

Companies connection to energy efficiency and sustainability

Company Cembrit a.s. produces manufacture of fibre cement. In their activities applies effective procedure to reducing of negative influence on the environment and human health. Company is trying about safe and environment driving, which one leads to stability and prosperity. Company based on analysing present and future needs and expectation clients.

Steam system

Steam is produced in central natural gas boiler room, where they installed two steam boilers with performance 2x 2.9 MW from producer Roučka Slatina Brno type Danstoker DHA 7. Steam has parameters: temperature 151 °C and pressure 0,5 MPa. Steam is distributed with steam pipelines stored to the energy channels. The amount of return condensate is not measured. Steam is used for technology, heating and hot water preparation.

Steam system problems identified

Problems are identified in installation new boiler for stability security of the production process. Next problems are identified in exchange mode heating social building and MTZ, heating technology water and modernization steam pipes.

Proposed energy saving measures, investments, and expected results

The proposed measures consist of the replacement of the steam boiler in the central boiler room, the utilization of waste heat from compressors for partial replacement of steam for heating, the replacement of the steam heating of social buildings and the MTZ by natural gas source and the modernization of existing steam distribution systems. These measures lead to a calculated energy savings of 1 533 MWh per year.

Implemented proposed energy saving measures, investments and results achieved

The investment costs are about 671 873 € and the simple payback period is about 12.3 years.

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

Installation of the new boilers will bring better stabilization of the production process. Measures lead to the reduction emissions of pollutants and CO2 emissions at the local level and reduction the costs associated with producing the amount of required steam.

Involvement of internal stakeholders

The measures are ranked according to the criteria defined with the company. 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.



Cembrit a.s.
www.cembrit.cz

Beroun, Czech Republic

Manufacture of fibre cement

292 employees

Total (estimated) Investment

€ 671 873

Total (Estimated) Savings

1 533 MWh per year

Non Energy Benefits

Reduced emissions of pollutants and CO2 emissions at the local level. Reduced water consumption for steam generation. Reduced chemicals for water supply.

Environmental protection
Modernisation of production process. Stabilization of the production process. Economical (financial increase).