

The company's approach to energy efficiency and sustainability

The company has been committed to sustainable textile management since the beginning, acting not only out of self-interest but also conforming to the crucial market requirements of ecology and economy. The demand of consumers for eco-friendly methods in this industry has increasingly come to occupy centre stage in the last few years. In addition, the company positively achieved a certification to ISO 14001 and ISO 50001.

Steam system

The nominal capacity of the steam system at this site is about 12 t/h. The two boilers use natural gas as fuel. Steam is produced at a pressure level of 10 bar but is used in different pressure levels ranging from 4 to 10 bar. The main consumers are the washing machines, the washing line and the drying line. On average, the system produces about 3–4 t of steam per hour. Most of the condensate returns from the consumers, but there are also consumers like the washing machines that use the steam directly.

Steam system problems identified

The steam system is in a good overall condition and several efficiency measures have already been implemented during the last years. Still, the consultant has identified some potential for improvement.

Proposed energy saving measures, investments, and expected results

One suggestion is to connect the condensate system to the heating system. Thus, the energy from the condensate can be used for heating purposes and, at the same time, heat losses from the condensate can be minimised. In addition, the operation times of the separate heating boiler can be reduced. Another possibility is to install an additional heat exchanger to recover energy from the flue gas, which can be used in the heating system. Depending on the chosen variant, the energy savings range between 65 MWh and 120 MWh per year.

Implemented proposed energy saving measure, investments and results achieved

The investment costs for the various technical possibilities are between 15,000 and 100,000 €. Taking the cost-effective options in consideration, the static payback period is about five years.

Achieved and/or expected non-energy benefits (NEBs) as result of implemented and/or proposed measures and investments involved

The utilisation of the hot condensate leads to a reduction of water and heat losses. In addition, the lower operating times of the heating boiler leads to lower maintenance costs.

Involvement of internal stakeholders

The management of the company is highly interested in implementing measures to achieve cost-effective energy savings.



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Textile Management

200 employees

Total (Estimated) Investment
€ 15,000

Total (Estimated) Savings
65 MWh

Non-Energy Benefits

Reduction of condensate losses

Reduction of maintenance

Lower CO₂ emission