STEAM AUDIT - The Netherlands, nr. 4

FACTSHEET



Companies connection to energy efficiency

The company has been committed to sustainable management as a participant of the Long Time Agreements that the paper sector has made with the government. In addition, the company positively achieved a certification to ISO 14001.

Steam system

The nominal capacity of the steam system, which consists of two boilers, is about 8 t/h The nominal steam pressure is 10,5 bar. The boilers use natural gas as fuel. The main consumers are Bleaching, Pre-drying, Glue-presses, Conditioning and Calanders. 80% of the condensate returns from the consumers.

Steam system problems identified

Main problems that are identified is caused by aging of the steam system, wrongly installed parts in the steam system and the setpoint of O2 in flue gases and the steam pressure. Some leakages are detected and the company misses procedures.

Proposed energy saving measure(s), investments, and expected results (in figures)

Though it isn't sure whether the steam boiler will be replaced in a little while, the replacement of the steam boiler is proposed as a measure next to some measures at the steam boiler which may render and measures which focus on the steam system (distribution and steam users). Main projects are technical insulation, re-level O2 in flue gases, fixing of leakages, re-level the steam pressure, fixing the (reversing) stones within the boiler, re-use of drain water heat and re-install wrongly installed filters.

Implemented proposed energy saving measure(s), investments and results achieved (in figures)

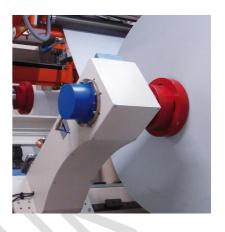
There will be some actions in the heat loss of the ventilation part (consuming). But the steam UP saving measures are mainly, relevel steam pressure, fixing leakages, insulation and re-install wrongly installed filters. The energy savings will be 1,600 MWh within the timeframe of the project and the pay back time will be less than 5 years. The calculated investments mount up till

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

Further insulation increases the security and the replacement of leaking parts reduces incidents in the steam system. All projects reduce the need for natural gas and so reducing the emission of CO2.

Involvement of internal stakeholders

There is a big involvement and interest of management and the technical department. The company is considering ISO 50001 in the future and are interested in procedural measures.



VHS Security Paper http://www.vhpsp.com/

The Netherlands

Paper mill

Security Paper

Total (estimated) Investment

€ 96,000

Total (Estimated) Savings

1,600MWh

Non Energy Benefits

Reduction of natural gas demand Lower CO2 emission Higher security