# The world's most energy efficient reverse osmosis has arrived

## at least 50% reduction in energy

80% less wastewater

compared to conventional reverse osmosis

up to 98% of feedwater is recovered

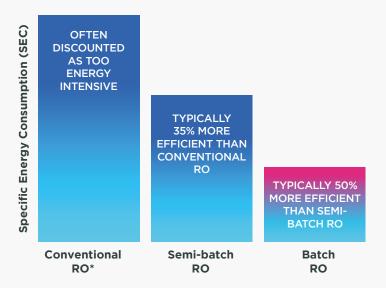
Salinity Solution's SAM50 Batch Reverse Osmosis (Batch RO) system delivers significant advantages compared to competing reverse osmosis technologies. The SAM50 system is specifically designed to meet the demanding requirements of water treatment in industrial and municipal applications.

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### Conventional RO vs Semi-batch RO vs Batch RO



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

#### **Technical information**

Parameter	Unit	SAM50-25	SAM50-150
Throughput	m³/day	25	150
Dry weight	kg	850	1500
Energy consumption	kWh/m³	<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
- Data centres

#### 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



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