

Energy Recovery, Inc. Unveils Breakthrough Quadribaric(TM) Technology for Desalination

Next-generation Technology Sets New Industry Standard for Efficiency and Performance of Energy Recovery Devices in Desalination Plants

SAN LEANDRO, Calif. & DUBAI, United Arab Emirates--(BUSINESS WIRE)-- [Energy Recovery, Inc.](#) (NASDAQ: ERII), a leader in the design and development of energy recovery devices for desalination, today introduced its Quadribaric™ technology, advancing the company's mission to make seawater desalination an affordable solution to addressing the world's clean water shortages. Embedded into the latest PX Pressure Exchanger(TM) (PX-300) line of rotary energy recovery devices, ERI Quadribaric technology uses a patented new design that revolutionizes the way PX devices work--essentially doubling the work load of each device--with greater efficiency than any energy recovery device on the market.

"Energy Recovery is continually developing technologies to support the evolving needs of desalination plants and to help deliver environmentally friendly, low-cost water to the world. Quadribaric technology is our latest enhancement and establishes a new performance standard for the industry," said Dr. Richard Stover, ERI's chief technology officer. "With the PX-300 device, Energy Recovery is supporting the growing capacity demands of larger desalination plants, where lower operating pressures, higher efficiencies and longer product life are essential to success."

Energy Recovery introduces a number of distinct benefits to desalination facilities around the world with the new technology, including:

- Higher Efficiency: Quadribaric technology features straighter flow paths than previously possible, improving efficiency.
- Less Mixing: With its reduced cycle speed, Quadribaric technology achieves minimal mixing between the seawater concentrate and feed water, supporting lower operating pressures in desalination systems.
- Greater Reliability: The slower rotational rate of the Quadribaric technology design extends product life cycle.
- Quieter Operation: Quadribaric technology uses a smoother exchange process, reducing the sound level produced by its operation.

"As the first ERI device to leverage the company's new Quadribaric technology, the PX-300 unit combined excelled isobaric technology design and state-of-the-art of vessel and port configuration to yield increased production capacity and improved energy recovery efficiency at a competitive price," said Nikolay Voutchkov, president of Water Globe Consulting, LLC. "I would expect the PX-300 to become the new 'standard' for energy recovery equipment in medium and large-size desalination plants, and look forward to seeing the benefits these facilities gain with the new ERI design."

The Energy Recovery PX device is used in hundreds of desalination plants around the world. More than 7,000 PX devices are currently deployed or under contract to be installed at desalination plants across the globe. All combined, these devices deliver more than six billion liters of clean water each day--an average of one liter for every person on the planet. By using ERI PX devices to recycle wasted pressure energy, desalination plants are able to reduce the energy consumption of SWRO systems by up to 60 percent, making desalination a cost-effective solution for clean water supply. PX devices also reduce the carbon footprint of desalination, saving more than 750 MW of energy and reducing CO₂ emissions by more than 4.6 million tons per year worldwide. With the new Quadribaric technology, each unit shipped will mean even greater energy savings and environmental benefits, helping meet the growing demand for clean, affordable water supply demands.

About ERI

Energy Recovery, Inc. (NASDAQ:ERII) designs and develops energy recovery devices that help make desalination affordable by significantly reducing energy consumption. ERI's PX Pressure Exchanger(TM) (PX(TM)) device is a rotary positive displacement pump that recovers energy from the high pressure reject stream of seawater reverse osmosis systems at up to 98% efficiency. The company is headquartered in the San Francisco Bay Area with offices in key desalination centers worldwide, including Madrid, Shanghai, Florida and the United Arab Emirates. For more information on ERI and PX technology, please visit www.energyrecovery.com.

Source: Energy Recovery, Inc.