

Companies connection to energy efficiency and sustainability

The company produces beer and non-alcoholic drinks. In their activities applies effective procedure to reducing of negative influence on the environment and human health. The company strives for safe and environmentally responsible management that will lead to long-term stability and prosperity. Company based on an analysis of current and future needs and expectations of customers..

Steam system

The source of the steam is the central gas boiler room, which is fitted with two gas medium pressure steam boilers DURO Dakovič working into a common steam collector at an absolute pressure of 12 bar and temperature 210 °C. The system returned 70% of the condensate. Steam is mainly used for brewing. Only small percentage is used for heating and hot water heating.

Steam system problems identified

Thorough insulation of all piping, steam piping, including valves, switchboards and fittings. According to Decree no.193/2007 Sb. must be installed thermal insulation on all the internal distribution pipes, including thermal insulation of hot water tanks. Installation of sub-metering of steam consumption on major steam consumers. Maximize the use of heat of dirty condensate from technology (bottling, kegs' washing) for heating and hot water heating, or to preheat the additional feed water.

Proposed energy saving measures, investments, and expected results

The proposed measures consist of replacement of the installation of a new frequency inverter for feed water pumps, new insulation of external steam pipelines, replacement of old burners by new low-emission burners or installation of a new steam boiler. This measures lead to calculated energy saving of 707 MWh per year.

Implemented proposed energy saving measures, investments and results achieved

The investment costs for the proposed energy saving measures are about 249 454 € and the payback period is about 9.5 years.

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

The projects increase the overall efficiency of the steam system and lead to the reduction emission of pollutants and CO₂ emissions at the global and local 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.



Černá Hora, Czech Republic

Brewery, non alcoholic drinks
production

120 employees

Total (estimated) Investment

€ 249 454

Total (Estimated) Savings

707 MWh per year

Non Energy Benefits

Reducing emission of
pollutants and CO₂ emissions
at the global and local level

Reducing water consumption
for steam generation

Reducing consumption of
chemicals for water supply

Maintenance cost reduction

Unscheduled down-time

Environmental protection

Economical (financial
increase)