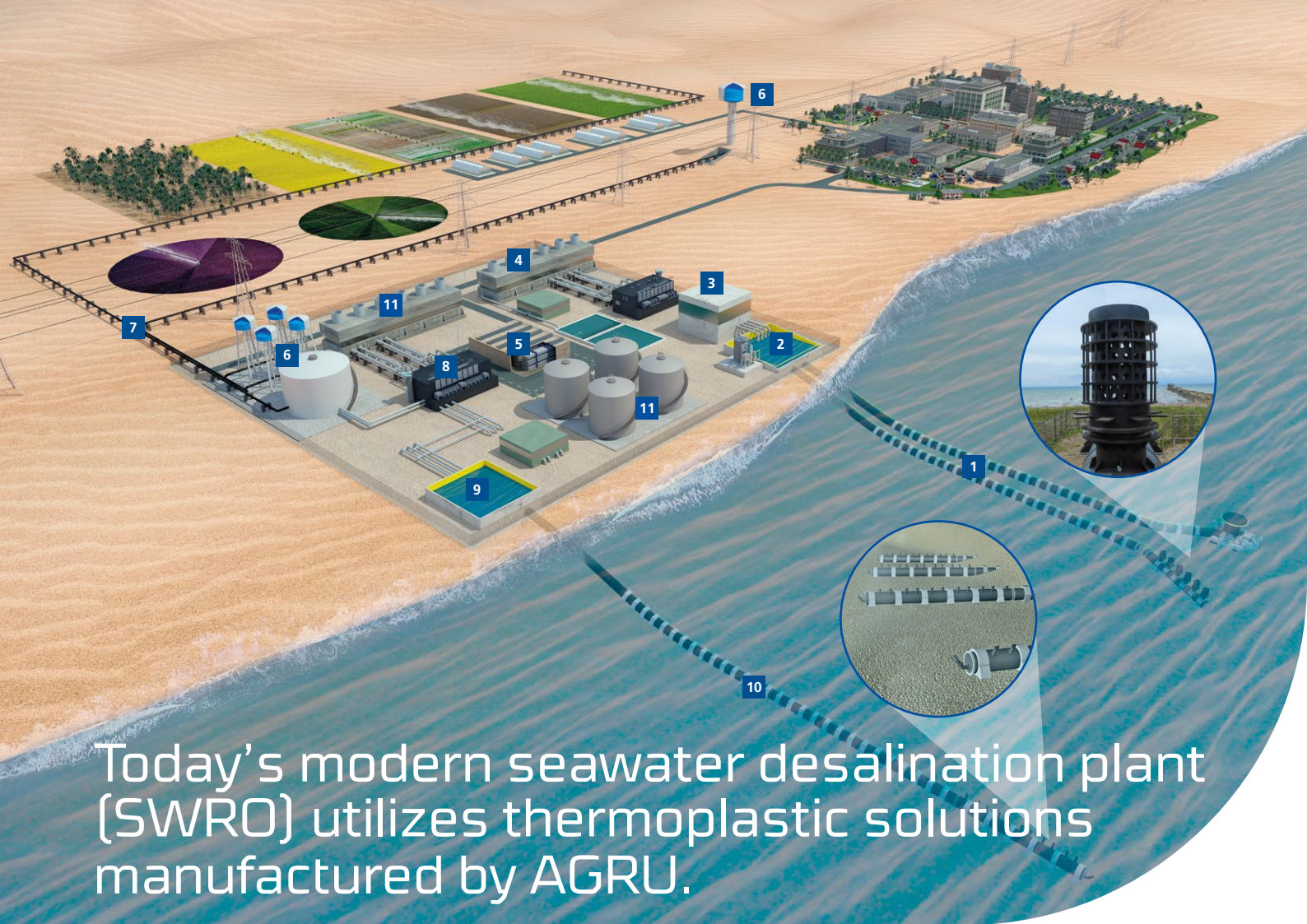


# DESALINATION

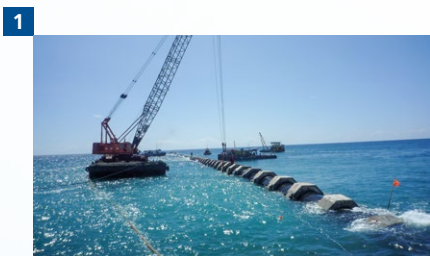
NON METALLIC – THERMO-  
PLASTIC SOLUTIONS FOR  
SEAWATER DESALINATION  
PLANTS





# Today's modern seawater desalination plant (SWRO) utilizes thermoplastic solutions manufactured by AGRU.

Drinking water is a scarce resource, as only one percent of the world's water supply is suitable for drinking. Due to the growing world population and climate changes, the desalination of seawater for drinking water production is becoming increasingly important. AGRU supplies the thermoplastic technology for seawater desalination which uses the reverse osmosis technique. Our range of solutions encompasses Piping Systems, Concrete Protective Liners and Semi-Finished products made from different materials.



## SEAWATER INTAKE

Corrosion resistant intake screens and chlorination piping systems. PE 100 (-RC) pipes and intake heads from AGRU are available in dimensions up to OD 3500 mm with various pressure ratings for seawater intake lines.



## PARTICLE SETTLEMENT TANKS

For protection of concrete basins the AGRU UltraGrip liner (NSF61 approved) provides the perfect solution. This sheet is produced in one production step with integrated anchor studs which provide a safe and secure bonding between the concrete and the UltraGrip sheet. Fast and cost effective in installation and operation.



## FILTER FEED PUMPS

In the pump station area PE 100-RC and PP pipes and fittings are utilized up to a diameter of 500mm. Fully pressure rated fittings up to 16 bar enable safe operation. For larger dimensions segmented or machined fittings are available. Excellent flow characteristic and high abrasion resistance are beneficial for this application area in an SWRO plant.

4



### PRETREATMENT FILTERS

Polypropylene piping systems welded by butt or IR fusion provide fast and efficient installation. Excellent abrasion resistance and pressure rating up to 10 bar to provide high durability.

5



### RO-MODULES

For the installation of permeate piping as well as feed pipes for the RO-membranes, PP piping (NSF61 approved) with a specially adjusted fitting range is available. Standard and customized solutions for header pipes available.

6



### PRODUCT WATER HOLDING TANKS

For the secure storage of the produced potable water PE 80 blue HYDRO<sup>CLICK</sup> sheets (NSF61 approved) provide the best solution. These sheets have all necessary approvals for the contact with potable water.

7



### POTABLE WATER SUPPLY

PE 100 and PE 100-RC pipes with long life time and high resistance to puncture loads for the supply of the potable water to the enduser.

8



### PROCESS CHEMICAL TANKFARM

In the buffer station the large supply range of AGRU pipes, fittings and valves up to 500 mm SDR 11 in PE 100-RC or PP can be applied. PH control injection piping systems in PVDF and ECTFE provide excellent durability for aggressive media such as H<sub>2</sub>SO<sub>4</sub> and Sodium Hypochlorite.

9



### BRINE DISCHARGE TANKS

AGRU HDPE UltraGrip liners in thicknesses from 2.5 mm up to 5.0 mm are used to protect the concrete structure.

10



### DISCHARGE PIPE

PE 100 (-RC) for discharge pipes provides excellent corrosion resistance, high flow characteristics, durability, flexibility and diffuser structures.

11



### STORAGE TANKS

Storage tanks can be lined with fabric-backed sheets in 3, 4, 5, or 6 mm which are bonded to steel tanks. PE and PP materials with polyester - or polypropylene fabric are used to improve the tanks' life expectancy and reduce maintenance intervals.



### AGRU OFFERS RELIABLE WELDING SOLUTIONS

For welding of various plastic piping systems AGRU provides infrared welding, butt welding, beadless welding and electro fusion socket welding machines.



The Plastics Experts.

Your distributor

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