

RO Solutions — Powered by FEDCO



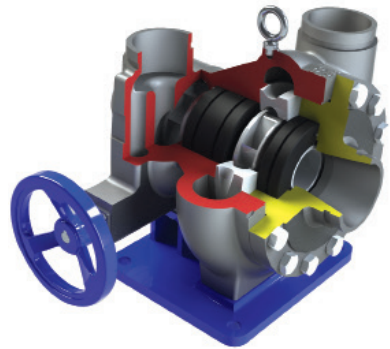
Making fluid energy work for **you**™



Turbocharger Energy Recovery Device

Benefits

- ✓ Fully Custom Engineered
- ✓ Self Regulating Energy Recovery
- ✓ Compact Footprint
- ✓ Resilient Design
- ✓ Reduces Total Cost of Water



Model	Flow Rate	Pressure Rating
HPB™	10–2800 m³/h	< 83 bar
HPB Boosted™	20–2800 m³/h	< 83 bar
HPB Ultra™	20–250 m³/h 250–350 m³/h	< 124 bar < 104 bar

Turbocharge your RO

- Efficient, Reliable Energy Recovery up to 124 bar
- Reduce Footprint, Energy, and Capex Requirements
- Reduce Pump and Motor Size Requirements

Unlock Optimal Designs

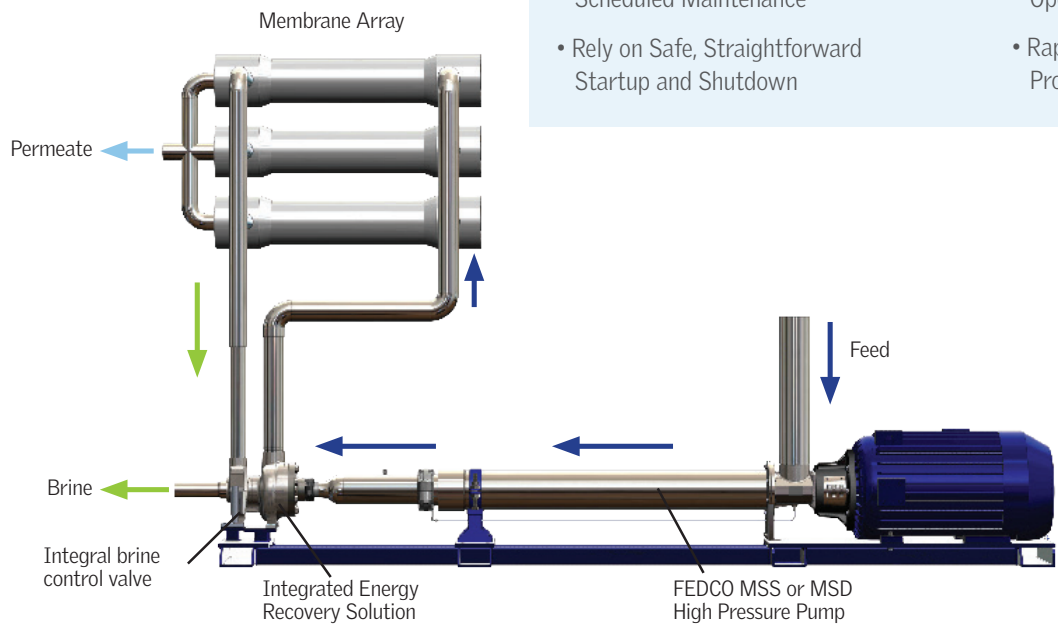
- Custom Engineered for Better RO System Performance
- Enables Simple RO Configurations with No Feed Splitting
- Increase Duty Points with Self Regulating Energy Recovery

Built for Resilience

- Zero Brine Mixing, Better Permeate Quality
- Reduced Downtime with Minimal Scheduled Maintenance
- Rely on Safe, Straightforward Startup and Shutdown

Get Up and Running—Fast

- Short Lead Times for the Most Demanding Project Schedule
- Simple Installation and Minimal Operator Training
- Rapid Commissioning to Start Water Production Quickly



Complete Pump and ERD Packages Available

Global Service and Support

- Spare Parts Delivered Fast
- Installation and Commissioning
- Operator Training
- Technical Assistance
- On-site or Off-site Service
- Loaner Rotor Program

Innovative Technology

- Fully Custom Engineered Products
- One Piece Rotor
- CFD-optimized Multi-vane Diffuser
- Rotor Flo™ Patented Lubrication
- No External Tubing or Auxiliary Equipment
- Super Duplex Construction

Superior Proven Efficiency

FEDCO's HPB leads the industry as the only turbocharger in the industry tested to exceed 80% transfer efficiency

Our turbochargers benefit from custom engineering, in-house test equipment, and continuous efficiency improvements



83+%

FEDCO Energy Recovery Devices can handle flows of 1600+ m³/h with 83%+ efficiency



Whether it is field operating log sheet data or precision test stand data, the HPB displays the highest average efficiency of any turbocharger ERD. Fully machined rotors and CFD-optimized hydraulic design make the difference.

HPB Turbocharger Energy Recovery Device

OPERATING ENVELOPE

Flow Rate: 5—3460 m³/hr (22—15,234 gpm)

Pressure: < 124 bar (1800 psi)

Liquid: Seawater, Brackish Water, Potable Water, Concentrate (20 microns)

Temperature: < 40 °C (104 °F)

MATERIALS

Casing: Duplex SS, Super Duplex SS

Rotor: Duplex SS, Super Duplex SS

Bearings: Non-metallic

Pipe Connections: Grooved End

3 Year Warranty

OPTIONAL FEATURES

Flanged Connections

High Pressure Option

Automated Brine Control

*Contact FEDCO for your custom option requirements

REVERSE OSMOSIS

Seawater and Brackish Water	Marine
Industrial/Municipal	Oil & Gas
Interstage Pressure Boosting	Produced Water
Hotels/Islands/Resorts	Water Reuse

SYSTEM UPGRADES

Contact FEDCO to upgrade your existing reverse osmosis desalination plant to state-of-the-art pumps and energy recovery devices.

FEDCO has a broad range of feed pumps, booster pumps, and energy recovery devices for seawater and brackish water reverse osmosis applications.



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