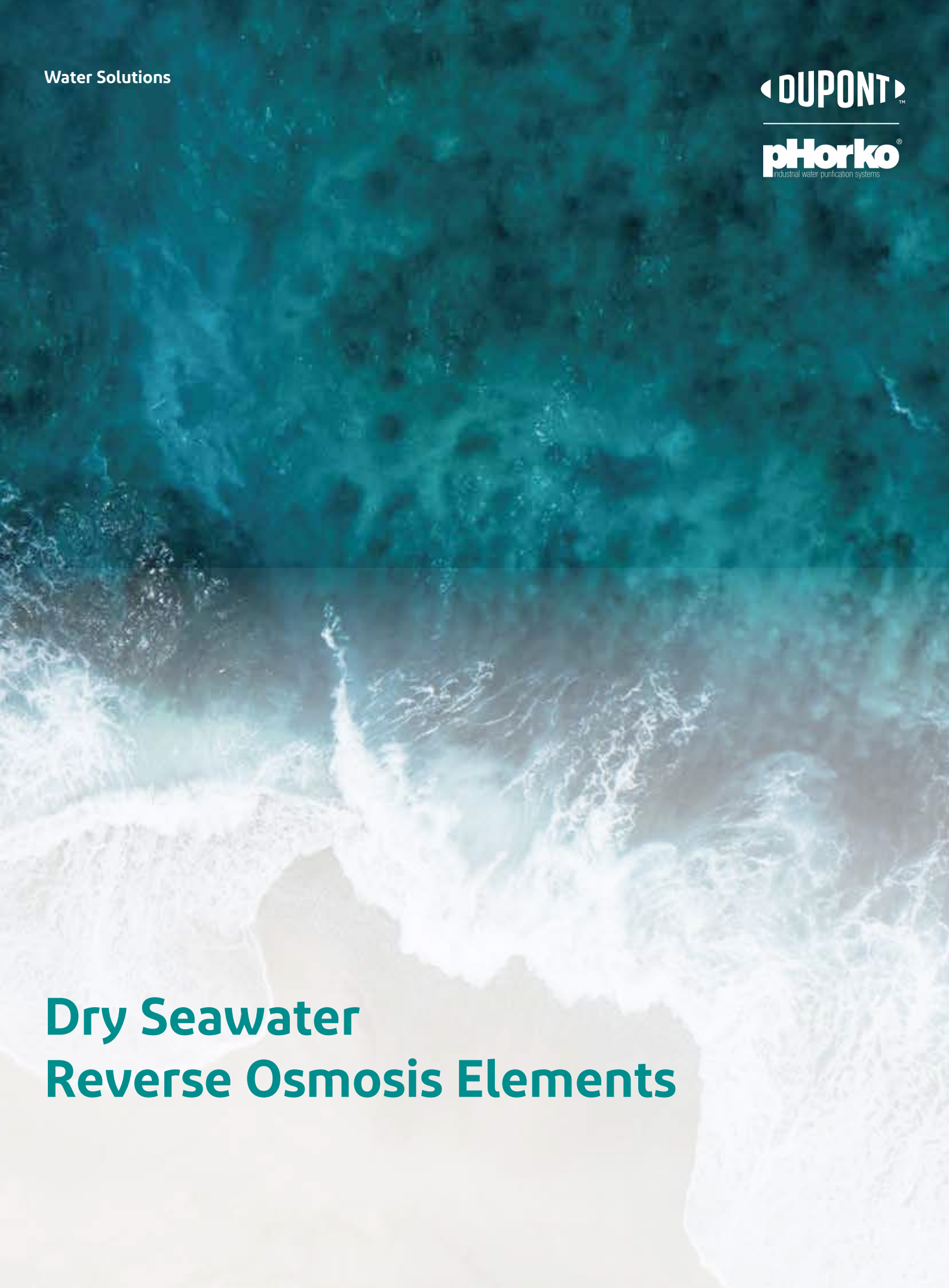
Water Solutions

DUPONT™

pHorko®
industrial water purification systems



# Dry Seawater Reverse Osmosis Elements

# Step-change innovation

DuPont Water Solutions has a long history of proven science and innovation. Reverse osmosis (RO) technology has come a long way over the last 40 years – desalination today costs only half of what it did 10 to 15 years ago. Water Solutions has focused its research and expertise in membrane development and design to meet the growing market need for seawater and brackish membranes that offer high permeability, high salt rejection and antifouling. Now, our ever-evolving R&D pipeline has led to the development of the industry's first dry-test seawater reverse osmosis (SWRO) membrane.

## Transition to dry SWRO portfolio

The new dry SWRO product portfolio is a breakthrough for the water treatment industry. Continuous advances in membrane chemistry, testing methods and procedures, together with automated precision single source manufacturing, enables DuPont to be the only supplier to offer dry SWRO elements.[1]

### Next-generation technology

Dry SWRO solutions will continue to meet or exceed technology performance standards. With the new dry portfolio, we've taken innovation a step further to replace wet testing with an alternative test that does not require water.

**By using the new product portfolio, customers will experience a wide-range of benefits, including:**

- Longer storage time
- Improved sustainability footprint
- Easier inventory and warehouse management
- No need to check conditions of preservation solution
- Reliable high quality and extended product warranties
- Safer installation due to 4kg reduction in weight and ease of handling

[1]DuPont is the only supplier of dry SWRO element, not wet tested elements.

# Why dry?

Dry SWRO elements offer customers significant advantages versus wet elements. Wet elements contain a preservation solution that needs to be checked after one year of storage, which may require eventual replacement. Not only does this add to the overall cost of the membrane, but it involves a high level of manpower, as well as reduces the possibilities of long-term storage and warehouse planning.

## Innovation beyond product specifications

We are leveraging decades of experience with dry brackish water reverse osmosis (BWRO) elements to guide our journey towards commercializing and standardizing the dry SWRO portfolio. Our process standards and automated manufacturing allow for us to not rely on wet testing to guarantee exceptional performance for our products.

Boasting the longest and largest experience in desalination technologies, our SWRO membranes achieve the highest level of performance, durability and reliability. By replacing the wet testing, we are not reducing the cost of manufacturing or altering the performance of our products – but enhancing technology to achieve long-term operational benefits.



**Greenhouse gas emissions from**
**~7 million**
Miles driven by an average passenger vehicle



**$CO_2$ emissions from**
**~3 million**
Pounds of coal burned



**Greenhouse gas emissions avoided by**
**~1,000**
Tons of waste recycled instead of landfilled



**Carbon sequestered by**
**~50,000**
Tree seedlings grown for 10 years

### Available DRY SWRO products

- FilmTec™ SW30HRLE-400
- FilmTec™ SW30HRLE-440(i)
- FilmTec™ SW30XLE-400
- FilmTec™ SW30XLE-440(i)
- FilmTec™ SW30HR-380
- FilmTec™ SW30HRLE-370/34(i)
- FilmTec™ SW30XFR-400/34(i)

## Global expertise and unmatched experience

With 70 years of separation-technology leadership, our global DuPont Water Solutions team is led by experts with unrivaled applications know-how, dedicated to global sustainability and backed by the most innovative R&D and technical service in the industry. We harness our collective global resources to ensure that your organization succeeds in all of its water and process operations.

- We do not rely on third parties to produce our elements – ensuring consistent product quality through standardized production processes and unsurpassed manufacturing excellence.
- Dry SWRO elements are certified for NSF and KIWA.
- The warranties offered for dry SWRO elements are high quality and extended.



## Contact us

DuPont's global network of accessible knowledge and market-leading portfolio of purification and separation technologies, enables the water productivity from which health, profits and possibilities spring. From manufacturers to municipalities, we help our customers to confidently explore new opportunities and shape the future.

**Contact us today at 833-338-7668 (833-3-DUPONT) and learn more about our dry SWRO portfolio.**

DUPONT™

pHorko®
Full scale water purification systems

**Water Solutions 833-338-7668 (833-3-DUPONT)**

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