STEAM AUDIT - GE09

FACTSHEET



Companies connection to energy efficiency

HAW Linings GmbH has an implemented Energy Management System according to ISO 50001. The company produces corrosion-resistant Rubber materials as well as Steel products

Steam system

The steam system supplies the processes with process heat. The main boiler is gaspowered and has a steam capacity of 6 Tons per hour. The second boiler has a steam capacity of 2.6 Tons per hour.

Steam system problems identified

- potentials in insulation of hot surfaces
- recovery of condensate was at ~66 %
- low air intake temperatures
- reduction of exhaust heat losses

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

- Insulation measures on hot surfaces for steam-, water- and condensate distribution: 15500 Euros investment for 517 MWh Gas savings per year
- Increase of condensate recovery to ~90%: 1500 Euros investment for 33
 MWh Gas savings per year
- Measures on intake system to reach air intake temperatures to 40°C: 3000
 Euros investment for 20 MWh Gas savings per year
- Heat recovery system on exhaust: 42500 Euros investment for 128 MWh
 Gas savings per year
- Various other measures

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

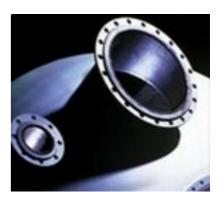
- Insulation measures on hot surfaces (implementation planning)
- increase of condensate recovery rate (implementation planning)
- Increase of air intake temperature is (considered for next cycles).

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

Strongest Non Energy Benefits lies in Water savings, but also Maintenance issues

Involvement of internal stakeholders

The steam audit was carried out jointly with the Energy Team. Non Energy Benefits were calculated where possible and considered in investment calculations.



HAW Linings GmbH http://www.haw-linings.com

Germany

Rubber materials and Steel products

300 Employees worldwide

Total (estimated) Investment

Measures for implementation:

€ 17000

Further measures considered:

€ 45500

Total (Estimated) Savings

Measures for implementation:

€ 31500 per year 570 MWh Gas/year

further measures considered:

€ 6500 per year 148 MWh Gas/year

Non Energy Benefits

e. g. Reduced Water Costs(included in savings calculation)e. g. Maintenance Benefits