



ShaanGu 
EKOL

***Energetics and Ecology
for Future ...***

www.ekolbrno.cz



Energetics and Ecology for Future ...

The EKOL spol., s.r.o. is a flexible fast-growing Czech company established in 1991. At present it is a respected European manufacturer and supplier of heat and power generating plants.

The company is based on the activities of outstanding scientific workers with long-term experience in the respective field. They specialize in solving environmental issues connected with the operation of thermal power plants.

In 2015 EKOL merged the foreign partner, ShaanGu Company. By this the company became the significant international company and the possibilities to reach new markets appeared.

On the base of this business connection EKOL can offer its customers improved supply chain and system optimized solutions for delivery of air and gas compressors with industrial steam turbines. EKOL continues in successful supply of steam turbines, gas turbines service, boiler units and EPC projects.

The main company's advantage is focusing on customer's specific requirements, understanding his needs and optimization of each project.

Manufacturing program of the company has become stabilized in the following brunches:

- EPC Projects
- Steam Turbines
- Gas Turbines
- Steam Boilers, Hot-Water, Warm-Water Boilers and Electric Boilers
- Manufacture, Assembly and Service

The company is investing a lot of money in a unique, up-to-date and high-performance technology that gives EKOL the opportunity to meet one of its main goals which is the development and manufacture of environmentally compatible power equipment of high efficiency.

EPC Projects

EKOL operates in following areas of energetic:

- Complex deliveries of power and heat plants
- Combustion of biomass and municipal waste
- Construction of sugar and paper factories
- Combined power cycle
- Chemical and petrochemical industry
- Cogeneration

EKOL has currently achieved a level which makes it possible for the company to deliver comprehensive power units to its customers, with **electrical power output of up to 150 MW**, starting from the design, construction, erection until commissioning, according to the client's requirements.

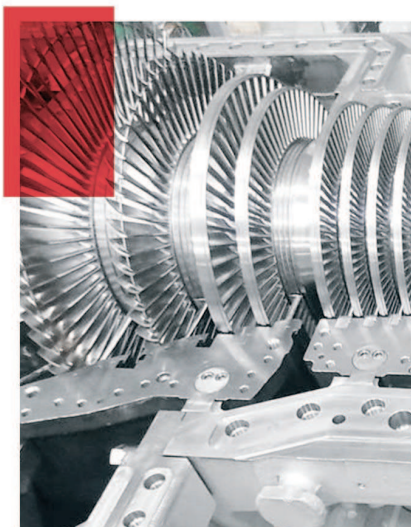
Power units using biomass as a fuel are significant branch of the company activities. The use of biomass is one of the methods of increasing the share of renewable fuel sources in the power and heat generation while at the same time the requirement for reducing CO and NOx emissions is respected. Although the share of biomass in the electrical power and heat generation is in general very low, the volume of its utilization is growing fast and its potential for the future is huge. The generation of bio-energy will gradually become the natural choice both in households and in the industry.

There is a wide range of fuels used in power units delivered by EKOL including gaseous fuel, liquid fuel and biomass. Furthermore, EKOL is ready to come up for specific requirements of the clients on the combustion of another fuels such as distiller residues, oil mill pomace etc.



Steam Turbines

EKOL now **presents itself as a fully acknowledged turbine manufacturer disposing** of the necessary production-technical platform. The design of turbine assemblies, elaboration of their structural-technological documentation, prime quality machining



of the turbines' main components and trial assembly in our own shop are all carried out by EKOL.

EKOL manufactures steam turbines of all basic types, i.e. back-pressure and condensing turbines with a single controlled extraction or maximally a double controlled extraction. The company also manufactures double-pressure steam turbines for example for steam-gas power plants.

Each listed type has the possibility of modifications in operating parameters within a range which practically enables meeting the requirements of any customer. Put simply, steam turbines are tailored to customer's requirements.

Gas Turbines

EKOL provides deliveries of gas turbines including the accessories, spare parts delivery, repairs, revisions, environmentally acceptable upgrades and higher-level deliveries of cogeneration and combined cycles.



Due to operation of gas turbines, negatively acting substances are entering the atmosphere. The negative impacts are reduced by the process using controlled combustion which reduces the creation of harmful emissions to minimum within the maximum aggregate power range.

Gas turbines are source of noise pollution for their surroundings as well. The noise problem is solved by installation of powerful noise silencers into intake and exhaust tracts of the aggregates.

EKOL is mainly focused on modernization of gas turbines for the purpose of:

- increasing the system efficiency
- increasing the turbine power output
- improving the operational comfort
- reducing the detrimental effects of gas turbine operation on the living environment.

The company is active in this field of application from the very beginning and offers its customers complex services aimed at solving the given problems.

Steam, Hot Water, Warm Water and Electric Boilers



EKOL Company ensures **not only supplies of thermal units**, but also the **general deliveries of complete boiler houses**. We provide service, general repairs, modernization and greening of boilers including the supplies of spare parts or components of boilers both in the Czech Republic and abroad.

EKOL ensures projects, manufacturing and deliveries of hot water, warm water and steam boilers for firing liquid and gaseous fuels, all combinations of technological gases, brown and bituminous coal, peat, waste wood and biomass.

Key products of the Boiler Division are steam boilers for power and heat stations, or for heating plant usage in combination with a steam turbine, for combined generation of electric power and heat.

EKOL together with the company Auxilien, a.s. are also capable of designing, manufacturing and delivering of steam and hot water electric boilers.

Manufacture, Assembly and Service

Manufacture and assembly are provided by daughter company EKOL energo, s.r.o.

The company's main activity remains to manufacture condensation and back-pressure steam turbines with a **performance of up to 70 MW**. The company has also been successful in developing and growing the field of retrofits and reconstructing used steam turbines, while also expanding significantly in the field of servicing.

In addition to our own production of turbosets and servicing activities, we offer our customers outsourcing in the machinery workshops we have set up. The high-precision CNC machines for machining castings and forgings for **weights up to 70 tonnes are the basis for long-term outsourcing agreements with many satisfied customers.**

MRO of steam turbines



EKOL company provides MRO activities of steam turbines of many different worldwide producers. Nowadays we have experiences with repairs or reconstructions of steam turbines **MAN, LANG, ŠKODA, MITSUBISHI, SIEMENS, PBS, ABB, etc.** We also ensure post-warranty service according to customer requirements.



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