

Companies connection to energy efficiency

The company is a former LTA participant. They have been implementing the ISO 50001 energy management system.

Steam system

The nominal capacity of the steam system, is about 1,7 t/h. The nominal steam pressure is 10 bar. The boiler uses natural gas as fuel. The main consumers are the presses (moulding). 50-60% of the condensate is returning.

Steam system problems identified

The boiler isn't save anymore and has to be replaced. Furthermore the installation misses a degassing system. Due to leakages in the steam traps, lots of heat is lost. The insulation isn't in order and the O₂-level in the flue gases is to high. Due to the absence of a degassing system, steam pipes are leaking.

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

The replacement of the boiler is a project that has to be implemented. The capacity of the boiler may be lesser than the old boiler. Replacement of steam traps, the installation of a degasser, further and replacement of insulation and adjustment of set points are energy saving measures along with the replacement of the boiler.

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

The new boiler has got a pay back period that's over 15 years, however this investment is needed for safety reasons. The other proposed measures all have pay back periods less than 5 years (between 0-3 years). The total energy saving is 1600 MWh and about 62,000 € per year

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

Safety is the main Non Energy Benefit why the new boiler is installed. A degassing system, further insulation and replacement of steam traps will increase safety. Also the reduction of natural gas is reducing CO₂.

Involvement of internal stakeholders

The QHSE manger is mainly involved into the project, along with the technical department.

The Netherlands

Composites

Composite, car parts

Total (estimated) Investment

€ 460.000

Total (Estimated) Savings

1,600 MWh/ yr

Non Energy Benefits

Reduction of natural gas demand

Lower CO₂ emission

Higher security