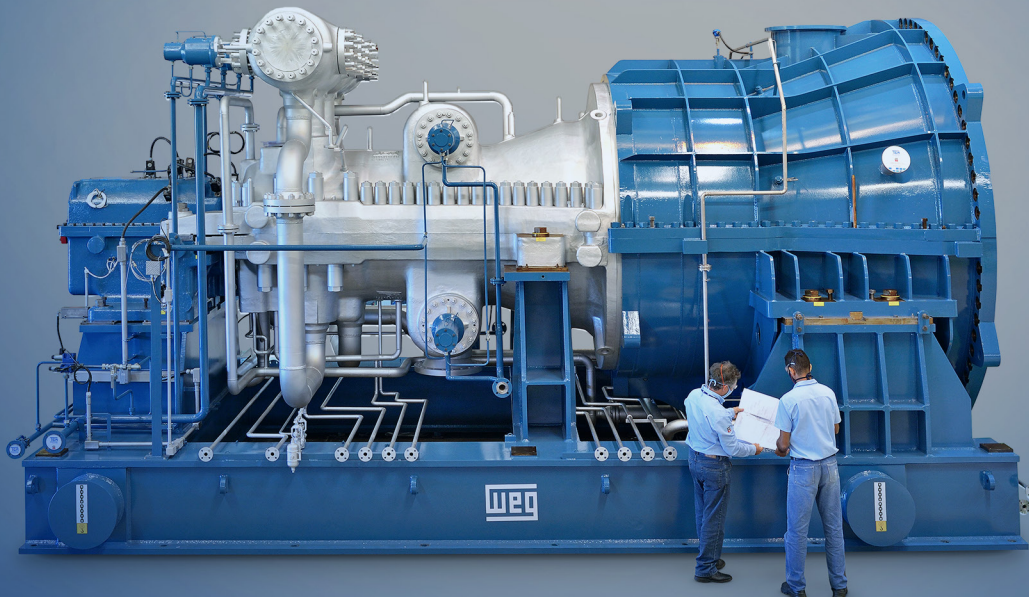
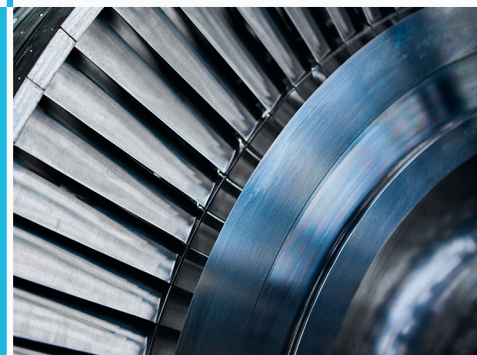


STEAM TURBINES

Steam power
**generation and
mechanical drives**

Industrial Motors
Commercial &
Appliance Motors
Automation
Digital &
Systems
Energy
Transmission &
Distribution
Coatings



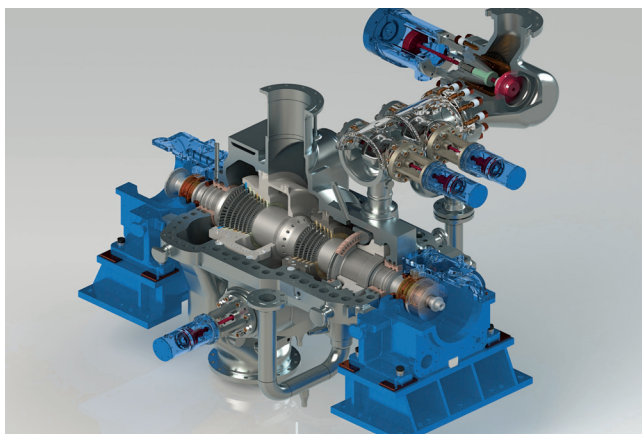
Driving efficiency and sustainability



Steam turbines

WEG steam turbines are available from 0.1 to 150 MW and used for power generation or mechanical drive applications. Its modular construction guarantees great installation flexibility in every type of industrial process, with focus on safety, efficiency, and cost effective solutions on every project.

WEG has over 60 years of experience with rotating equipment, and its team consists of engineers and technicians specialized in the development and manufacturing of efficient products that meet the most demanding international quality standards.



WEG has several differentiators in its structure, notably the manufacturing of blades and bearings.



Quality

WEG's main commitment is to deliver products, parts, and services at the highest quality levels, always aiming for customer satisfaction. To achieve this, the quality system continuously supervises and seeks improvements in processes, meeting the most demanding international standards for the selection, calculation, and manufacturing of rotating equipment.

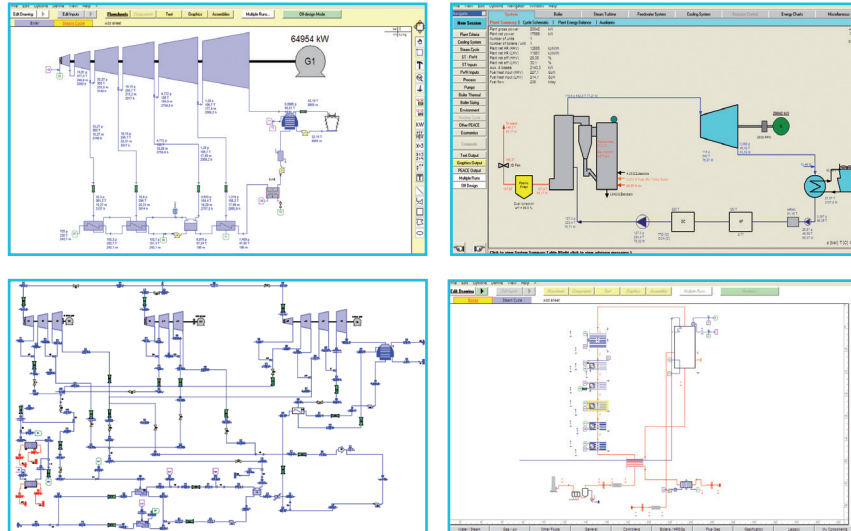
Certifications

ISO 9001 and ISO 14001.



Heat balance study

Heat and Mass Balance studies are conducted by qualified professionals and involve a comprehensive analysis of the steam flow and electrical energy in industrial plants. This enables a better identification of opportunities to optimize operational efficiency and, consequently, greater utilization of the available energy for electricity production for self-consumption and/or export to the grid.



Complete and Integrated Solution

Focused on efficiency, economy, profitability, and operational safety, WEG's application engineering integrates various equipment into a customized solution, meeting the most demanding requirements of all industrial processes. These are complete steam power generation solutions that include the supply of turbogenerator sets, automation systems, and electrical power distribution and transmission systems.



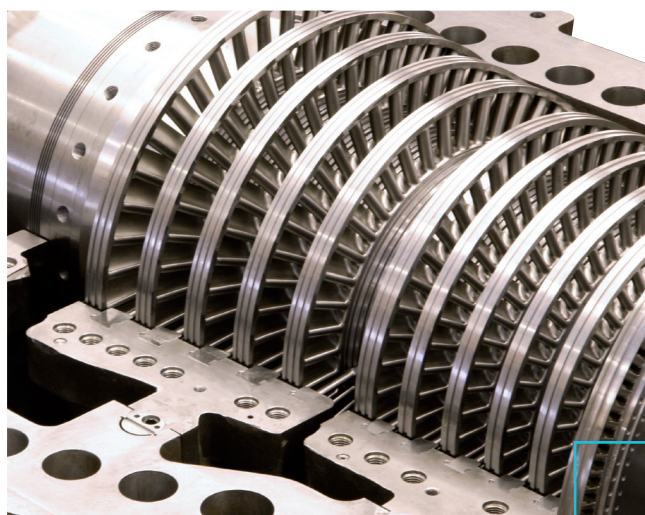
Steam turbine - reaction technology

BT / BTE Line

Backpressure - extraction

Technical characteristics

- Nominal power output up to 150 MW
- Inlet pressure up to 2,030 psia (140 bara)
- Inlet temperature up to 1,004 °F (540 °C)
- Speed up to 13,600 rpm
- Extraction pressure up to 652 psia (45 bara)
- Exhaust pressure up to 232 psia (16 bara)



Steam turbine - reaction technology

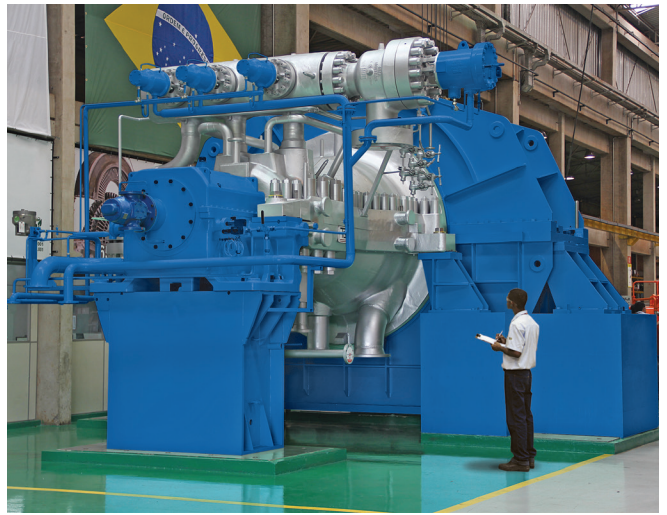
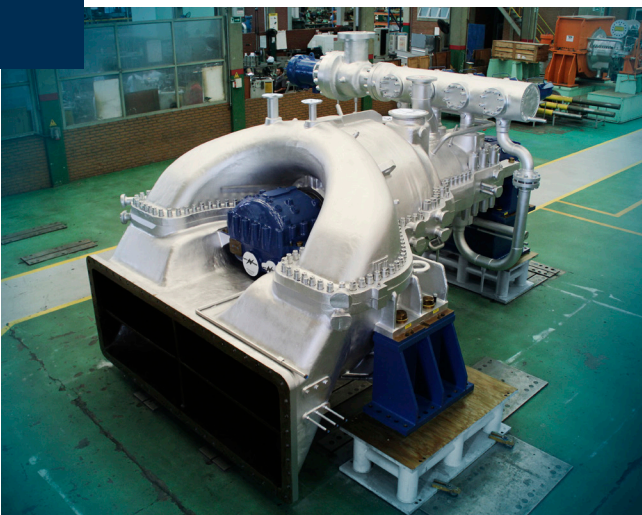
CT / CTE Line

Condensing - extraction



Technical characteristics

- Nominal power output up to 150 MW
- Inlet pressure up to 2,030 psia (140 bara)
- Inlet temperature up to 1,004 °F (540 °C)
- Speed up to 13,600 rpm
- Extraction pressure up to 652 psia (45 bara)



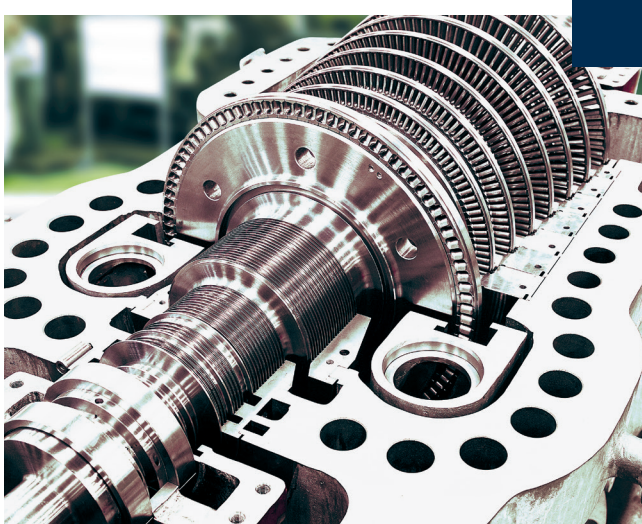
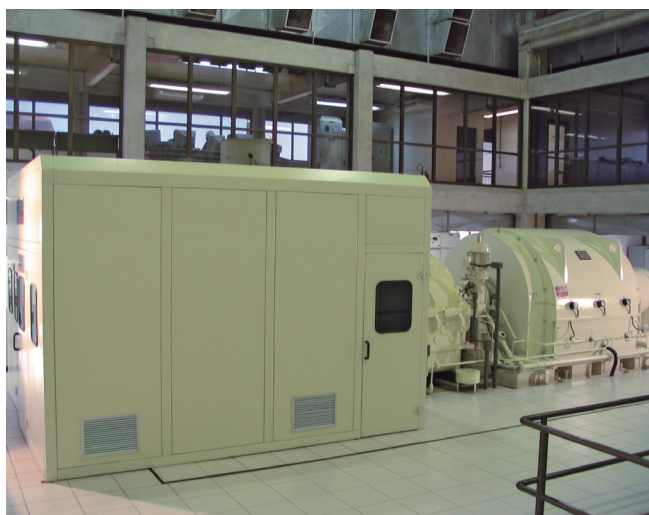
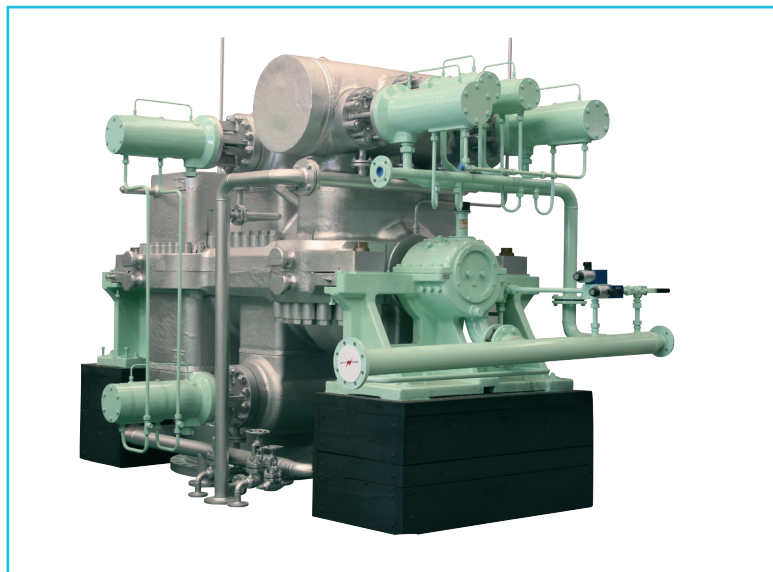
Steam turbine - impulse technology

TM-A / TME-A Line

Backpressure - extraction

Technical characteristics

- Nominal power output up to 55 MW
- Inlet pressure up to 1,015 psia (70 bara)
- Inlet temperature up to 986 °F (530 °C)
- Speed up to 8,000 rpm
- Extraction pressure up to 435 psia (30 bara)
- Exhaust pressure up to 145 psia (10 bara)



Steam turbine - impulse technology

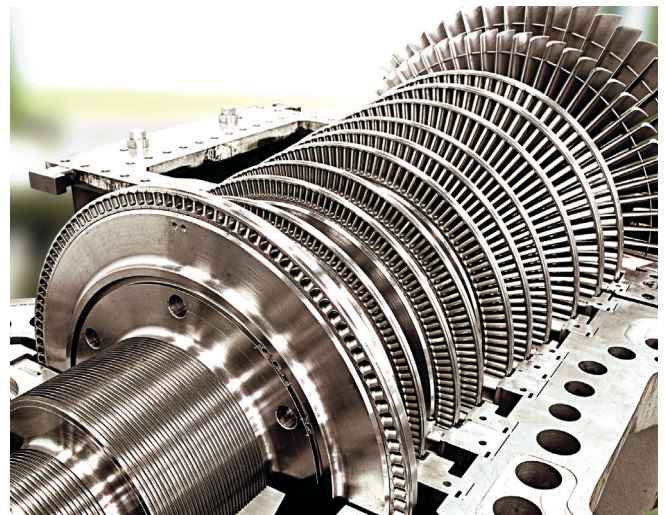
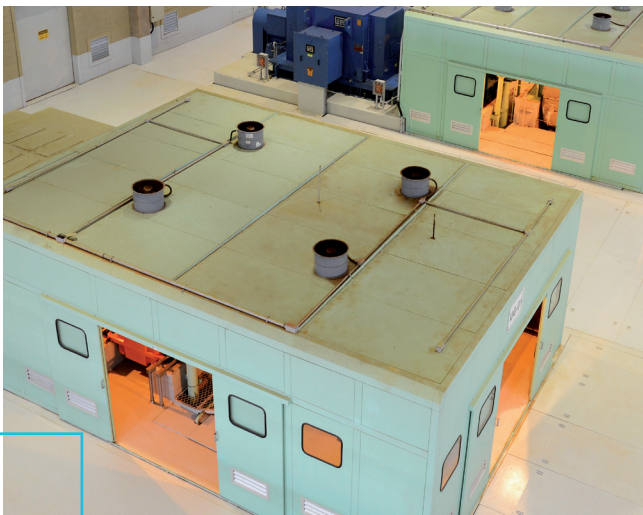
TMC-A / TMCE-A Line

Condensing - extraction



Technical characteristics

- Nominal power output up to 25 MW
- Inlet pressure up to 1,015 psia (70 bara)
- Inlet temperature up to 986 °F (530 °C)
- Speed up to 8,000 rpm
- Extraction pressure up to 435 psia (30 bara)



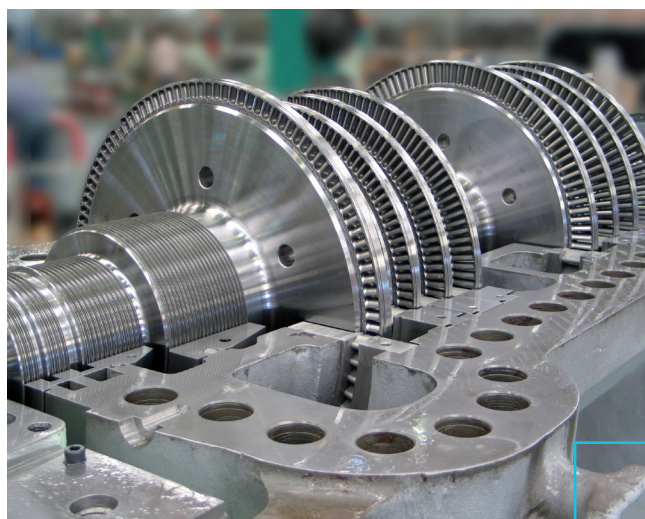
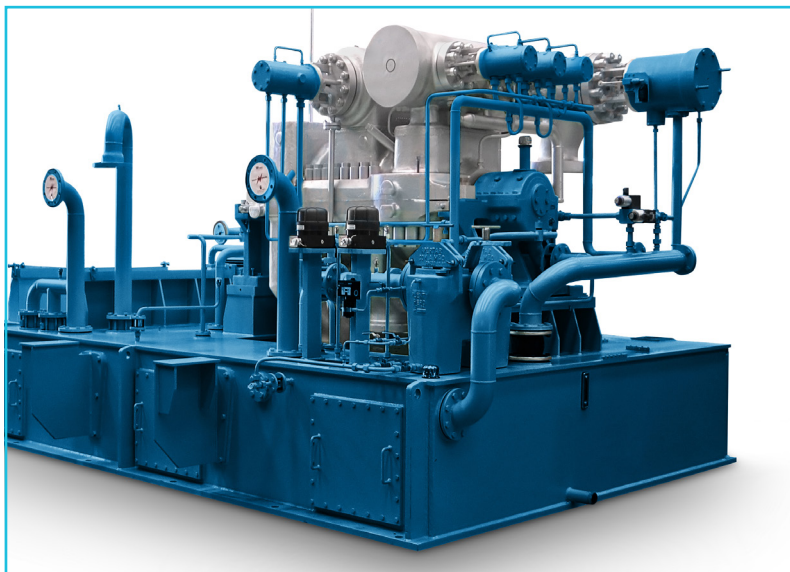
Steam turbine - impulse technology

TM / TME Line

Backpressure - extraction

Technical characteristics

- Nominal power output up to 20 MW
- Inlet pressure up to 652 psia (45 bara)
- Inlet temperature up to 842 °F (450 °C)
- Speed up to 8,000 rpm
- Extraction pressure up to 290 psia (20 bara)
- Exhaust pressure up to 87 psia (6 bara)



Steam turbine - impulse technology

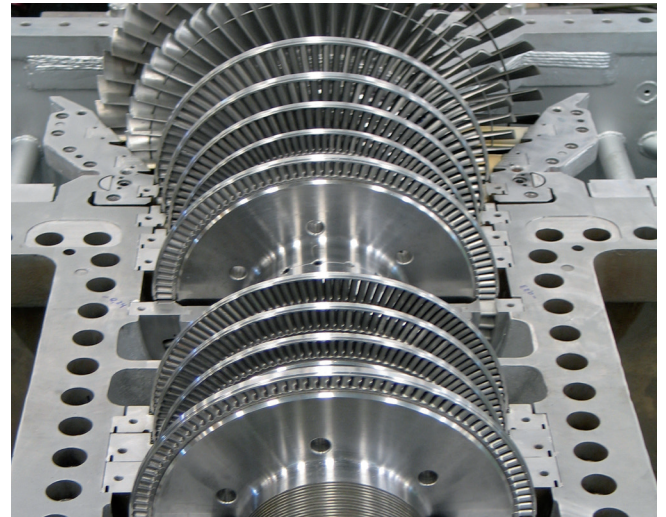
TMC / TMCE Line

Condensing - extraction



Technical characteristics

- Nominal power output up to 17 MW
- Inlet pressure up to 652 psia (45 bara)
- Inlet temperature up to 842 °F (450 °C)
- Speed up to 8,000 rpm
- Extraction pressure up to 290 psia (20 bara)



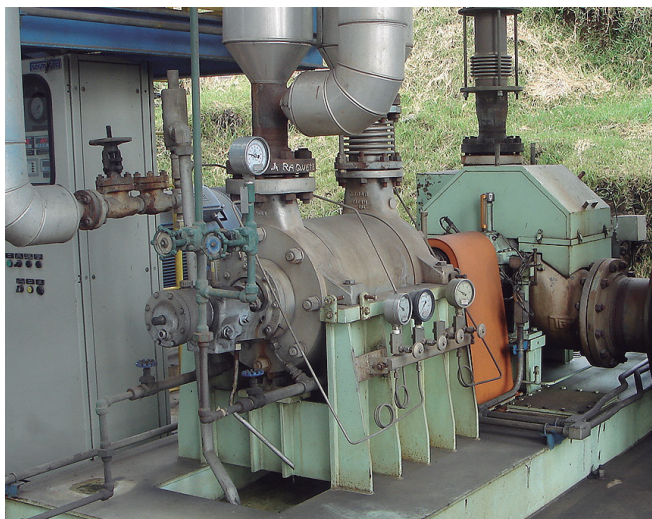
Steam turbine - impulse technology

TM FLEX Line

Backpressure

Technical characteristics

- Nominal power output up to 5 MW
- Inlet pressure up to 652 psia (45 bara)
- Inlet temperature up to 842 °F (450 °C)
- Speed up to 6,500 rpm
- Exhaust pressure up to 174 psia (12 bara)



Steam turbine - impulse technology

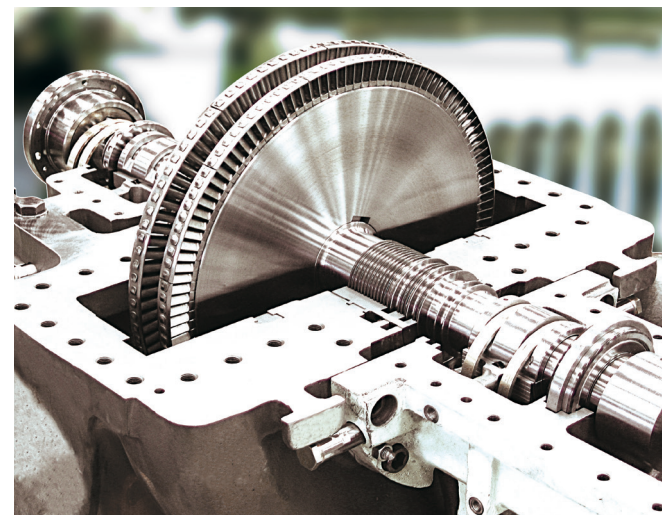
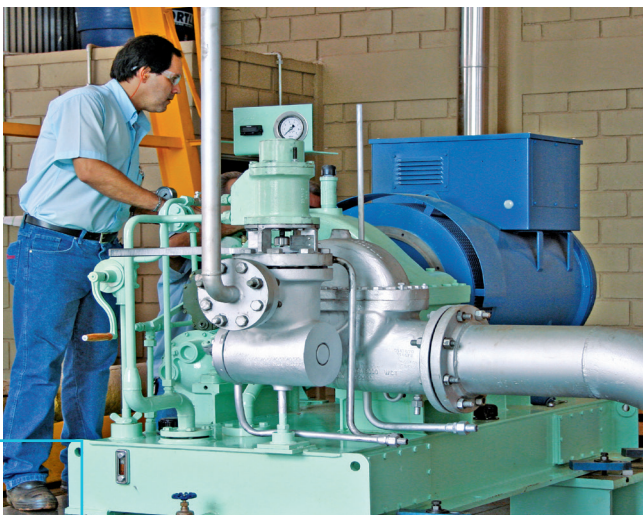
TS-P / TS / TG Line

Backpressure



Technical characteristics

- Nominal power output up to 2 MW
- Inlet pressure up to 943 psia (65 bara)
- Inlet temperature up to 896 °F (480 °C)
- Speed up to 10,000 rpm
- Exhaust pressure up to 218 psia (15 bara)



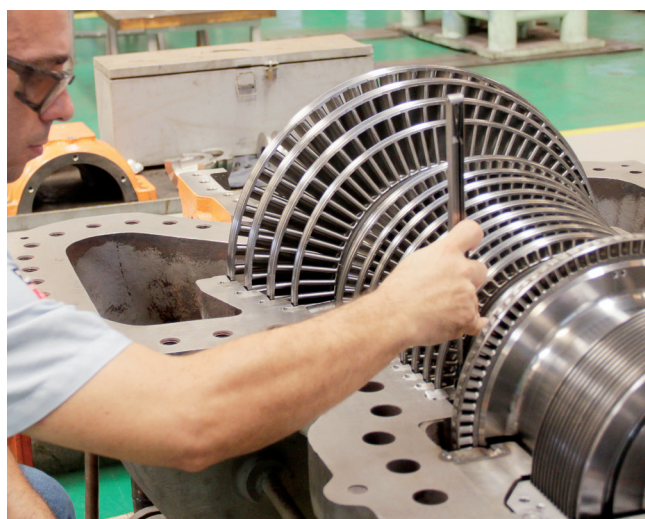
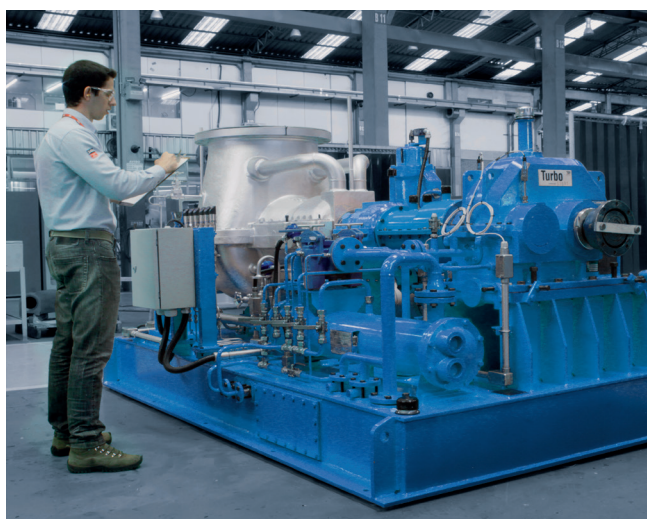
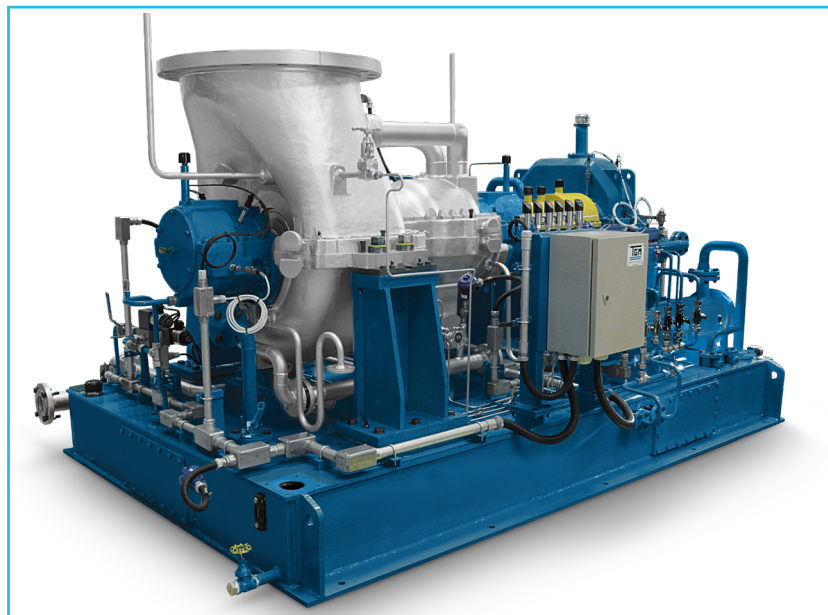
Steam turbine - reaction technology

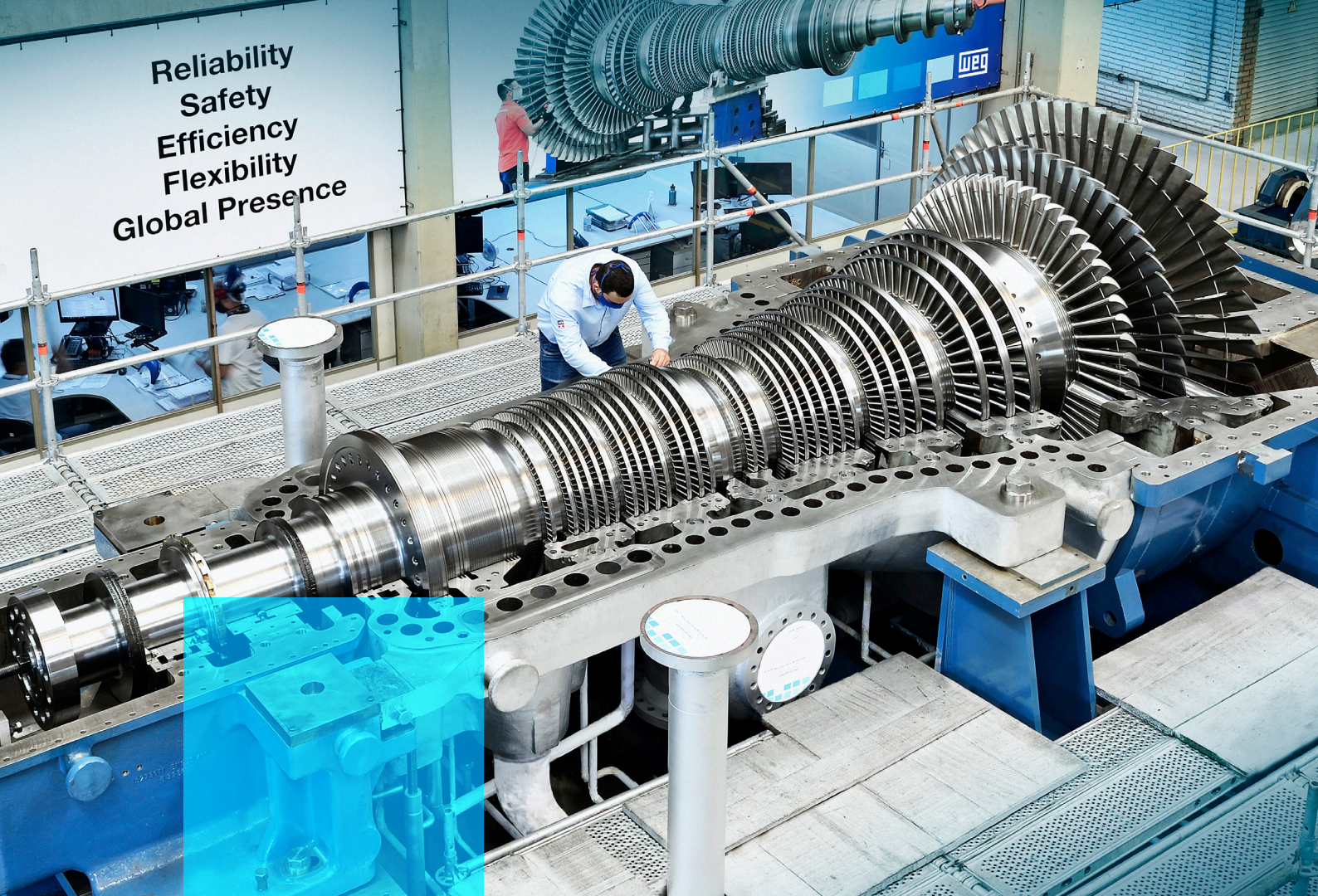
MCT Line

Condensing

Technical characteristics

- Nominal power output up to 3 MW
- Inlet pressure up to 652 psia (45 bara)
- Inlet temperature up to 842 °F (450 °C)
- Speed up to 9,000 rpm





Retrofit

Retrofit or equipment replacement can be an intelligent and safe alternative to increase energy production with the same volume of steam, thus optimizing the plant's operational efficiency. WEG conducts technical and economic feasibility studies and can assist customers in making personalized decisions.



Services for steam turbines

WEG specializes in providing services for steam turbines, maintaining them whenever possible in conditions close to their original construction form. The use of advanced techniques allows for case-by-case application of revision, modernization, recovery, and repowering services, either total or partial, for steam turbines manufactured by WEG as well as other manufacturers. When it's determined that replacing the equipment with a new one is not feasible, the service plays a significant role in reducing environmental impacts since equipment reutilization becomes possible.



Turbomachine safety and control system

It's an electronic system integrated with protection devices for greater safety and operational availability, all designed and validated by the safety and control systems engineering, being of vital importance in the operation of the electric power generation system or mechanical drive. A system without monitoring and control is susceptible to operational problems, which can cause accidents or unnecessary maintenance shutdowns, increasing operational costs.

Spare parts and components

By means of modern processes and strict control and quality standards, WEG manufactures spare parts for steam turbines with timely delivery. They are parts such as bearings, bushings, labyrinth seals, sealing rings, among others. For some turbine models, WEG keeps parts, mechanical and electronic components in stock.

Service Support

Our aftermarket specialists help customers achieve greater operational availability with 24/7/365 on-call emergency services. WEG streamlines the entire process, from identifying needs to completing services, to restore equipment to its natural conditions in the shortest possible time. All services are performed by teams qualified to serve customers worldwide. WEG's resources and services undertake unquestionable commitments to the production chain, ensuring the full operation of customers' equipment.



The scope of WEG Group solutions
is not limited to products and solutions
presented in this catalogue.
To see our portfolio, contact us.

**For WEG's worldwide
operations visit our website**



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The values shown are subject to change without prior notice.
The information contained is reference values.