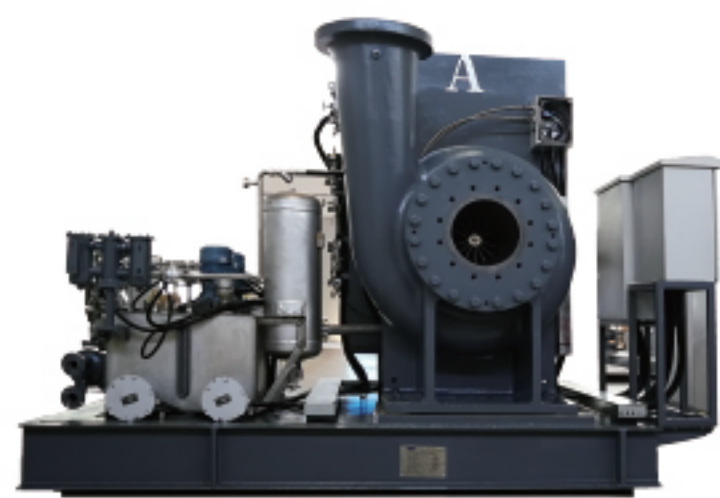


32 years of experience in world class Turbine Technology

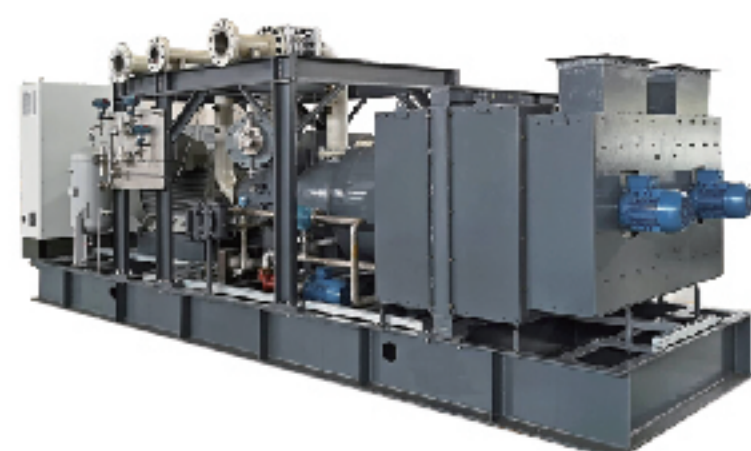
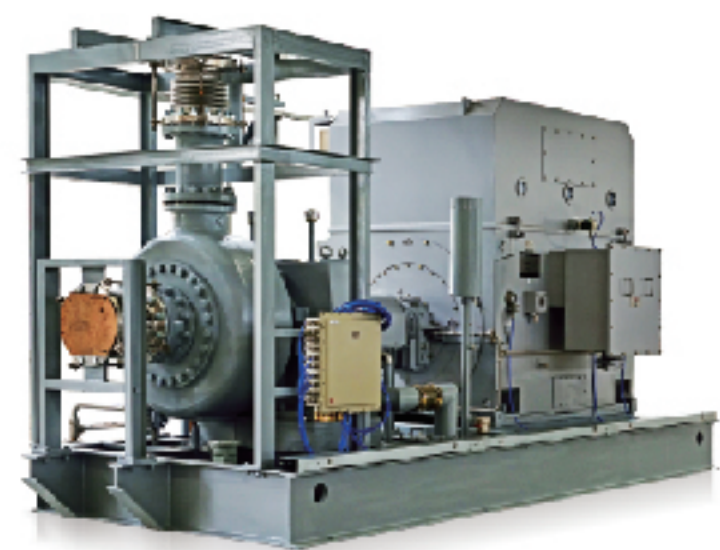
“At UniEco, we are about to provide our customers with the best Turbo Expander Solutions and enable our customers reaching their goals.”

Developed with world-class of Turbo Expander technology, UniEco products can find their applications in Cryogenic Process such as Air Separation, Natural Gas Liquidation, Hydrocarbon Recovery, Industrial Tail Gas Recovery, Ethylene Cold Box, as well as Power Generation through Gas Pressure Letdown, Organic Rankine Cycle (ORC), Compressed Air Energy Storage (CAES) and other Energy Recovery applications. UniEco Turbo Expander Manufacturing Facility has passed ISO9001 quality certification by SGS.



Turbo Expander & Booster - TEB Series

- Single unit and Dual unit (warm and cold)
- Provide Refrigeration for Air Separation, Natural Gas Liquidation, Hydrocarbon Recovery, Industrial Tail Gas Recovery, Ethylene Cold Box, and other Cryogenic Process.
- Gas including Air, Nitrogen, Hydrogen, Natural Gas and other Hydrocarbon Gases.
- Flow rate: 4,000~120,000 Nm³/h (up to 120,000 Nm³/h ASU)
- Pressure Range: 0.2~7.0 MPa, Pressure Ratio up to 21:1
- Temperature Range: -260~200 °C
- Expander Efficiency: up to 89%
- Refrigeration Power: 100~3,000 kW
- Shaft Speed: 10,000~80,000 rpm
- Impeller Size: 80~550 mm (one piece forged closed impellers)



Turbo Expander & Generator - TEG Series

- Single stage and Multi stages
- Recovering and Generating Electricity from Gas Pressure Letdown, Compressed Air Energy Storage (CAES), and other Energy Transferring Process.
- Gas including Air, Nitrogen, Hydrogen, Natural Gas and other Gases.
- Flow rate: 4,000~120,000 Nm³/h
- Pressure Range: 0.2~7.0 MPa, Pressure Ratio up to 70:1
- Temperature Range: -260~200 °C
- Expander Efficiency: up to 87%
- Power Generation: 50~8,000 kW
- Speed: 5,000~30,000 rpm
- Impeller Size: 80~550 mm (one piece forged closed impellers)



ORC system with Turbo Expander & Generator

- System Configuration with Turbo Expander + Generator + Evaporator + Condenser + Pumps + Piping & Valves + Controls
- Recovering and Generating Electricity from Waste Heat, LNG Cold Energy and other Energy Transferring Process through Organic Rankine Cycle.
- Waste Heat Sources including hot liquids (90 °C and above), low pressure steam and hot gases (250 °C and above).
- Water cooled or Air cooled.
- ORC fluid can be R245fa, R134a, propane, butane or Mixed Refrigerants typical for LNG process.
- Expander Efficiency: up to 87%
- Power Generation: 50~8,000 kW

UniEco (Changshu) Co., Ltd.

R&D CENTER
Davidson, NC 28036, USA

MANUFACTURING & ENGINEERING CENTER
No.3 Wanhe Industrial Park, Wanhe Road
Changshu, 215513, China

SALES OFFICE
Room 903 BH Center
No. 7755 Zhongchun Road, Shanghai, China