



**Contact: Lisa Galloway**  
Marketing Communications  
Hydranautics  
401 Jones Road  
Oceanside, CA 92058  
Phone: 760-901-2500  
Fax: 760-901-2578  
E-Mail: lgalloway@hydranautics.com

**FOR IMMEDIATE RELEASE:**

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**Nitto Denko - Hydranautics Reverse Osmosis Elements Supply Largest Recycled Water Plant in Southern Hemisphere.** *Over 3,200 ESPA2 Elements Chosen For Australia's Western Corridor Recycled Water Project's Gibson Island Plant.*

Oceanside, CA... Southeast Queensland, Australia is coping with both exponential population growth and the worst drought in that region's history. Necessity dictated that the local water authority explore new and long-term solutions to provide residents and businesses with clean water for drinking, energy and industrial use: the \$2 billion USD Western Corridor Recycled Water Project (WCRWP) was born – a massive integrated effort employing 6 wastewater treatment plants, two power stations, numerous storage tanks, a dam, miles of piping and – the WCRWP's backbone -- three advanced water treatment (AWTP) plants. The Gibson Island AWTP (100,000 m<sup>3</sup>/d, 26.4 mgd) is the largest of the three, and is experiencing operational success since the plant's commissioning in 2008.

Gibson Island AWTP uses a three step process, starting with microfiltration (MF) on the secondary effluent that will be piped in from the nearby Gibson Island Wastewater Treatment Plant. Microfiltration removes small suspended particles, bacteria and other materials from the water. The second step in the process is reverse osmosis (RO) filtration using spiral wound membranes. Reverse osmosis forces water through the molecular structure of a precisely polymerized thin film composite membrane. The water molecules are small enough to pass through the membrane surface while larger minerals and contaminants such as salts, viruses, pesticides, and other materials are rejected; Gibson Island AWTP uses Nitto Denko-Hydranautics' well-proven ESPA2 RO membranes for this crucial step. The final stage of the water-purification process is ultraviolet (UV) light with hydrogen peroxide treatment, which provides disinfection and reduction of small specialty chemicals like NDMA.

Nitto Denko-Hydranautics' ESPA (Energy Saving Polyamide) reverse osmosis membranes are known for both high productivity and low salt passage. The 400 ft<sup>2</sup> ESPA2 membranes operate at significantly lower pressures than most spiral wound elements (<150 psi as compared to 225 psi test conditions for typical brackish water membranes) offering considerable energy and cost savings, while also meeting very stringent product water requirements for industrial, agricultural, and indirect potable use. This high quality water production coupled with low operating pressure makes it easy to understand why GE Water & Process Technologies (as the RO OEM), selected Nitto Denko-Hydranautics' ESPA2 membranes for this milestone project. This plant joins a number of other large-scale plants such as the Orange County Water District's 265,000 (70,000 mgd) Groundwater Replenishment System that use ESPA2 for reclaiming their wastewater.

The ESPA2 is part of the comprehensive line of Nitto Denko- Hydranautics membranes used worldwide with an installed capacity of more than 1 billion mgd (>3,785,000 m<sup>3</sup>/day). This experience, combined with the best membrane performance in the industry, demonstrates Hydranautics' position as the technology leader and as the preferred qualified supplier of spiral wound reverse osmosis elements around the world.

Based in Oceanside, California with sales offices around the world, Hydranautics was founded in 1963 and in 1987 became part of the multi-billion dollar Nitto Denko Corporation based in Osaka, Japan. Hydranautics manufactures reverse osmosis, nanofiltration, ultrafiltration and microfiltration membrane products of exceptional quality for water treatment and specialty applications.

For more information contact Hydranautics at 1-800-CPA-PURE/760-901-2500 or visit Hydranautics online at [www.membranes.com](http://www.membranes.com).

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