



Brackish Water Treatment

A Sustainable Solution for Water Scarcity

Brackish water — sourced from aquifers and surface water — features salinity levels between freshwater and seawater (usually up to 10,000 mg/L TDS). With advanced treatment, this valuable resource is transformed into high-quality water for drinking, irrigation, and a wide range of industrial applications.

IDE's Advanced Treatment Solutions

IDE's brackish water treatment integrates advanced pretreatment, membrane desalination, PFAS removal solutions and smart process control to deliver efficient, reliable, cost-effective, and sustainable performance. Its fully automated, cybersecure facilities ensure safe and reliable operation.

◎ **BWRO Membranes**

Brackish Water Reverse Osmosis (BWRO) membranes operate at moderate pressure to efficiently remove salts, contaminants, and organics, offering high rejection, energy savings, and extended long term performance. IDE leverages this technology in high-TDS applications for cost-effective, low-energy desalination.

◎ **NF (Nanofiltration) Membranes**

Nanofiltration (NF) membranes are energy-efficient, ideal for water softening, desalinating water by removing divalent ions, color, organics, and other contaminants while retaining beneficial minerals. IDE uses NF membranes to enhance water quality and operational efficiency.

◎ **High Recovery PFRO (Pulse Flow Reverse Osmosis)**

PFRO is IDE's proprietary and patented technology which uses high-velocity brine pulses and automatic flushing to reduce fouling and boost recovery while lower costs. It's ideal for efficient, sustainable, high-recovery desalination.

◎ **Modular Prefabricated Design (MPD) Units**

IDE's MPD units offer flexible, efficient brackish water treatment with prefabricated, rigorously tested modules for fast installation, minimal disruption, and easy expansion. Integrating BWRO, NF, and PFRO technologies, IDE delivers scalable, cost-effective solutions that reduce construction time and enhance performance.

◎ **Expert Operation & Maintenance**

With global expertise, IDE manages all aspects of plant operation and maintenance, ensuring reliable performance, compliance, and safety. Our skilled teams and responsive support drive continuous innovation and fast problem-solving.



IDE Brackish Projects

The Prospect Lake Clean Water Center (Fort Lauderdale Florida, USA)

Capacity: 50 MGD

Technology: NF membranes and Ion Exchange

Water source: Ground water (Biscayne Aquifer)

Contract type: DBFOM, 30 years (P3)

Usage: Potable Water

Recognition: Award-winning project for the Best P3 Utility Project of the Year (2023)



Dos Bocas Plant (Tabasco, Mexico)

Capacity: 34 MGD

Technology: BWRO membranes

Water source: Surface water (Gonzales River)

Contract type: Design Build

Usage: Industrial water for Dos Bocas Refinery

Cherokee Wastewater Treatment Plant (Colorado, USA)

Capacity: 2 MGD

Technology: High Recovery PFRO

Water Source: Municipal wastewater

Contract Type: Design Build

Usage: Municipal indirect potable reuse (IPR)



Afikey Maim Plant (Israel)

Capacity: 1.8 MGD

Technology: BWRO membranes

Water source: Contaminated surface water, from the Jordan River

Contract type: DBO

Usage: Agriculture, Industry, fish farming ponds



About IDE

IDE Technologies is a global leader in water treatment, specializing in advanced desalination and water reuse solutions for industrial and municipal clients. With over 60 years of experience, IDE delivers sustainable and efficient projects, including the world's largest seawater desalination plants. The company has received numerous prestigious awards for its innovation and industry leadership.

IDE Water Assets is a project development company, delivering end-to-end solutions for water treatment projects worldwide.

Our work includes PPP and Water-Sale models, covering design, financing, ownership, and operation.

We collaborate with global partners to develop innovative, future-ready water facilities and welcome new opportunities and challenges.

We Are Your Water Partner

IDE TECHNOLOGIES

 Assets@ide-tech.com

Let's talk about your next water project!

