

Power Station Fans

Heavy Duty Axial and Centrifugal Fans

a company of POWERCHINA

TLT-Turbo



History & Technology.

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Vice President, Order Execution

The roots of TLT-Turbo GmbH go back far into the last century. In 1873 already the Dinglerwerke AG, Zweibrücken, which was established in 1827, built the first centrifugal flow fans for mine ventilation.

Since then the field of fans has been systematically adapted to the markets and fields of application. In the thirties the first big axial flow fans for wind tunnel systems with an impeller diameter of 15 m and a power consumption of 85,000 kW were put into operation.

In the following years the fans of TLT-Turbo GmbH, in particular the power station fans, were continuously advanced. Particularly the decision for the application of fans in mono-units up to 750 MW (only one primary, one forced draft and one induced draft axial flow fan each per unit) has been fundamentally influenced by the high availability and reliability of the TLT-Turbo fans and led the customers to decide for this system.

TLT-Turbo GmbH also pioneered the development of the first FGD-axial flow fans on the wet, saturated clean gas side behind the scrubber.

TLT-Turbo GmbH took up the challenge and developed a convincing technical design with the result, that the first fans of this kind were put into operation in 1985.

Gain from a reliable partnership.

Today TLT-Turbo GmbH builds axial and centrifugal flow fans for almost any application. The capability of TLT-Turbo GmbH is evident in the matured product range, which has stood the test under very difficult, and sometimes extreme conditions on the international markets.

Axial and centrifugal flow fans for almost any application.



The high quality standard of the TLT-Turbo GmbH products represents the state of the art and offers the optimum solution for every application.

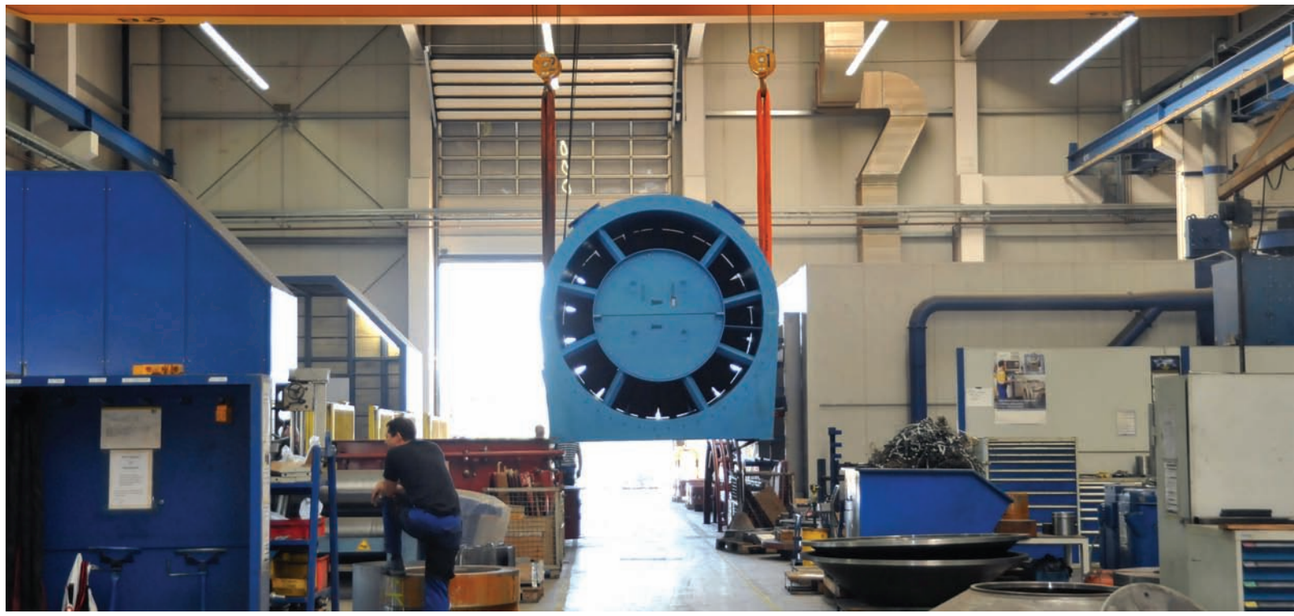
TLT-Turbo GmbH granted in 1979 one of the first licences to China and has positive experiences of many years with local partners in the Chinese market as well.

In 2006 TLT-Turbo GmbH and Chengdu Power Machinery Works (CPMW) founded a Joint Venture Company "Chengdu KKK Power Fans" (CKPF).

And finally in 2014 TLT-Turbo GmbH was acquired by Power Construction Corporation of China (PCCC).

Heavy Duty Fans.

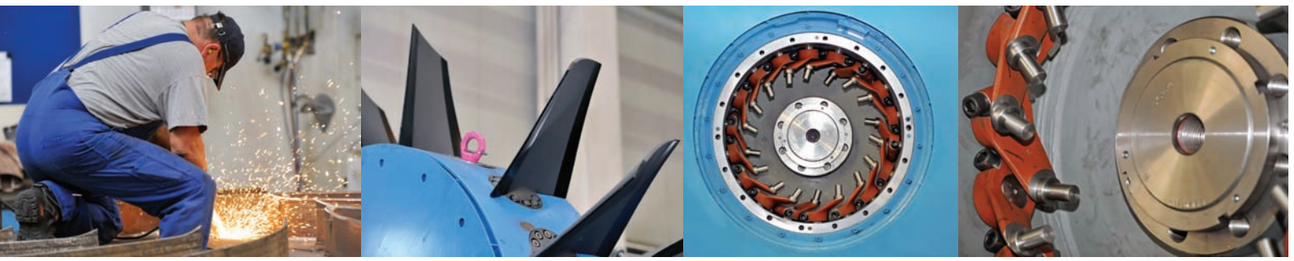
The various designs and sizes of TLT-Turbo fans are used in many different systems to deliver air, clean gas and desulphurized flue gases.
The increasing requirements of the market led TLT-Turbo to develop different types of fans for the efficient and economical optimization, being suited for the diverse requirements of the processes.



Axial overpressure fans with adjustable impeller blades.

The impeller blades can be adjusted individually during stand-still or all together during operation. This results in a large operating range with high efficiencies even in the partial load range. TLT-Turbo's hydraulic in-flight adjustment system has been the best available technology for many years.

Beside these well-proven devices with mechanical control and feedback shafts, TLT-Turbo introduced the new generation of such adjustment systems based on highly accurate electronic sensors.



Axial impulse-type fan with adjustable inlet vane control and fixed impeller blades.

Although in most cases the efficiencies in the partial load range are considerably lower than those of fans with impeller blade adjustment system, this type of fan is being preferentially used. This robust construction is designed for extreme operating conditions, high temperatures and high dust content.
The blade materials and thicknesses are selected according to the requirements. This type of fan is mainly used as induced draft fan.



Centrifugal Flow Fans.

Single width single inlet and double width double inlet centrifugal flow fans with inlet vane control or dampers.

In principle, from the point of view of power consumption, centrifugal flow fans are not as economical as axial flow fans. However, this type of fan is often used for small and medium size power stations. Centrifugal flow fans stand out for their simple and robust construction and are suited for handling mean volume flows in case of large pressure increases and for extreme operating conditions at high temperatures and high dust content as well.

Using these types of fans in smaller power station units may result in lower investment costs.









Expert advice, service and delivery of components for the optimization of existing plants.

Besides the delivery of complete new fans and components for fans TLT-Turbo GmbH also offers engineering and service for new plants and reconstruction of power stations and other applications.

Our aim is to reduce the total cost of ownership:

- Increase the availability of your fans
- Increase the economic efficiency of your fans
- Prolong the service life of your fans

TLT-Turbo GmbH offers you specialist counseling, the delivery of the required products, and the installation for your projects.

Our services

Assembly,

Commissioning and Service such as:

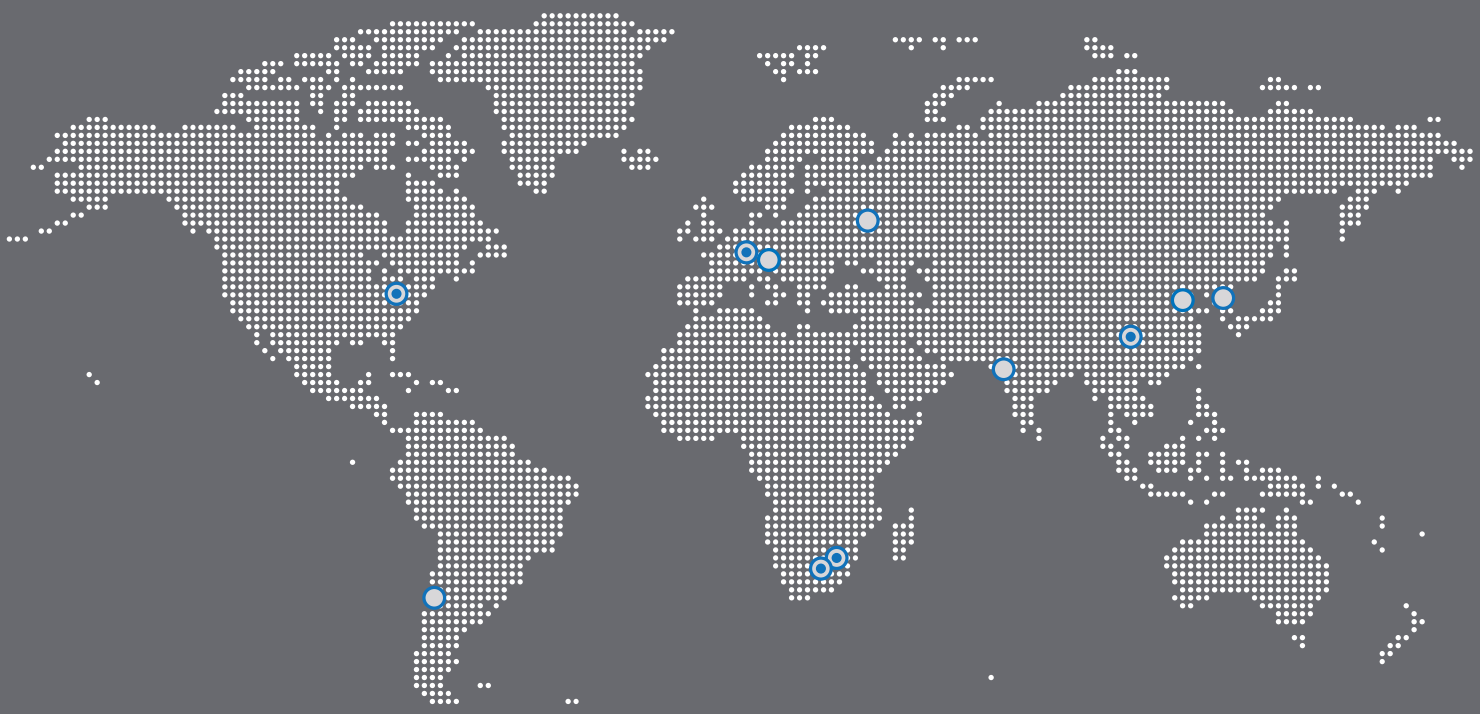
- Inspection
- Maintenance
- Repair
- Revision

Technical advice for

- Retrofit
- Optimization of the duct system (calculation of pressure loss)
- Vibrational calculations
- Noise expertise
- Execution of model measurements
- Maintenance programs
- Trouble-shooting programs
- Recommendations for spares inventory
- Aerodynamic measurements, acceptance tests
- Balancing
- Repairs
- Disassemblies
- Manufacturing and delivery of spare parts
- Manufacturing according to drawings of other manufacturers
- Sound protection measurements

A Passion for Solutions.

Germany . China . South Africa . USA
Austria . Chile . Hungary . India . Russia . South Korea



Business Location w/ Manufacturing and Service Workshop

TLT-Turbo GmbH . Germany
TLT-Turbo (Sichuan) Co., Ltd. . China
TLT-Turbo Africa . South Africa
TLT-Turbo Inc. . USA

Business Location

TLT-Turbo Rep. Office . Austria
TLT-Turbo South America SpA . Chile
TLT-Turbo Rep. Office . China
TLT-Turbo Rep. Office . Hungary
TLT-Turbo India (Pvt.) Ltd. . India
TLT-Turbo Rep. Office . Russia
TLT-Turbo Korea . South Korea

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