

Companies connection to energy efficiency and sustainability

The company has implemented and is certified for quality management system which complies with international standard ISO 9001:2008. The Company is also certified in accordance with standards such as ISO/TS 16949:2009 and ISO 14001:2004, and that in the sphere of parts manufacture for automotive industry. The Company is likewise certified for production and maintenance of aircraft industry components.

Steam system

Steam is produced in the central gas boiler room and it is used primarily for heating, cooking in the kitchen and at least for technology. The K2 boiler runs in continuous operation in winter, depending on the outside temperature and the heat demand, boiler K1 is commissioned. In the summer, there is operated only the smallest boiler K1. The third boiler (K4) is permanently shut down. The steam is produced at a pressure of 0.78 MPa and 180 °C. The system returned 70-80 % of the condensate.

Steam system problems identified

Steam is primarily used in the company for heating and due to reduction in heat consumption for heating (reconstruction and thermal insulation of buildings) the operation of the steam boiler room is therefore inefficient.

Proposed energy saving measures, investments, and expected results

The proposed measure consists of replacement of the existing steam source with hot water source, substitution of the existing steam distribution for pre-insulated hot versions, complete reconstruction of heat exchanger stations. This measure leads to calculated energy saving of 2 948 MWh per year. Another saving measure is the implementation of the energy management system. This project has calculated savings of 870 MWh per year.

Implemented proposed energy saving measures, investments and results achieved

The investment costs for the replacement of the steam source are about 2 176 000 € and the payback period is about 15 years. The implementation of the energy management system has estimated investment costs of 105 500 €, which results in the simple payback period of about 3.5 years.

Achieved and/or expected Non Energy Benefits (NEBs) as result of implemented and/or proposed measures and investments involved

Both projects increase the overall efficiency of the heating system and lead to the reduction emission of pollutants and CO₂ emissions at the global level, reduction water consumption for steam generation, reduction consumption of chemicals for water supply.

Involvement of internal stakeholders

The measures are ranked according to the criteria defined with the company in cooperation with the energy auditors. The management was informed about the methodology Steam Up and they have expressed their willingness to participate. They are highly interested in implementing measures to achieve cost-effective energy savings.



Uherský Brod, Czech Republic

Mechanical Engineering

1 610 employees

Total (estimated) Investment

€ 2 280 000

Total (Estimated) Savings

3 800 MWh per year

Non Energy Benefits

Reducing emission of pollutants and CO₂ emissions at the global level

Reducing water consumption for steam generation

Reducing consumption of chemicals for water supply

Environmental protection

Modernisation of production process