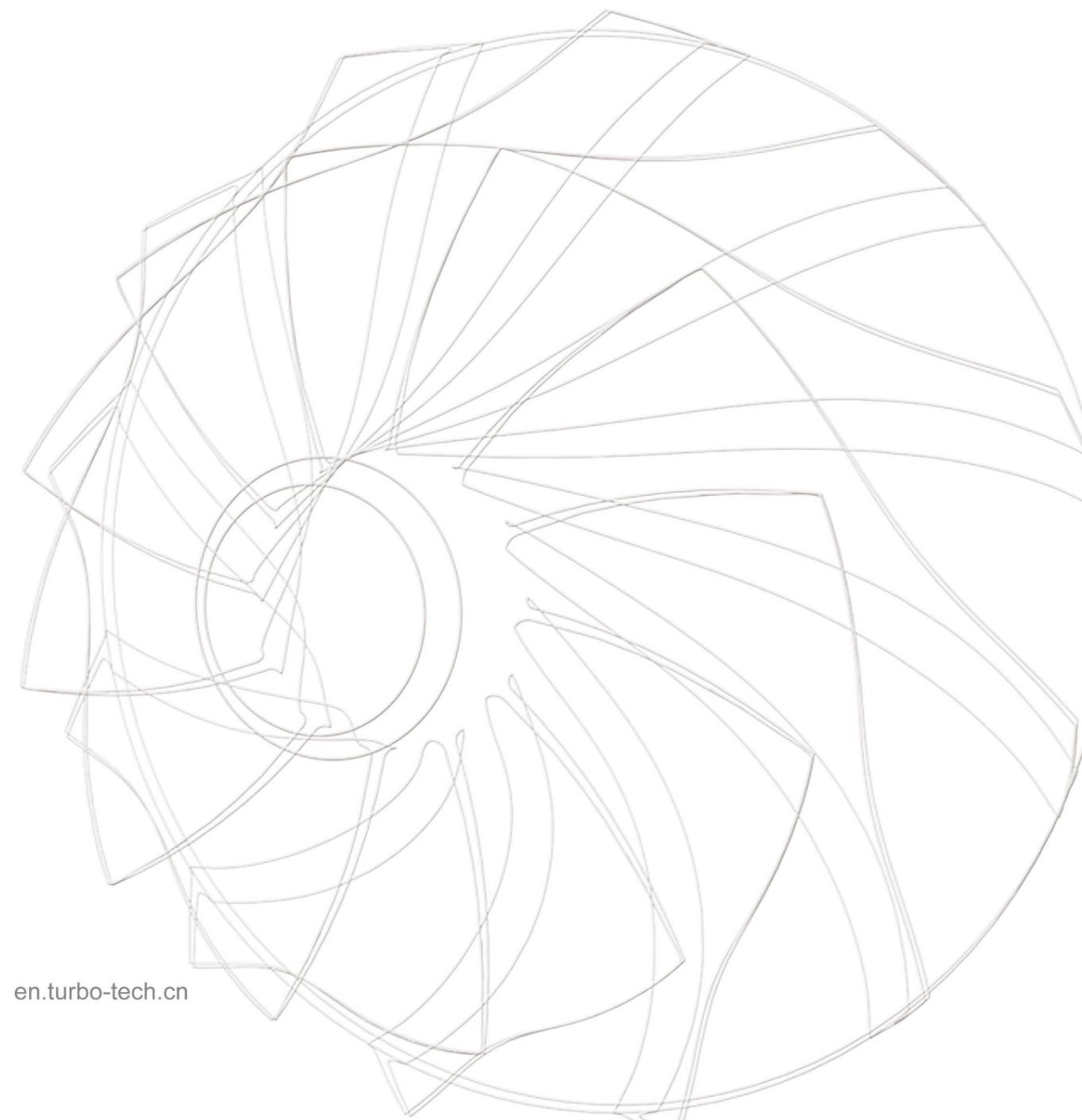


TURBO-TECH

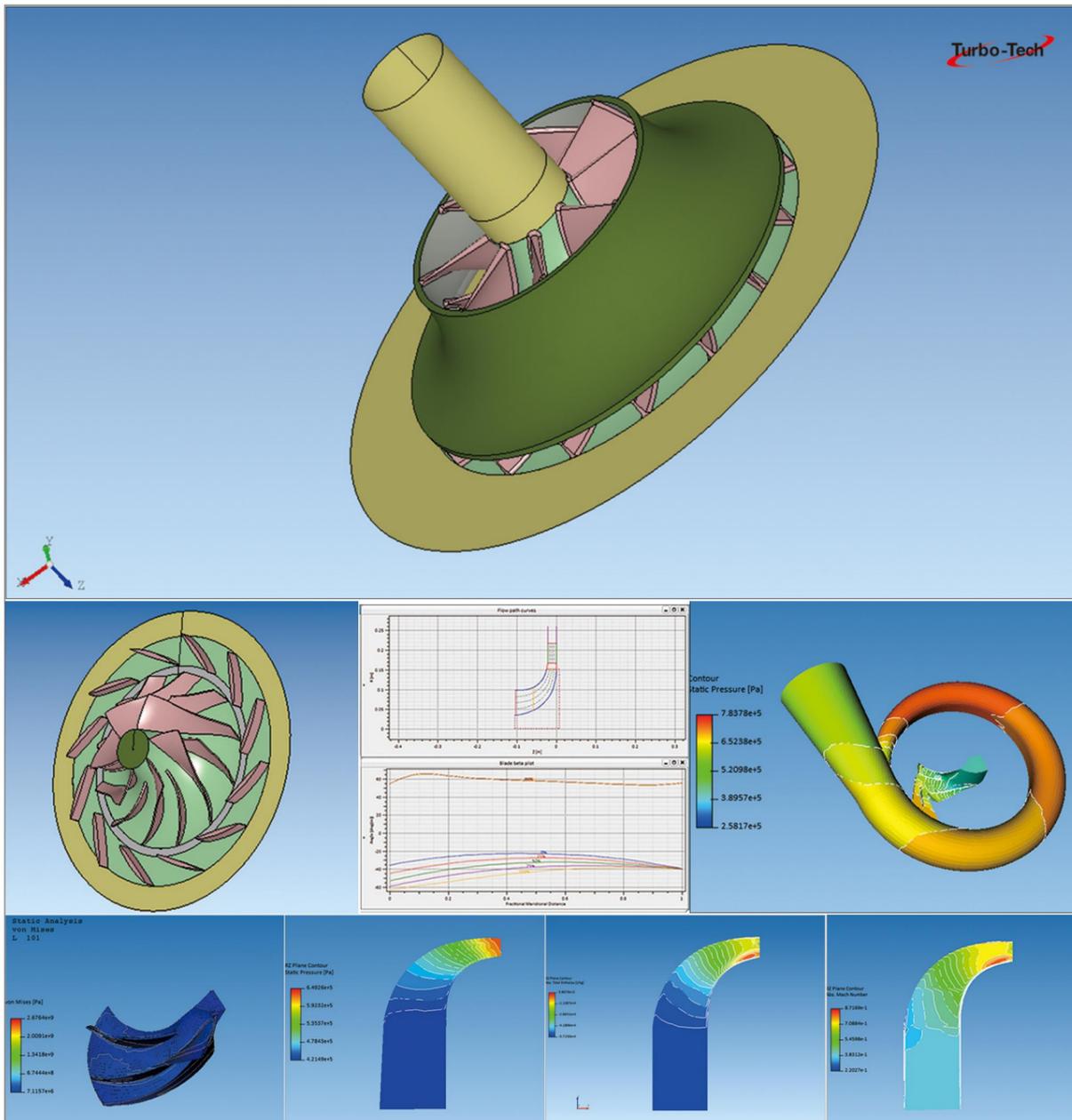
·Centrifugal Gas Compressor ·Centrifugal Air Compressor ·Centrifugal Blower



Website

Aerodynamic Design

Efficient Aerodynamic Design



Advantage of Aerodynamics

+ Maturity

A variety of mature and reliable aerodynamic models.

+ Multiformity

Multifarious aerodynamic models for Air, Nitrogen, Hydrogen, Argon, Water Vapor, low temperature flash steam (BOG), LNG Refrigerant, Natural Gas, Olefin Gases, Carbon Dioxide, Carbon Monoxide, Chlorine Gas, Vinyl Chloride, Hydrogen Chloride, Nitrogen Oxide and other gases and mixed gases.

+ Comprehensiveness

With a variety of open/closed impeller blade, from low pressure ratio to high pressure ratio, from small flow to large flow, so that every machine can adapt to a variety of complex conditions.

+ High Efficiency

The controllable vortex three-dimensional flow impeller has the advantages of wide flow range and high efficiency.



Multiple Driving Modes

1. Motor Drive

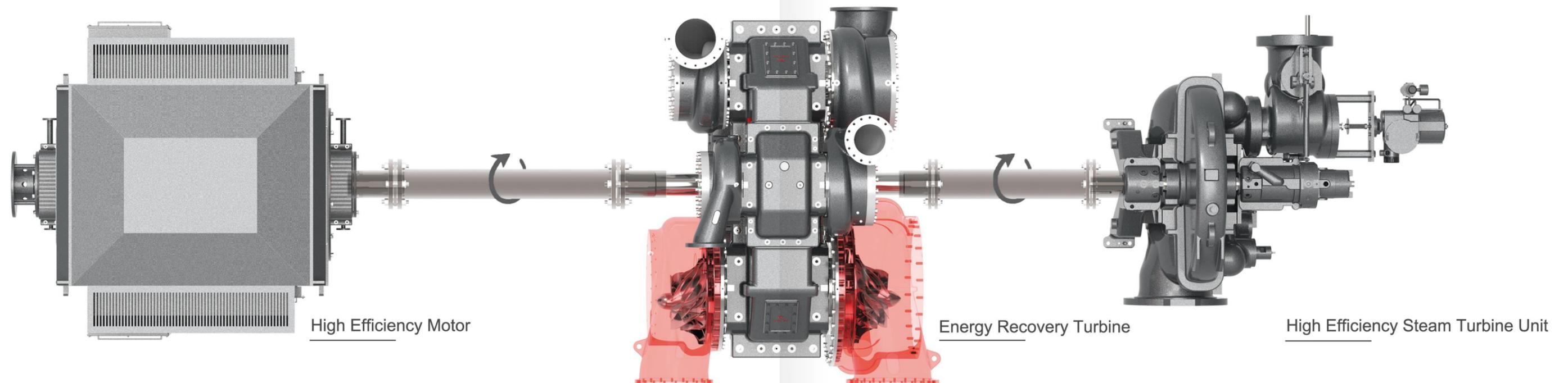
The motor drives the compressor independently, and the voltage can be customized according to the actual situation on site.

2. Steam Turbine Drive

The steam turbine drives the compressor independently. Some models can be directly driven by the steam turbine (the idle shaft of the compressor) to reduce the mechanical loss.

3. Motor and Steam Turbine Combined Drive

Motor and steam turbine combined drive, to meet the customer field drive mode flexible switch.



Multiple Compressor Combinations

1. Main Compressor with Circulating Booster

The main air compressor and circulating booster are driven by the same driving machine (steam turbine or motor), coaxial arrangement to saving land area and reducing mechanical loss. More energy saving and high efficiency.

2. Air Compressor with Process Gas Compressor

Different medium compressors can be combined

- ✓ Multi-medium compression combination in one airend.
- ✓ Combination of different compression ratio in one airend.

3. Energy Recovery Turbine

As an integral geared process gas turbine, it can use waste gas or process gas and other byproducts to provide power supply during the process. Medium and high temperature gas can be directly used to drive compressors or generators without other heat exchange equipment or steam generation equipment.

Gear Drive System

Gears

- Grade AGMA13 gears;
- Aviation standard, high precision manufacturing, to ensure the stable operation of multi-shafting transmission system;

Maximum five axes and ten stages, with a transmission power up to 60 MW!

Thrust Collars

- Reduce the meshing force of high speed gears, improve gear life, and reduce mechanical losses;

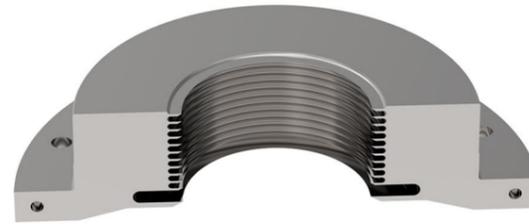
Bearing

- The five petal tilting pad bearing ensures the rotor can run smoothly under different loads and temperatures;
- Detachable bearing pads for easy maintenance and reduced maintenance costs;

Seal

Labyrinth Seal

During the operation of the compressor, the gas medium will be in the seal and the shaft between the throttle gap and the expansion chamber, the formation of step by step throttle effect, so as to achieve seal.



Application:

Air, Nitrogen, etc.

Carbon Ring Seal



Carbon ring seals are usually made of graphite material and have self-allocating properties, which rely on the fluid resistance effect in the seal gap to achieve the seal effect.

Application:

Air, Nitrogen, Argon, Carbon Dioxide, etc.

Dry Gas Seal

Dry gas seal is suitable for inflammable and explosive, poisonous and harmful process gas compressors. The conventional choice is single end face dry gas seal, double end face dry gas seal and series dry gas seal, in order to adapt to the requirements of different process gas.

Application:

Rich Gas, Blast Furnace Gas, Carbon Monoxide, Carbon Dioxide, Analytical Gas, Cracking Gas, Syngas, Recycled Hydrogen, Recycled Gas, Natural Gas, Ethylene Gas, Propylene Gas, Raw Gas, Helium, LNG and other process gases;



Tandem Dry Gas Seal

Double-end Face Dry Gas Seal

Single-end Face Dry Gas Seal

Parameter

Process Gas Compressor

Turbo-Tech centrifugal process gas compressor Ra series, a wide range of compression medium, including: LNG refrigerant, natural gas, olefin gases, carbon dioxide, carbon monoxide, chlorine gas, nitrogen oxides, etc.

Ra Series

- Flow: 1200~600000 Nm³/h
- Discharge Pressure: 0.25~40.0 MPa(G)
- Compression Medium: Various process gases

Ni Series

- Flow: 5~375 T/h
- Compression Ratios: 12.0
- Max. Temperature Rise 110°C
- Compression Medium: Steam



Process Gas Compressor

Turbo-Tech centrifugal process gas compressors are designed and manufactured to API standards, with products at the global first-line level, replacing imports and providing long service life. Currently, they are widely used in industries such as petrochemicals, coal chemicals, natural gas and carbon dioxide capture.

Po Series

- Flow: 1200~60000 Nm³/h
- Discharge Pressure: 0.25~3.5 MPa(G)
- Compression Medium: Boil-off Gas

Re Series

- Flow: 1200~24000 Nm³/h
- Discharge Pressure: 0.06~3.0 MPa(G)
- Compression Medium: Argon



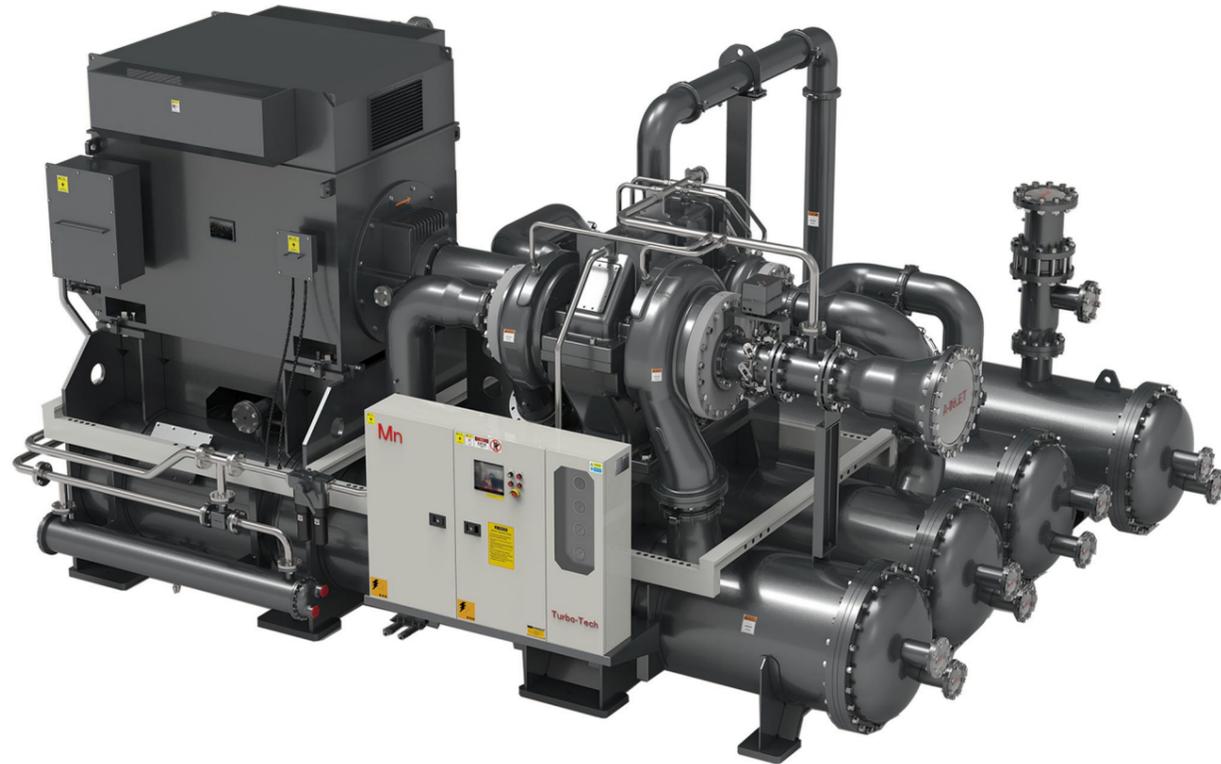
Parameter

Large Compressor and Booster Compressor

Turbo-Tech compressor maximum discharge pressure can reach 16MPa (G) and the maximum power can reach 60MW, widely used in industries such as air separation, petrochemical, air energy storage, and wind tunnel experiments.

Mn(H) Series

- Flow: 1200~600000 Nm³/h
- Discharge Pressure: 0.12~16.0 MPa(G)
- Compression medium: Air, Nitrogen, etc

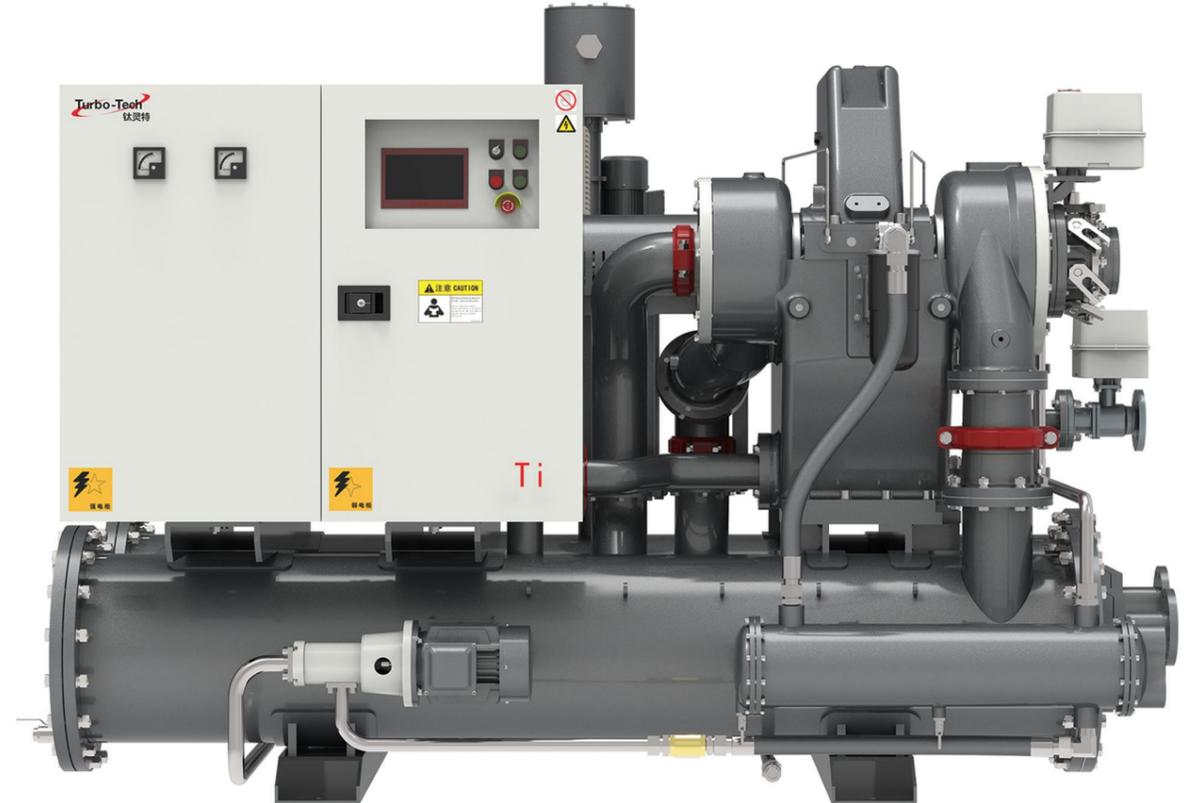


Centrifugal Compressor (Air/Nitrogen)

Turbo-Tech compressor having advantages such as high efficiency, wide range of flow and pressure, low maintained cost.

Ti Series

- Flow: 1200~24000 Nm³/h
- Discharge Pressure: 0.06~1.6 MPa(G)
- Compression Medium: Air, Nitrogen, etc



Parameter

Single Stage High Speed Centrifugal Blower

It is widely used in fossil-fuel power station, petrochemical and chemical industry, water supply or sewage treatment plant and other industries;

Use adjustable angle discharge guide vanes, adjustable range of 40-105%;

CF Series

- Flow: 1200~150000 Nm³/h
- Discharge Pressure: 0.03~0.2 MPa(G)
- Compression Medium: Air, Nitrogen, etc

RF Series Gas Blower/Circulating Blower

- Flow: 3000~520000 Nm³/h
- Discharge Pressure: 0.01~8.0 MPa(G)
- Compression Medium: Various process gases



Heat Recovery

Advantage

- The compression heat can be recovered after each stage of compression in the centrifugal compressor, resulting in high recovery efficiency;
- The compression heat recovery system can control the water temperature intelligently, which is efficient, easy to clean, compact and convenient for centralized management;
- The water outlet temperature range of the compression heat recovery system can reach 50 °C~90 °C, and is widely used in scenarios such as daily use, drying/heating, boiler water replenishment, and production process insulation;



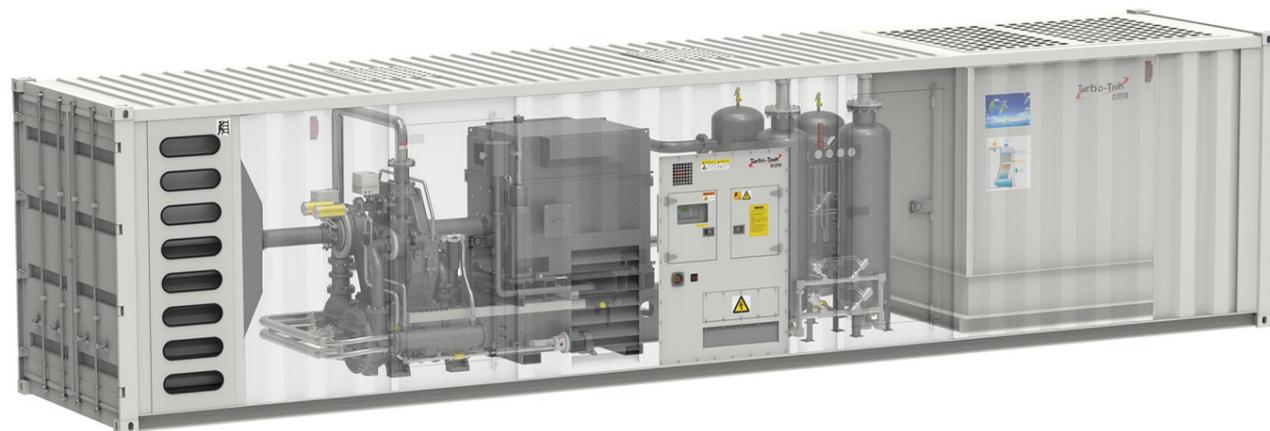
- Centrifugal compressor can carry out heat recovery of compression heat according to user requirements, and provide process water heating, which can not only fully recover heat energy, but also reduce the input of compressed air and cooling water, so as to save energy for enterprises.

Compressor in Container

The "movable" container air compressor station includes centrifugal compressor, purification system, water cooling/air cooling system, which are plug and play (electric), drag and go, providing dual guarantees for stable gas supply.

- Complete Function
- Flexible operation
- Indoor/Outdoor
- Installation All-in-One
- Easy to maintain
- Easy to transport
- Integrated control
- Energy saving and high efficiency
- Available for various environments

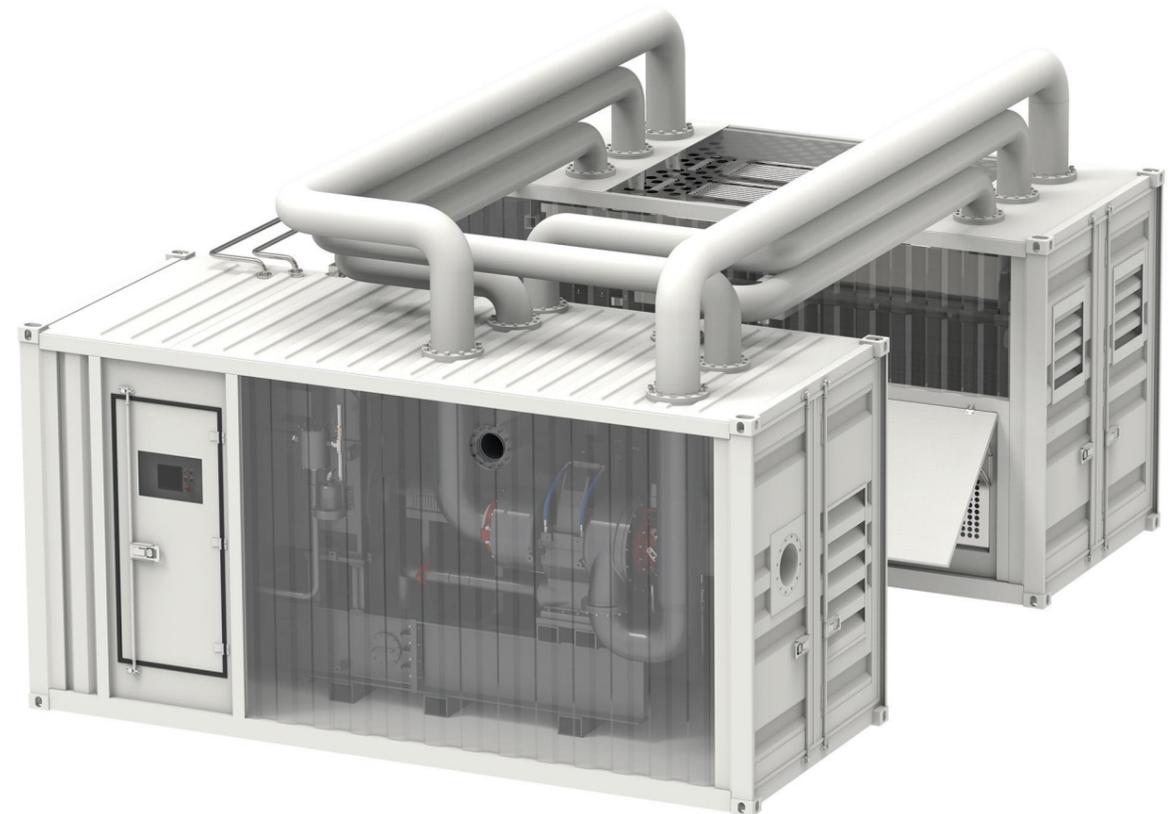
Water Cooled Container Compressor



Air Cooled Container Compressor

Air-cooled container compressors are suitable for use in environments where water resources are scarce or water quality is poor.

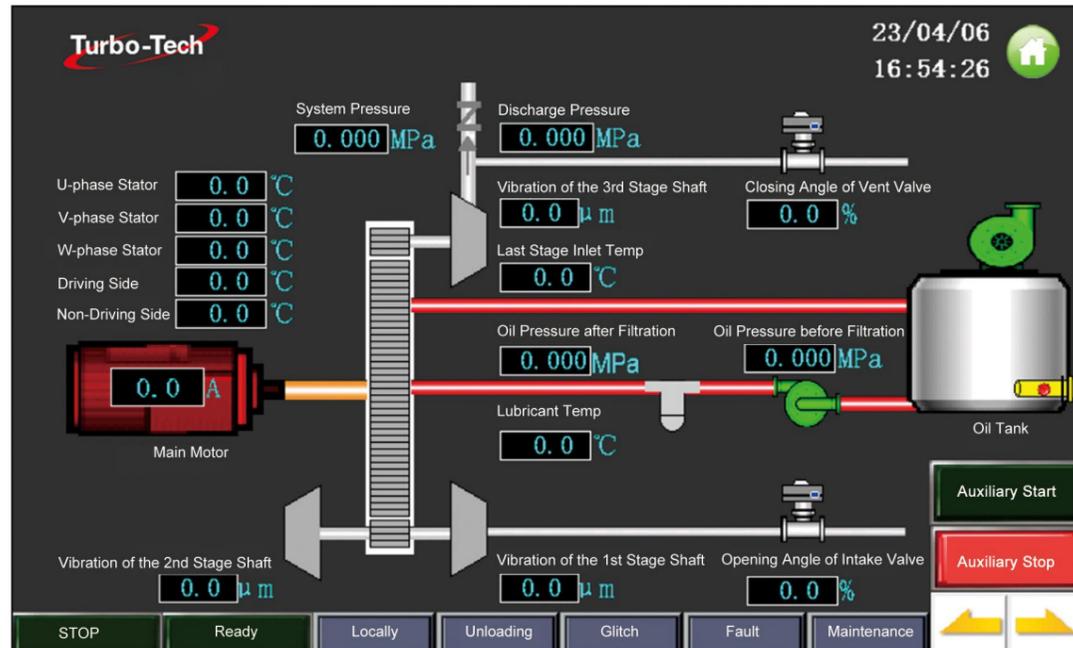
According to the actual demand, we provides customized container integrated gas supply solutions, to provide customers with one-stop compressor service.



Control System

PLC Control System for Single Unit

- Control cabinet: The operation interface of the control panel is easy to understand, One click start, operate with touch screen;
- LCD screen: display the parameters, provide real-time data monitoring, to ensure the reliable operation of the equipment;



Intelligent centralized control system for multiple units

- On-line control: one-click operation, on-demand startup, multi-machine joint control, efficiency improvement;
- Energy efficiency optimization: operation monitoring, fault warning, and energy efficiency analysis;
- Remote monitoring system: Monitors the compressor running status remotely through a PC or mobile phone;



Customer Service

Professional Service Team

We have a professional service team, for not only Turbo-Tech compressor but also other brands to provide equipment diagnosis, regular maintenance, parts replacement and other one-stop service;

Perfect Service Network

Relying on the global distributor network, to provide fast and comprehensive service nearby;

Hotline:

400-886-1856

