

Genesis Water Technologies

GWT® Reverse Osmosis (RO) Seawater Desalination

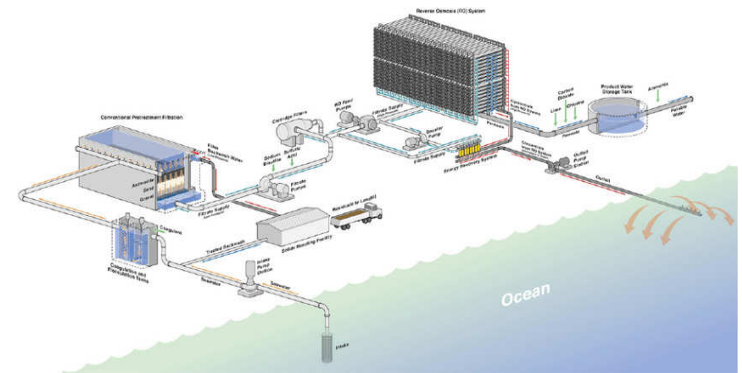


What is the Seawater RO Desalination Process?

Sea Water Desalination is a process of molecular separation via membrane technology to reduce the dissolved salt and mineral content of sea water to a suitable level for human and animal consumption, industrial and irrigation uses.

The Seawater Reverse Osmosis Process involves three water streams.

- * Sea water intake source
- * Product / Permeate water of low salt content
- * Concentrate water of high salt content



How does the Seawater RO desalination process work?

There are five basic stages to the sea water desalination process

- * Open Intake ocean Water / Coast or Beach Well Feed Water
- * Pre-Treatment – Filtration/ Anti-scalant Dosage
(Intake Basin Disinfection, Clarification, Filtration, Polishing Cartridge Filtration)
- * Reverse Osmosis Process
- * Post Treatment – Remineralization / Genclean Disinfection
- * Treated Water Storage/ Distribution
- * Reverse Osmosis Brine Discharge To Sea

GWT® Sea Water Desalination Process Advantages

Advantages / Benefits

- * GWT as technical partner, has extensive experience in providing process engineering services for sea water reverse osmosis desalination plants that are designed, engineered and custom built based on a specific water analysis provided by the client to meet their specific water needs.
- * GWT sea water desalination modular systems for water utilities as well as commercial/industrial applications utilize advanced energy recovery devices, nano-composite membranes, our unique DLP series nano fiber cartridge filtration and Genclean pretreatment, optimize permeate water quality, and provide higher water production while reducing operational costs and footprint.
- * Lower capital outlay, operating and maintenance costs
- * GWT sea water desalination RO systems are designed to perform effectively in multiple applications and with varying salt water feed TDS levels from 10,000 ppm up to 42-45,000ppm for deep well and open intake sources.
- * Solid System Warranty and Technical Support
- * Remote Monitoring/System Consumables Agreements Available



GWT[®] Sea Water RO Systems High Permeate Water Quality

- * Essential for High TDS Sea Water Conditions.
- * Typical TDS Level After Treatment < 500ppm TDS meeting WHO/EPA standards.
- * Treatment process is very effective in the removal of colloidal particles, viruses, dissolved organic ions and inorganic particles.



GWT® Seawater RO Desalination Treatment Applications

- * Drinking Water Utilities
- * Industrial Process Water
- * Decentralized Potable Water for Hotels/Resorts

GWT® Seawater RO Desalination Water Treatment Client Water Challenges

We take on immense challenges that matter to our clients

- * Water Treatment Quality Improvement
 - * Water Resource Scarcity
 - * Regulatory Changes
- * Sustainable Environmental Remediation



GWT® Sea Water RO Desalination Systems Summary

GWT process optimization engineering services & sea water desalination systems technology provide a sustainable, cost effective solution to meet your specific drinking or process water needs.

These sea water desalination systems utilize advanced energy recovery devices, nano-composite membranes, our unique DLP series nano fiber cartridge filtration and Genclean pretreatment to optimize permeate water quality, and provide higher water production while reducing operational costs and system footprint.

Lower capital outlay, and overall operating & maintenance cost.

GWT sea water desalination plants are engineered and optimized to perform effectively in multiple applications and with varying sea water feed TDS levels up to 42-45,000ppm from deep well or open intake sources.



Thank You

Genesis Water Technologies, Inc.
Innovation in Water®

For more information please contact:
customersupport@genesiswatertech.com
Tel +1 321 280 2742
www.genesiswatertech.com

