



Contact: Serenity Gardner
Global Manager, Marketing Communications
Hydranautics
401 Jones Road
Oceanside, CA 92058
Phone: 760-901-2500
Fax: 760-901-2578
E-Mail: sgardner@hydranautics.com

FOR IMMEDIATE RELEASE:

Hydranautics to provide membrane elements for the 35 MGD Gold Coast Desalination Plant, Tugun, Australia

Oceanside, CA... Hydranautics/Nitto Denko, the global leader in membrane technology, was selected to provide SWC5 and ESPA2+ elements for the 35 MGD (132,500 m³/d) Gold Coast seawater desalination plant. Australia is the world's driest inhabited continent and Queensland is that nation's second highest per capita water user. The region's current severe drought conditions and forecasting research suggesting a weather trend of even longer dry spells paint a dry picture of Queensland's future. The region's potable water crisis will be eased by the USD \$1.0 billion Gold Coast Desalination Plant, set to go online in November, 2008. After investigations by the Gold Coast Desalination Alliance (GCD Alliance), the Gold Coast City Council chose Tugun as the most suitable site for the desalination plant. The GCD Alliance consists of Veolia Water Australia, John Holland Group, Sinclair Knight Merz and Cardno. Tugun, 100km south of Brisbane, has a coastal proximity offering shorter intake and outlet pipelines.

Plant output standards require that the bromide in the permeate be less than 0.1 ppm. In addition, boron rejection and energy consumption were also very essential design consideration in the evaluation process. By using an Integrated Membrane Solutions[®] design with SWC5 elements in the first pass and ESPA2+ elements in the second, Hydranautics provided an advantageous design of superior rejection, low energy consumption and high boron rejection through the useful life.

The thin film composite polyamide SWC5 sea water membrane is designed to provide higher salt rejection at a higher rate of flow with increased boron rejection – 92%. The SWC5's high (400 ft²) active membrane surface area provides a high performance, cost saving solution for municipal applications providing 9,000 GPD (34.1 m³/d) at 99.8% nominal salt rejection at low operating pressures.

Lower pressure ESPA2+ (Energy Saving Polyamide) features exceptional salt rejection at lower pressures and higher rejection rates than industry competition. ESPA2+ is ideal for projects requiring a high active area membrane surface (440 ft²) area resulting in fewer elements, in turn generating lower capital costs to the end user. ESPA2+ offers a flow rate of 12,000 GPD (45.4 m³/d) while maintaining a nominal salt rejection of 99.6% and boron rejection of 93% at pH10.

Hydranautics' SWC5 and ESPA2+ are part of a comprehensive line of sea water and low energy membranes that are used worldwide with an installed capacity of more than 850 MGD (>3,215,000 m³/day) and operating successfully. 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 and technical support offices throughout the globe, 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 and ultrafiltration membrane products for water treatment applications around the world.

For more information on how Hydranautics can solve your most demanding water problems call today for more information at 1-800-CPA-PURE/760-901-2500 or visit Hydranautics online at www.membranes.com.