

ULTRA HIGH-PRESSURE ENERGY RECOVERY SOLUTIONS WITH THE PX U SERIES

Lowering the cost of sustainable wastewater treatment with zero and minimal liquid discharge

Energy Recovery's PX U Series is a range of energy recovery devices uniquely designed for ultra-high pressure reverse osmosis (UHPRO) systems to provide a sustainable path to water and wastewater treatment and reuse. The PX U series offers operational cost savings when implementing minimal and zero liquid discharge (MLD/ZLD), operating across fluctuating flow and pressure levels to handle variable wastewater composition. Built for industrial wastewater treatment, the PX U Series operates at pressures of up to 120 bar (1,740 psi) for water and wastewater applications such as brine mining, textiles, lithium, and more.

Environmental Compliance and Sustainability

Governments have mandated ZLD or MLD requirements for wastewater treatment to reduce wastewater discharge, recover resources, and reuse water from industrial applications to improve water sustainability. However, this compliance comes at a cost. The PX U Series, derived from the PX[®] Pressure Exchanger[®], drives operational efficiency by using cutting-edge energy recovery technology to reduce energy use, and associated carbon emissions, in UHPRO systems for wastewater or reuse applications targeting MLD or ZLD. When paired with our UHP Circulation Pump, it drives operational efficiency for UHPRO systems by maximizing energy cost savings and enabling ZLD or MLD to become more economically viable.

BENEFITS*

Efficient:

- Designed to recover up to 65% of otherwise wasted energy
- Industry-leading efficiency with up to 97% peak efficiency in all flow conditions

Reliable:

• 25-year design life with no scheduled maintenance

Operational Flexibility:

- Compact, modular, and scalable to wide variations in operating conditions
- Operating pressures up to 120 bar (1,740 psi)
- Low OPEX and fast payback



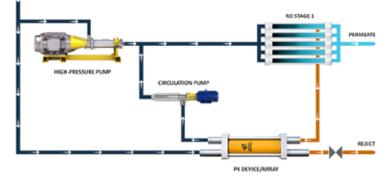


Reducing Energy Costs in Wastewater Treatment

In wastewater treatment plants incorporating ZLD/MLD, the last 10% of the water treatment process often drives 50% of overall treatment costs due to high-cost thermal treatment technologies. UHPRO reduces the cost of these expensive thermal processes, and Energy Recovery's PX U Series further reduces the waste energy in the UHPRO process by returning pressure energy to the system, ultimately reducing overall energy costs.

PX U20 PX U20 0.0 10.

PX U Series Integration*



*Example PX U Series integration design. Actual configurations may vary.

POWER MODEL PRO

Power Model Pro is a secure, easy-to-use cloud-based product configurator tool that allows you to optimize the hydraulic pumping system of a reverse osmosis system using our products.

To register, reach out to your sales representative or contact us at <u>www.energyrecovery.com/contact</u>.



Energy Recovery - Optimizing Energy, Maximizing Savings

Energy Recovery (Nasdaq: ERII) is a trusted global leader in energy efficiency technology for the water treatment industry. Building on our gold-standard pressure exchanger technology platform, we design and manufacture reliable, high-performance solutions that generate cost savings, increase energy efficiency, and reduce carbon emissions across desalination, wastewater treatment, and other water treatment applications. With a strong foundation in desalination, Energy Recovery has delivered transformative solutions that increase operational efficiency and provide a positive environmental impact to water producers worldwide for more than 30 years. Headquartered in the San Francisco Bay Area, Energy Recovery has manufacturing and R&D facilities in California, with sales and on-site technical support available globally.

For more information, please visit <u>www.energyrecovery.com</u> or contact us at <u>www.energyrecovery.com/contact</u>.

