



Perth (Australia) SWRO Desalination Project

The Industry Standard Solution

The efficiency of a plant's energy recovery technology is critical to both winning big SWRO projects and achieving maximum plant profitability. Leading industry firms such as Degremont choose to use ERI PX-220 modular technology because it is the most efficient energy recovery device commercially available today. In addition, the ceramic components at the core of the PX device will never corrode. Degremont's decision to use PX technology is supported by the fact that the PX device has a proven, successful operating track record – running at over 95% efficiency in 10,000 m³/day lines globally. These projects include the longest running trains operating with isobaric energy recovery devices for over 30 months.

Energy Recovery, Inc. (ERI), has built a team that has developed energy efficient recovery products, specifically the ERI Pressure Exchanger™ (PX) device, that are among the enabling technologies driving the rapid growth in desalination, and are helping to make desalination affordable world-wide.

Contact ERI today at sales@energy-recovery.com to learn more about how PX technology can help you make money.

In April 2005, Western Australia's Water Corporation chose Degremont to design, build and operate Perth's first seawater desalination plant using reverse osmosis technology, the largest such plant in the southern hemisphere. The 143,000 m³/d plant is to be built at Kwinana, 25 kilometres south of Perth in Western Australia. The aim is to increase drinking water production capacity for Perth, where conventional freshwater resources are in very short supply.

ERI, a leading manufacturer of energy-efficient desalination recovery devices, was recently awarded a contract from Degremont Multiplex Joint Venture to provide advanced energy recovery equipment for the 143,000 m³/day (35 million U.S. gallons) Perth desalination project in Western Australia. Reducing energy and overall costs, the build-own-operate project will lessen the impact of Western Australia water scarcity issues, providing drinking water in just 18 months from the ground breaking, in time for the start of the Australian summer in October 2006.

Formed by Suez Degremont and Multiplex Engineering Pty Ltd., the Perth project is part of Degremont's major desalination leadership effort. The contract will be part of a public-private partnership, with Western Australia Water Corporation playing an active role in the project and day-to-day management issues alongside the Degremont and Multiplex teams. Degremont has a contract to build the plant and to operate the plant for its 25-year expected life.

Perth Project Facts

- **CAPACITY: 143 000 m³/day**
- **12 SWRO TRAINS + 6 BWRO TRAINS**
- **16 PX-220 PRESSURE EXCHANGERS PER SWRO TRAIN**
- **ENERGY RECOVERY DEVICE EFFICIENCY OVER 95%**
- **FIRST LARGE SWRO PLANT IN WESTERN AUSTRALIA**
- **PLANT STARTUP IN OCTOBER 2006**
- **OPERATION CONTRACT: 25 YEARS**