



The Integro™ – A Game Changer for RO & Desalination Efficiency

Validated by Cranfield University, UK

Shortlisted in the XPRIZE Water Scarcity Challenge

WHAT IS THE INTEGRO™

The Integro™ is a chemical-free water conditioning technology that prevents hard limescale accumulation by altering ionic activity in the water. By disrupting ionic bonding, it reduces the ability of scale to form, as well as improving water's permeability.

For reverse osmosis (RO) and desalination systems, the Integro™ delivers measurable improvements in efficiency, operating cost, and sustainability.

Unlike conventional chemical dosing, the Integro™:

- ⊕ Requires no consumables, sacrificial media, or bulk precipitation.
- ⊕ Operates inline, continuously, with minimal maintenance.
- ⊕ Creates a cleaner feed stream that helps downstream processes work at peak efficiency.



HOW THE INTEGRO™ IMPROVES RO & DESALINATION

Scaling and fouling are among the greatest challenges in reverse osmosis and seawater desalination, driving up energy use, shortening membrane life, and increasing chemical consumption.

The Integro™ addresses these challenges by:

Maintaining Higher Permeability



Membranes can operate at lower pressure for the same output.

Enhancing Ion Rejection



Lowering chloride and sulphate passage, resulting in cleaner permeate with reduced conductivity.

Reducing Flux Decline



Fouling builds more slowly, extending cleaning intervals.

Supporting Sustainability

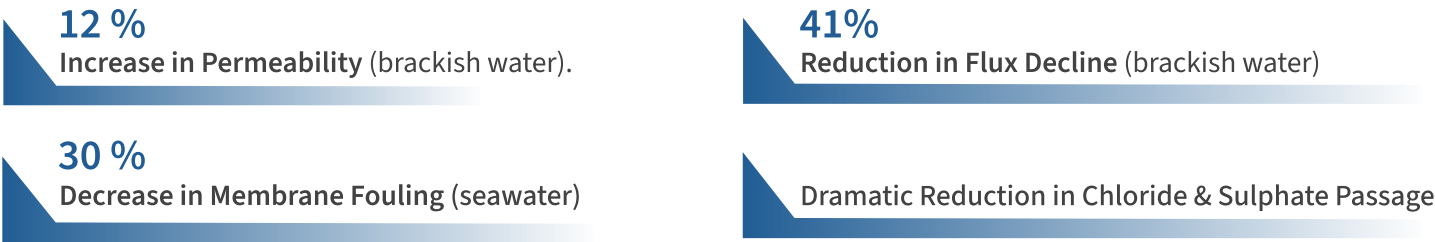


Reducing reliance on antiscalants and cutting waste from chemicals and membranes.

VALIDATED PERFORMANCE – CRANFIELD UNIVERSITY (2025)



Independent testing at Cranfield University confirmed the impact of the Integro™ across freshwater, brackish, and seawater RO systems:



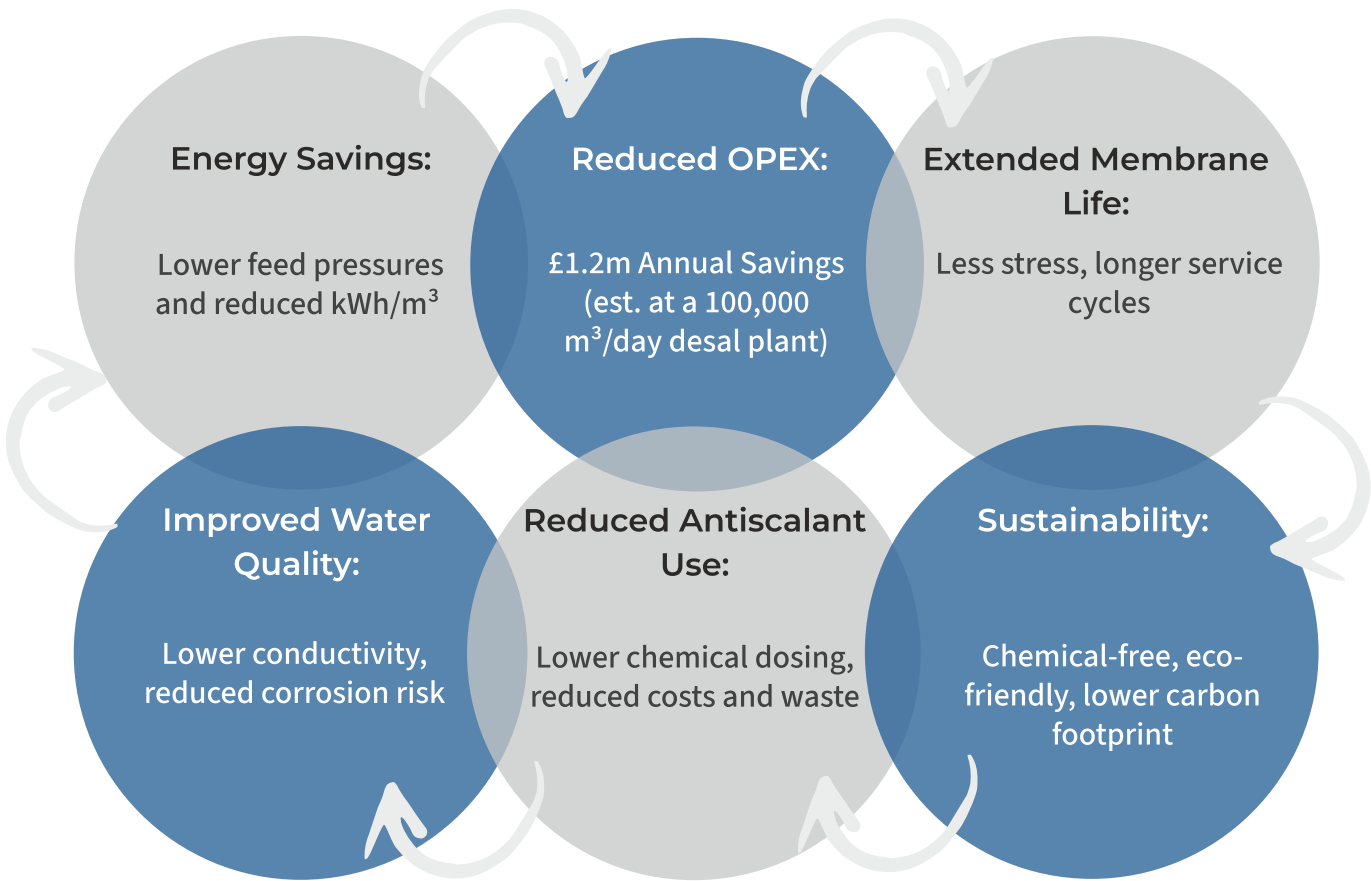
A RECOGNISED INNOVATION – XPRIZE WATER SCARCITY CHALLENGE

Sidon Water has been selected as a Qualified Team in the \$119m XPRIZE Water Scarcity Challenge, recognising breakthrough solutions to secure sustainable global water supplies. This milestone underlines the potential of the Integro™ to reshape desalination efficiency at scale.



XPRIZE
WATER
SCARCITY

HEADLINE BENEFITS FOR OPERATORS



DISCOVER HOW THE INTEGRO™ CAN TRANSFORM YOUR REVERSE OSMOSIS OR DESALINATION SYSTEM.



Download the full Cranfield University White Paper.

Contact: enquiries@sidonwater.com | www.sidonwater.com



SIDON Integro™



sidonwater.com

