## STEAM AUDIT - GE07

# **FACTSHEET**



#### Company's connection to energy efficiency

This company produces about 10.000 tons of pasta per year. It is an EMAS certified company and has high interests in becoming more energy efficient.

#### Steam system

The preheated fresh water is treated via a desalination and an osmosis system and flows into the feedwater tank. Together with the returning condensate this is collected in the feedwater tank. The feed water is fed to the boiler via a level control when needed. The steam boiler can produce up to 1,250 kg of steam per hour, which is fed into the steam distributor at a pressure of about 7 bar. Only from the steam distribution and from the pre-dryer, the condensate can be returned. In the other processes, the steam goes directly to the product and cannot be reclaimed or contaminated with the product and is therefore not suitable for further use in the steam process.

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

- Adding oxygen controls could save about 109 MWh/a and 4.232 €/a; invest costs ca. 20.000 €
- Lowering the exhaust gas temperature through an economizer could save about 80 MWh/a and 3.006 €/a; invest costs ca. 12.000 €
- Improvement of the insulation especially in the field of fittings could save about 54 MWh/a and 2.029 €/a; invest costs ca. 5.000 €
- Controlling blowdown via conductance and automating sludge could save about 9 MWh/a and 340 €/a; invest costs ca. 1.500 €

### Involvement of internal stakeholders

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

Germany

**Pasta Manufacturer** 

Pasta & Spätzle

>90 Employees

**Total (estimated) Investment** 

38.500 €

**Total (Estimated) Savings** 

9.607 €/a 252 MWh/a

#### **Non Energy Benefits**

Reduced water consumption Improved work safety Reduced CO<sub>2</sub> emissions