

### Companies connection to energy efficiency

The company is a participant of the long term agreements on energy saving that the sector has made with the Dutch government. The company agreed on 2% energy - efficiency improvement a year based on process-efficiency and chain-efficiency.

### Steam system

The company has got two gas driven steam boilers. One of 2.546 kWth and one of 3.300 kWth (burner sizes). They are generating steam at 10 and 32 bar(g). The steam is mainly used in the production processes.

### Steam system problems identified

The main problems which are found are: A high loss of steam through defective steam traps. The loss of steam heat exposes itself by the steam plumes above the boiler room. Some adjustments with the setpoints of the dryers and the discontinuous input of Reversed osmosis water are also identified problems that will cause heat losses.

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

Changing steam traps with steam traps without moving parts in the distribution system and improve testing is the main measure that is proposed. Other main measures are based on the cleaning and remodelling of the air-heat exchangers in the drying process and the change of set points within the same processes. The total savings will be 2.500 tons off steam per year this is 1.100 MWh.

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

The implementation of new steam traps will be implemented. New steam traps might have additional costs. The investments are negligible because of the fact that the steam traps will be replaced anyway. However new choices in steam traps may lead to higher costs. The estimated investments are 50.000 €.

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

The project leads to a higher security due to less heat loss and less steam in the condensate system and risk of water blow and also a CO2 reduction due to less demand of natural gas.

### Involvement of internal stakeholders

The process engineer, LTA (Long Time Agreement) manager and the technical manager are involved in the project and interested in reducing heat and steam losses and reducing risks.



The Netherlands

Flour

Food, Petfood, Feed and supplements

60 tte

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Total (estimated) Investment

€ 50,000

Total (Estimated) Savings

€ 5,208 p/m

208 ton steam p/m

Non Energy Benefits

Reduction of natural gas demand

Lower CO2 emission

Higher security