

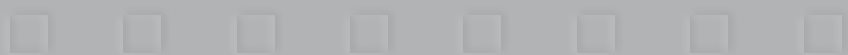
TEDOM

technology
... in harmony
with nature



engines

TL





Tradition engines

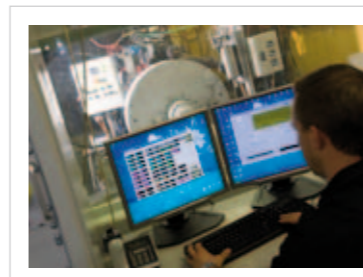
The history of the TEDOM engines production develops the rich tradition of automotive production in the Liberec region, which dates back to 1906. In 1953, the LIAZ – Liberec Automotive Works company was founded. This company achieved a great technical and production progress and became an internationally renowned firm, successfully exporting its products to many countries.

The new history of the company has begun in 2003, when it became a part of the TEDOM holding, until then an important and long-time purchaser of the LIAZ engines. The manufacture of engines is integrated in the TEDOM holding as a separate division located in Jablonec nad Nisou.

TEDOM engines

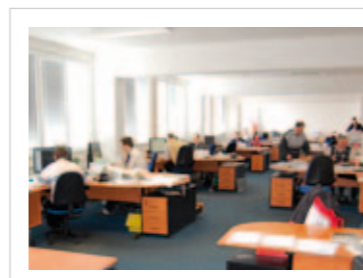
The TEDOM engines constitute a unified series of four-stroke six-cylinder in-line engines of the volume 11 946 cm³, with their output ranging from 80 to 300 kW. The engines are developed for the combustion of both liquid fuels (diesel, bio-diesel) and gas fuels (natural gas, propane-butane, biogas and other alternative fuels).

The series of stationary engines is intended to drive rotating machines (e.g. electric generators), the series of vehicle engines is intended for buses, trucks and locomotives. We lay great emphasis upon ecologic operation; therefore, you will find in our offer engines which satisfy the strictest emission limits. Our indisputable advantage consists in the fact that we also offer engines in the horizontal execution, suitable to be built under the floor of vehicles.



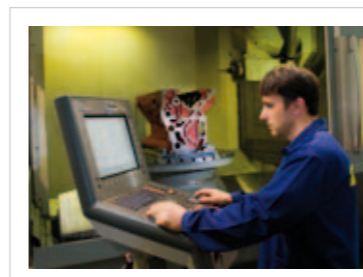
Development

Our experienced team works on the further development of reliable modern engines both for vehicles and for stationary applications. At present, our development centre focuses on the design of engines with the very low production of emissions (including CO₂) in accordance with the valid legislation. At the same time, it develops engines using fuels from renewable resources.



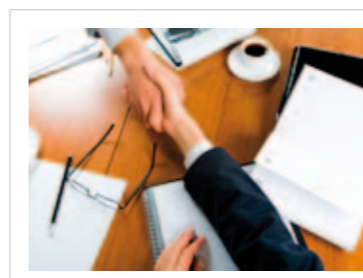
Design

The designing department flexibly applies the outputs of the development department on the series production and continuously innovates the existing production. The team of designers uses the latest software equipment for the creation of process simulations and drawing documentation.



Manufacture

The continuous modernisation of the production, its organisation and modern management methods enable the highly effective and quality production. The manufacturing activities are supported by the modern technological equipment for machining on the NC and CNC machines.



Sales

We always strive to accommodate the demands of our customers, from the first contact, the conclusion of the contract and the implementation of the order, to the delivery of the finished product. Our sales team tries hard to make the whole selling process as simple for our customers as possible in order to achieve their maximum satisfaction.



Services

We provide the guarantee and post-guarantee repairs of engines, repairs and revisions of injection pumps as well as the deliveries of all original spare parts for the LIAZ and TEDOM engines. We provide services directly in the customers' premises by request and, as additional services, we offer machining and services in the area of metrology.



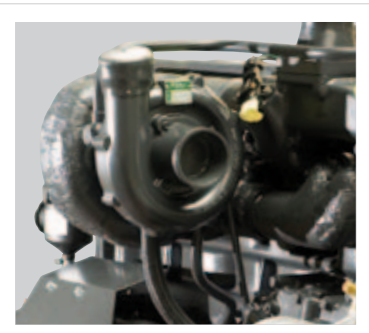
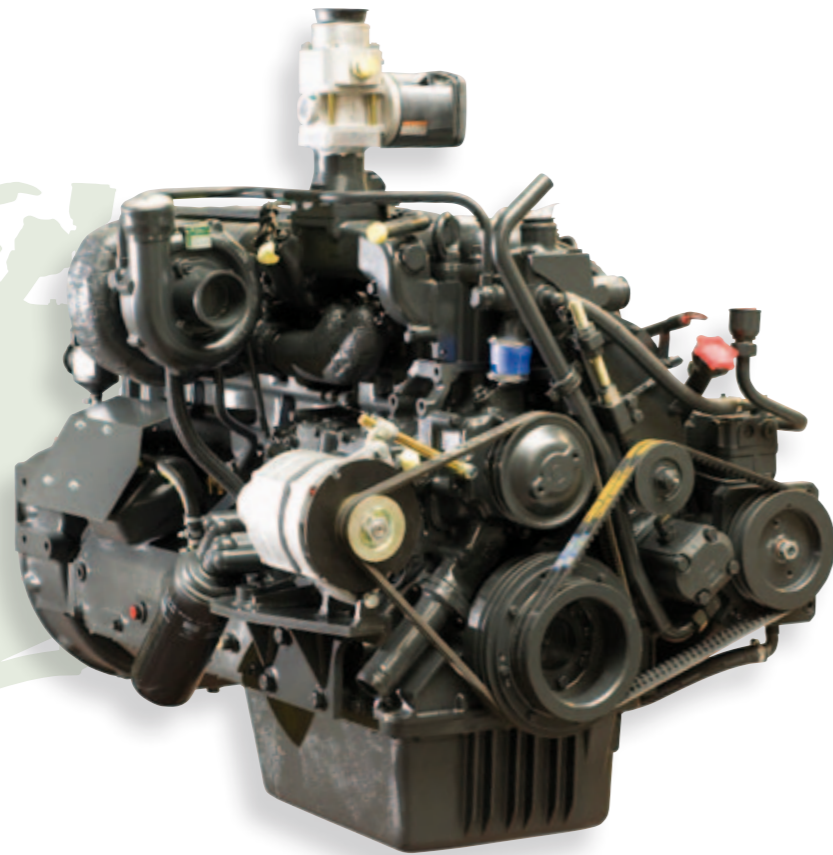
Quality

The Engines division has implemented a certified quality management system in compliance with the requirements of the European standard EN ISO 9001:2008. All processes and activities of the company have been identified and implemented on the basis of the continuous improvement philosophy.

TEDOM vehicle engines

The TEDOM engines are based on the well-tried and recently by far the most frequently used engine for trucks and buses in the Czech Republic. For applications in present-day vehicles, the engines underwent important modernisation, however, maintaining all their well-tried characteristics. The TEDOM engines satisfy the strictest emission limits of the EURO 5 standard as well as the stricter facultative EEV standard, and in the area of railway vehicles, the standard UIC III.B.

The TEDOM engines can also be used as a full substitution of the LIAZ engines in the repairs of vehicles and their conversion to the natural gas drive.



vehicle

applications

Trucks

In the past, vehicle diesel engines were particularly produced for the LIAZ trucks. At present, the TEDOM engines are supplied as a full substitution of the LIAZ engines in the repairs and conversions of older vehicles. Thanks to their low production of emissions and low operating costs, the TEDOM gas engines are suitable e.g. for public utility vehicles.



Buses

The TEDOM engines in the gas-driven execution are intended particularly for new town and suburban service buses. Historically, the LIAZ engines were the most frequently used bus engines in the Czech Republic and Slovakia; therefore, the present-day TEDOM engines have an important share in the conversion of buses from the diesel drive to the gas drive (CNG). The TEDOM engines are very suitable for this purpose thanks to their optimum stroke volume, providing the torque moment required for the bus drive. The engines of the CITY series meet the emission limit of the EURO 5 standard and the EEV standard.



Railway motor cars

In the railway applications, the TEDOM engines are used both in passenger and freight cars. With passenger trains, they are mostly used for the cars for local lines requiring a smaller output; with the freight trains for sidings and shunting purposes. In case a higher output is required, two engines can be coupled with the possibility of their individual control. The rotors of the TRAIN series satisfy the railway UIC III.B standard.



Further possible applications

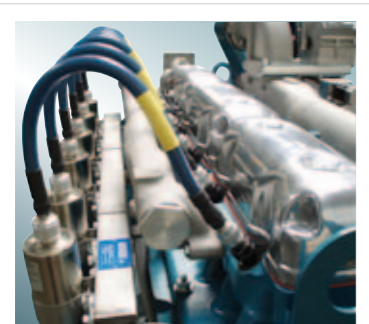
The TEDOM rotors can also serve as driving units for river and coasting ships as well as agricultural and civil engineering machines. In the sector of river transport, they can be used as ship generators as well.



stationary

TEDOM stationary engines

The TEDOM stationary engines are intended to drive rotating machines, e.g. electric generators, compressors, pumps etc. They are most often used for applications in the area of power plant engineering. Their advantage is their reliability, long service life and the possibility to combust various alternative fuels based on renewable power resources.



stationary

applications

Co-generation units

The co-generation units with the TEDOM engines are highly efficient plants for the combined production of electric power and heat. They consist of an engine, a generator, the system of heat exchangers and a control system. The generated electric power is used either for the own consumption of the structure where the unit is located, or it is sold and supplied to the public network. The heat is used for heating buildings and service water. As the fuel for the TEDOM engines, natural gas is used most frequently; however, very popular are also the co-generation units combusting biogas, dump gas, gas from water treatment plants or mine gas.



Generator units

The generator units (GU) are the assemblies of an engine and a generator on a common steel frame. In the majority, they are used as the emergency sources of electric power for the cases of the main electric power source failures in the places with the need of its uninterrupted supply. The GU can be equipped with the automatic regulation of their operation, the automatic system of phasing to the distribution network, an anti-noise hood, automatic switching on and off, the fitting upon a bogie etc.



Assemblies with other rotating machines

Rotating machines, such as pumps or compressors, can be assembled with the TEDOM engines. Their advantage consists in the possibility to operate these machines independently on the electric distribution network. Therefore, they are used in the places where electric power is not available, or where the use of the machine is not very frequent and it would be expensive to pay for the contracted capacity of an electric connection.



TEDOM **engines** www.tedom.eu



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