

# MAXH<sub>2</sub>O Desalter for Brine Minimization and Effluent Treatment

The MAXH<sub>2</sub>O Desalter is a state of the art RO solution which includes an integrated salt precipitation cycle for high recovery applications. The MAXH<sub>2</sub>O Desalter process allows pushing the RO water treatment ability to its limit, while overcoming the challenging limitation of membrane scaling and fouling, while achieving the industry's highest recovery rates.

## ? The Challenge

- Challenging water chemistry which limits RO recovery and efficient water reuse due to high scaling and biofouling potential
- Compliance with discharge regulation due to selective ion concentration limitations such as Sulphates, Silica and others.



#### The Solution

IDE's MAXH<sub>2</sub>O Desalter - a unique technology that treats and minimizes brine and industrial effluents by eliminating the constraints of water chemistry. By removing sparingly soluble salts out of the water, the MaxH<sub>2</sub>O maximizes recovery and process water reuse while complying with discharge regulation.

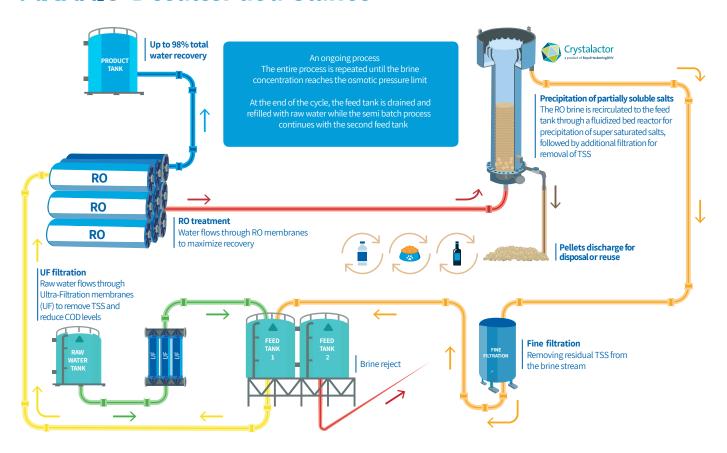
### Why choose M∧XH<sub>2</sub>O Desalter?

If you need to minimize brine and industrial effluents with high scaling tendency and low to moderate salinity, the MAXH<sub>2</sub>O Desalter is the perfect solution for you.

- **High Recovery Rates** Industry's highest, up to osmotic pressure limit (8%-10% TDS)
- **Economical** Optimized OPEX, by reducing chemical consumption and minimizing ongoing maintenance
- **Selective Salt Removal** Removal of sparingly soluble salts to comply with discharge regulation
- Reliable & Robust Allows continuous operation and avoids biofouling and scaling
- Flexible Tolerates variable feed water qualities, concentrations and flows
- High quality product Meets environmental regulations for discharge or reuse



#### M∧XH<sub>2</sub>O Desalter at a Glance



## **Performance Comparison**

	MAXH <sub>2</sub> O Desalter	<b>Alternative Solutions</b>
Pretreatment stages	Minimal	Intensive
RO Stages	1	Typically 2-3
Total recovery	Up to 98% (Osmotic Pressure)	Typically 50-80%
Recovery limiting factor	Osmotic pressure	Water chemistry
Bio-fouling tendency	High resistivity to bio-fouling due to changing salinities	Higher risk of bio-fouling
Scaling tendency	Low	High
Chemicals	Low	High
OPEX	Medium	High



