

# Modular Prefabricated SWR0 Desalination Solution



## Complex Desalination Solutions Just Got Simpler Than Ever Before

We at IDE are tuned to our customers' ever changing requirements and constrains. For this reason, we developed the IDE Modular Prefabricated Design (MPD) philosophy - a platform that provides a simple and flexible designs to a range of desalination plants.

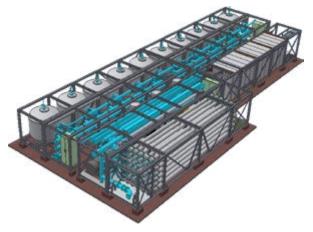
With our MPD prefabricated modules, all manufacturing and testing work is completed in off-site workshops and in QA/QC controlled environments, minimizing on-site work and ensuring the highest standards. As the design is modular, your plant can easily be expanded in the future to meet your changing needs, by using the module's existing capacity or adding additional modules.

Our MPD concept provides a perfect solution for a variety of needs, where RO is the technology of choice. The MPD is available in a range of sizes - from 1,600 m³/day complete RO systems, equipped with integrated pretreatment, and up to prefabricated modules for mega size RO plants. The MPD maximizes off-site prefabrication for fast installation and minimal on-site labor.

#### MPD SWR0 Systems | 1,600 - 5,000 m<sup>3</sup>/day

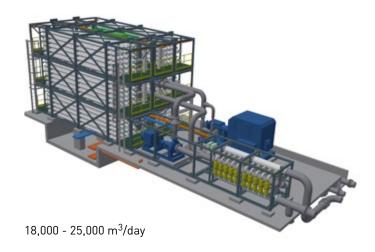


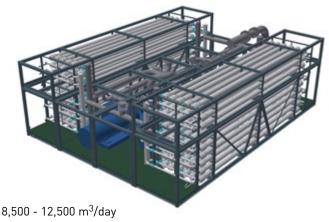




 $3,500 - 5,000 \text{ m}^3/\text{day}$ 

#### MPD design is suitable for large scale desalination SWRO plants







## **Main References**

Jurong Island Desalination Plant, Singapore

Capacity: 135,000 m<sup>3</sup>/day (35 MGD) | To be commissioned: 2020

• Formosa Group, Taiwan

Capacity: 105,000 m<sup>3</sup>/day (27.7 MGD) | To be commissioned: 2020

• Quebrada Blanca, Chile

Capacity: 102,360 m<sup>3</sup>/day (27 MGD) | To be commissioned: 2020

• Oteko, Russia

Capacity: 2 x 5,500 m<sup>3</sup>/day (2.9 MGD) | Completed: 2018

• Santa Barbara, USA

Capacity: 10,500 m<sup>3</sup>/day (2.8 MGD) | Commissioned: 2017

• WEB Bonaire, Bonaire Island

Capacity: 5,600 m<sup>3</sup>/day (1.23 MGD) | To be commissioned: 2020

• Koh Tao Water, Thailand

Capacity: 1,000 m<sup>3</sup>/day (0.3 MGD) | Commissioned: 2015

• Mulpha Hotels, Hayman Island, Australia

Capacity: 1,000 m<sup>3</sup>/day (0.3 MGD) | Commissioned: 2014

## Lower Risk - Higher ROI

#### Lower Risk



- Full prefabrication & testing in the workshop
- Reduced site works
- Fast delivery & shorter execution schedule

#### **Higher ROI**



- Pre-set for future expansion
- Minimal expenses related to infrastructure and civil works







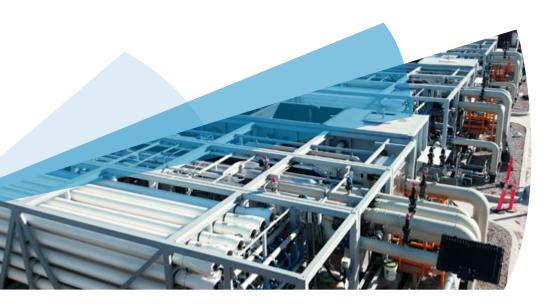


## From Ocean to Tap

#### City of Santa Barbara Refurbishes a 20-year-old SWRO Plant to Meet 21st Century Needs

Exceptional drought conditions demand exceptional thinking, and in July 2015 the City of Santa Barbara decided to refurbish its old plant, which had been in long-term standby mode since 1991. Significant engineering was required to bring the plant online and provide a substantial contribution to the city's challenging water needs, independent of the constant threat of drought.

The 10,560 m<sup>3</sup>/day (2.8 MGD) plant was commissioned in late 2017, with the option to expand to a capacity of 25,344 m<sup>3</sup>/day (6.7 MGD). The plant currently provides 30% of the city's water supply.



## IDE - Over 50 Years of Experience

### Sustainability. Resilience. Community.

A world leader in desalination and water treatment solutions, IDE is at the forefront of the development, engineering, construction and operation of enhanced desalination, industrial water treatment and water reuse facilities. IDE's headquarters are in Israel, with offices in the USA, China, India, and Chile, facilitating client partnerships across the globe.

- Proven and robust water treatment technologies that provide our clients with end-to-end solutions
- Developed some of the most advanced membrane-based and thermal solutions
- Designed, built and operates some of the world's largest desalination plants
- Successful implementations in more than 400 plants in over 40 countries



MIT Technology Review 2015 - 16

50 Smartest Companies



2016 Fortune Change the World List

2nd place

