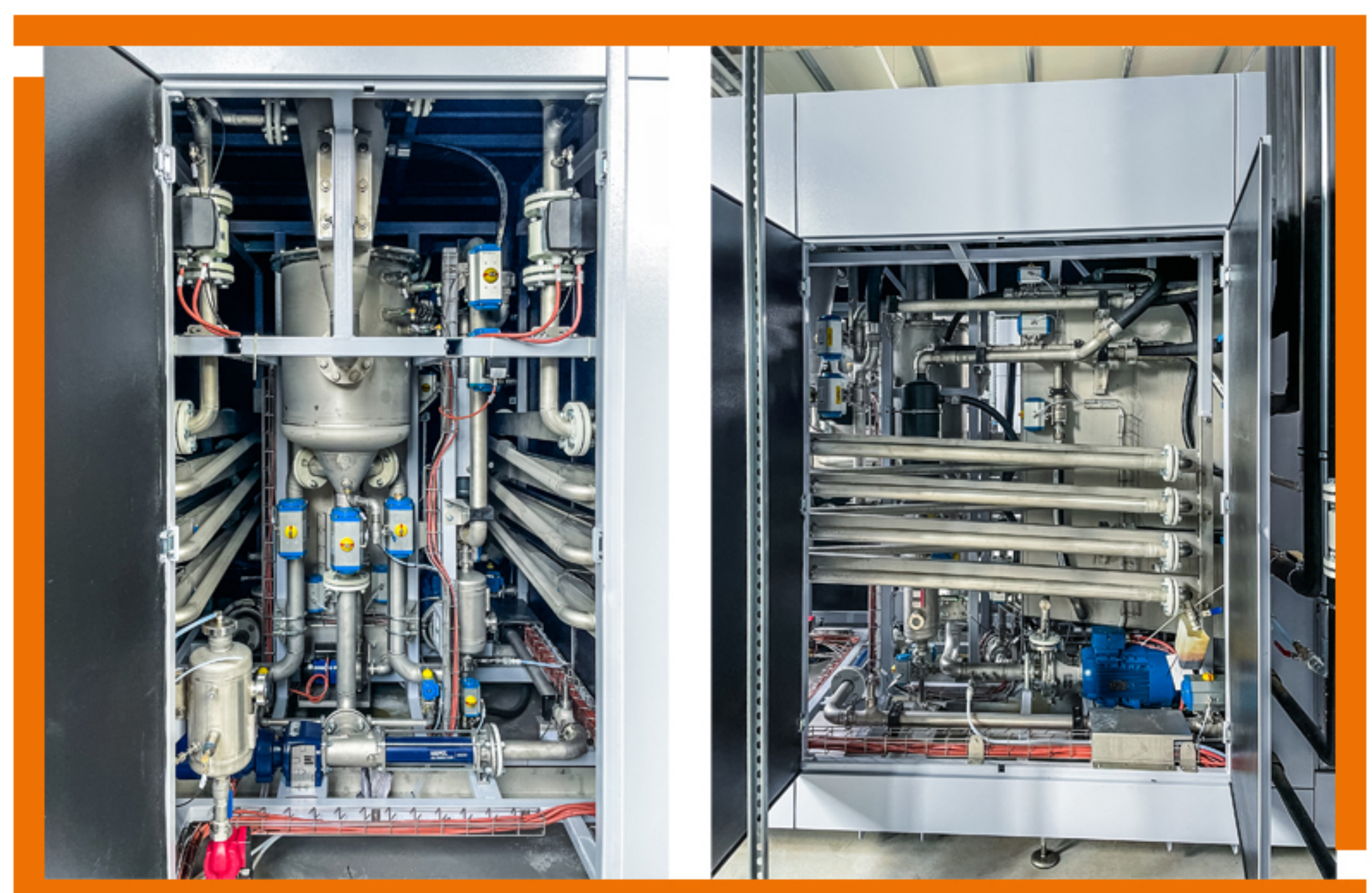
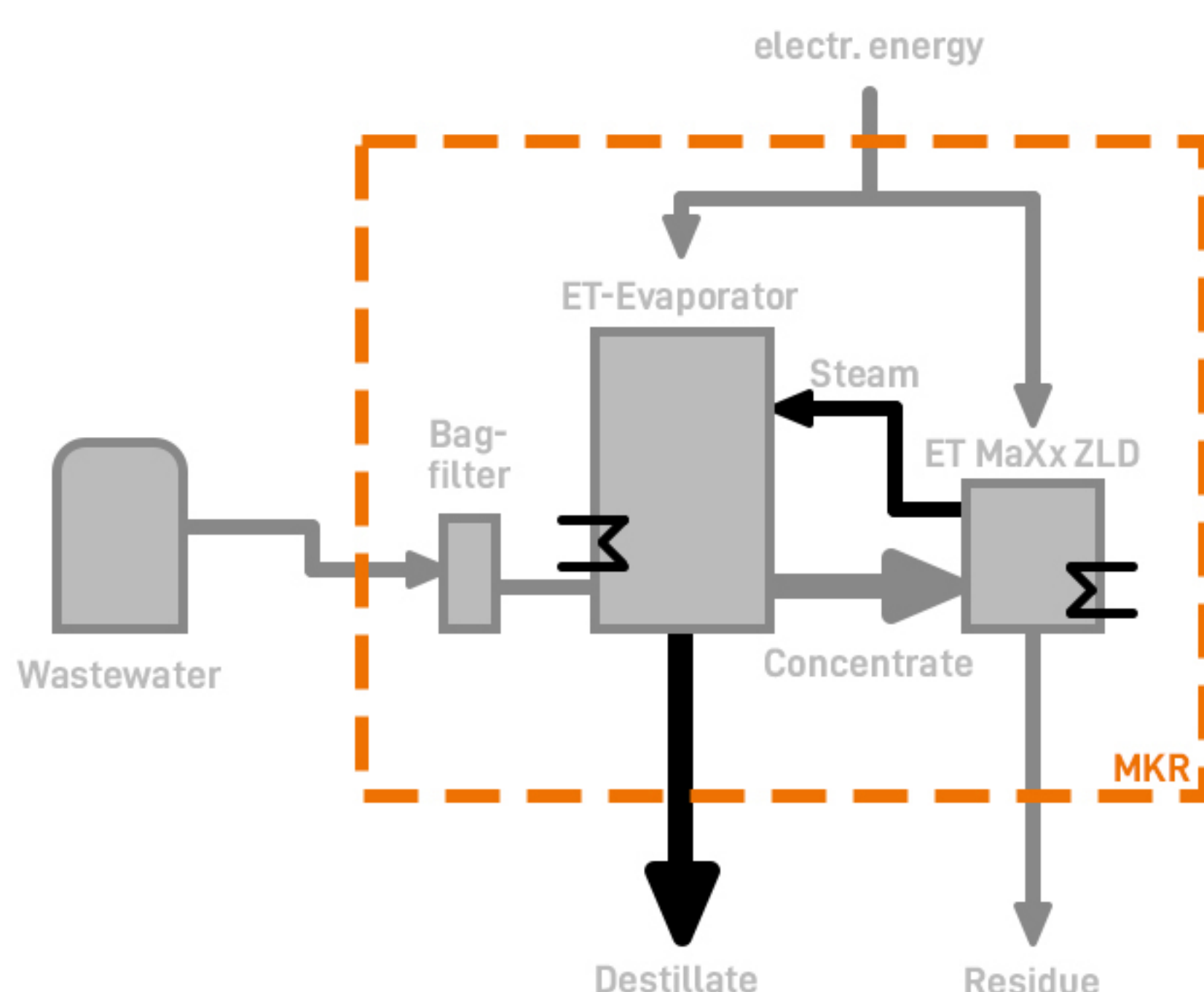
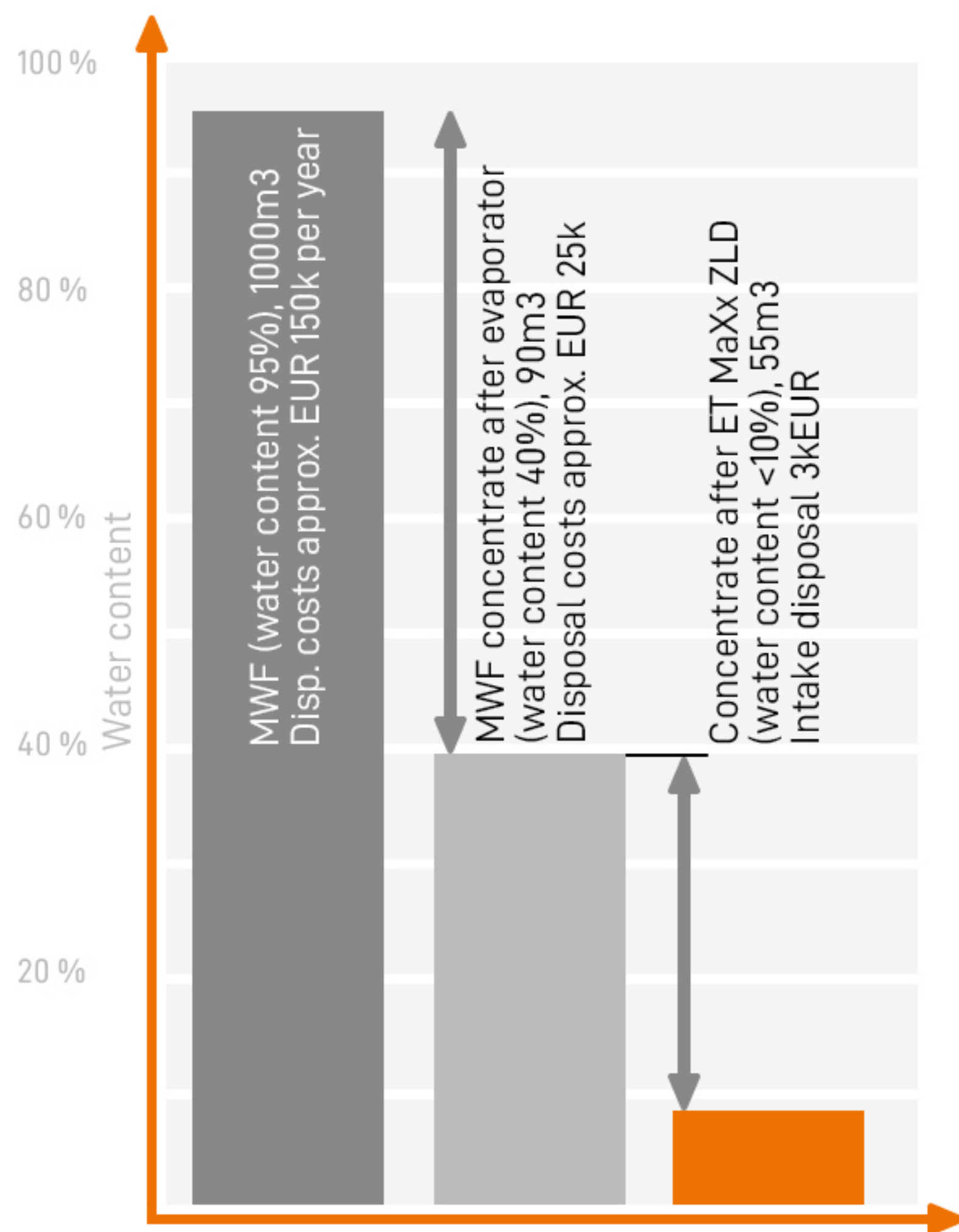
Thanks to the integrated and forced-flow high-pressure Cleaning becomes automatic and accurate dosing which allows chemicals.

ET MaXx ZLD

At MKR we go beyond traditional distillation and set new standards for efficient and sustainable solutions and so for the future of industrial process water treatment.

Energy efficient - cost saving - environmentally conscious

Thanks to intelligent energy recovery, the downstream ET MaXx ZLD evaporator stage can achieve reductions in **residual water content down to <10 %** with virtually **no extra energy**. Compared to conventional ZLD systems, this means an **increase of 50%**. Due to the maximum concentration, the residues usually yield valuable raw materials in the form of oils or dissolved salts, the recycling of which brings additional economic potential. Instead of incurring high costs for residual concentrates, MKR concentrates can be sold at a profit.



The success Story tradition becomes innovation.

Coolant treatment
Machine cleaning
Wastewater recycling
Washwater treatment



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
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