FEDCO IS THE INDUSTRY LEADER IN INNOVATIVE ENERGY RECOVERY DEVICES

DESALINATION: REVERSE OSMOSIS

FEDCO HPB SERIES
HYDRAULIC PRESSURE BOOSTER TURBOCHARGER ENERGY RECOVERY DEVICE
HPB Hydraulic Pressure Booster
Turbocharger Energy Recovery Device Series

The FEDCO HPB turbocharger recovers the brine energy stream from your reverse osmosis (RO) systems to provide feed stream pressure boosting. Each HPB is custom built to customer flow and pressure requirements. Pioneering software converts the customer requirements into CNC programs to machine hydraulically optimal feed and brine channels. Machined flow passages are ideal for the best system efficiency for your RO plant.

Benefits:
- Custom Engineered Solution
- Superior Proven Turbocharger Efficiencies
- Small Footprint
- Low Capital Cost
- Low Life Cycle Cost

Reduced System Energy Consumption

The FEDCO HPB energy recovery device does not require splitting of feed flows, multitude of valves, elbows, fittings or additional pumps, thus, with its operational ease, minimal pressure losses, and no brine leakages. The HPB provides the highest industry pressure boosting for RO units and efficient means of interstage pressure boosting to help conserve energy, reduce the size of the feed pump and motor.

Industry’s Best Value

The FEDCO HPB energy recovery units are the preferred choice for growing number of owner operators and end users of reverse osmosis systems for their ease of operation and the industry's lowest life cycle costs while delivering the highest system efficiencies. FEDCO HPB has engineered solutions for small to large reverse osmosis systems.

An OEM’s Preferred Choice

Systems builders and end-users both have come to depend on the FEDCO HPB units for their ease of integration, quick deliveries, simple installation, minimal operator training, ease and reliability of operation and minimal scheduled maintenance.

Compact Footprint

Only the FEDCO HPB has a small footprint for large capacities compared to other energy recovery devices.

FEDCO HPB Innovative Technology

- Fully custom engineered products
- One piece rotor
- CFD optimized multi-vane diffuser
- Rotor Flo™ patented lubrication
- No external tubing or auxiliary equipment
- Zero brine to feed mixing
- Corrosion resistant construction

FEDCO HPB Turbocharger with FEDCO MSS Series Feed Pump standard seawater RO package.
Quick Delivery

Most FEDCO HPB models are available in only three to six weeks!

FEDCO Service & Support

FEDCO is ready to provide comprehensive service and support for our customers worldwide. Our service centers in India, Indonesia, Japan, Singapore, United Arab Emirates, United Kingdom, and United States allow us to provide local support of spare parts and service for all FEDCO equipment. Our unique loaner rotor program for our HPB Series allows you to continue to operate with no downtime.

- Spare parts delivered fast
- Installation and commissioning
- Operator training
- Technical assistance
- On-site or off-site service
- Loaner rotor program

Superior Proven Efficiency

The FEDCO HPB leads the industry as the only turbocharger in the industry tested to exceed 80% transfer efficiency. Our engineering and manufacturing teams have the most experience and most advanced test equipment for continuous efficiency improvements.

Hydraulic Pressure Booster Turbocharger Energy Recovery Device (ERD)

Technical Info

Capacities:
5-3460 m³/h (22-15,234 gpm)
Pressures:
10- 83 bar (145-1200 psi)
Liquid:
Seawater, brackish water, potable water, concentrate (20 microns)
Temperature:
Up to 40 degrees C

Materials

Casing:
Duplex SS, Super Duplex SS
Rotor:
Duplex SS, Super Duplex SS
Bearings:
Non-metallic
Pipe Connections:
Grooved End

3 YEAR WARRANTY

Options

Flanged Connections
High Pressure Option
Automated Brine Control
*Contact FEDCO for your custom option requirements

Reverse Osmosis Applications

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

Retrofits

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.
Committed to Success

FEDCO is committed to being the industry leader in the design and manufacture of innovative fluid machinery. Our product lines are unmatched in quality and performance in the reverse osmosis market. We custom engineer highly efficient and reliable high pressure pumps and energy recovery devices that system builders and end-users can depend on. We support customer operations worldwide with easy to use products and long term relationships to help them with the lowest capital and life cycle cost of ownership. FEDCO provides the single source for your processing equipment needs by making fluid energy work for you.

An Energy Conscious Alliance

FEDCO and TORISHIMA have supplied thousands of pumps and energy recovery devices all over the world. Together we have over 100 years experience in engineered pump technology and a global network of manufacturing, sales and service locations. In June 2013, we became affiliated to supply energy efficient and energy recovery rotating machinery solutions for reverse osmosis desalination.

Service & Support

Let us bring world class service to you. FEDCO is ready to provide full service and support for our equipment anywhere in the world. Our experienced field service technicians can provide startup assistance for the commissioning of new equipment, training on FEDCO products, and troubleshooting for technical issues. Our alliance with Torishima Pump helps to provide support in virtually all our markets.

Standard Reverse Osmosis Pump & Energy Recovery Package from FEDCO

Pair the HPB turbocharger energy recovery device with the FEDCO series MSS, MSD or SSD centrifugal feed pump for the industry standard in seawater reverse osmosis (RO) desalination packages.

Global Network