

The world's most energy efficient reverse osmosis has arrived

typically

50%

reduction
in energy

compared to competitor
systems

80%

less
wastewater

compared to conventional
reverse osmosis

up to

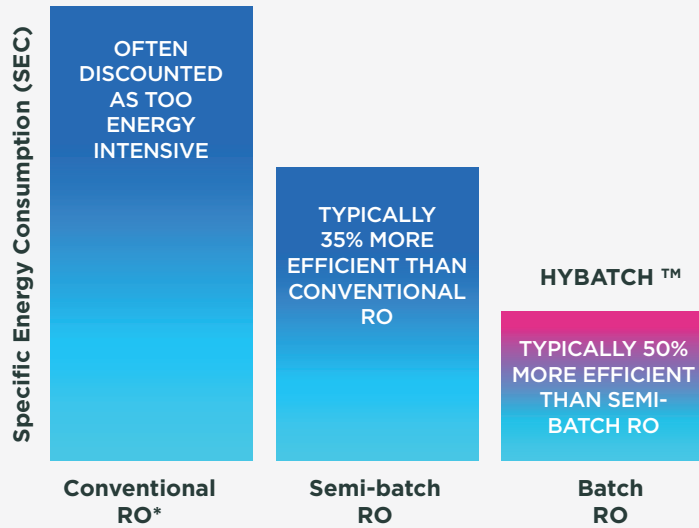
98%

of feedwater
is recovered

Salinity Solutions has developed HyBatch™, a ground-breaking batch reverse osmosis (RO) technology - the first in the world to be manufactured commercially - to dramatically reduce the environmental impact of water treatment. Salinity's system uses less energy, purifies a higher amount of municipal and industrial wastewater, generates less waste, and is more compact and portable than traditional RO systems.



Conventional RO vs Semi-batch RO vs Batch RO



Source: <https://www.sciencedirect.com/science/article/pii/S0011916420313035>
*Single stage

Technical information for a typical SAM50 unit

Parameter	Unit	SAM50-25	SAM50-100
Throughput	m ³ /day	25	100
Dry weight	kg	850	1500
Energy consumption	kWh/m ³	<0.5	
Feed TDS	ppm	0-6000	
Rejection	%	95-99.5	
System housing	m	Standard 20ft container 6.1 (L) x 2.44 (W) x 2.89 (H)	
Number of housings		1	2
RO elements per housing		1	3
Total number of elements		1	6

Industries include

- Water & wastewater treatment
- Food & beverage
- Pharmaceutical
- Healthcare
- Agriculture
- Mining

Applications

- Water reuse
- Effluent treatment
- Nutrient removal
- Ultrapure Water
- Mineral extraction
- Minimal liquid discharge

Benefits

- High energy efficiency
- Modular and scalable
- Small footprint
- Up to 50x brine concentration
- Up to 98% water recovery
- 'Plug & play' installation
- Patent protected
- Engineered in the UK
- Uses any standard 8" RO membrane

