

# RURSUS OPTIMIZATION DRYING PROCESS

Rursus (Geldof Recycling) in Bruges is investing in an installation producing bobbins for pallets based on wood chips. The wood chips come from the company's own production in Wevelgem and/or Bruges. Indeed, the company produces residual and recycled wood from wood waste.

## CUSTOMER

Rursus nv

## ARCHITECT / DESIGNER

## LOCATION

Brugge

## SURFACE

0 m<sup>2</sup>

## BUDGET TECHNIQUES

## STUDY PERIOD

## IMPLEMENTATION PERIOD

## SERVICES

Feasibility studies & energy plans, Energy optimisation

## SECTORS

Industry

## RURSUS - OPTIMIZATION DRYING PROCESS

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INDUSTRIUM was asked to carry out a study of the envisaged drying process and investigate possible energy concerns and optimisations.

INDUSTRIUM recommended using the following best available techniques:

- Good insulation of the dryer
- Systematic monitoring and control of the drying process (using (wood) moisture meters)

- Use of frequency-controlled fans
- Use of heat exchangers (with heat recovery)

In addition, the profitability of a cogeneration unit for producing the heat for the drying process was investigated, as an alternative to the planned steam boiler.

If technically feasible, installing a CHP indeed appears to be a cost-effective measure. The various components (in particular the belt dryer) are chosen so that the installation of a CHP can be done in the most sensible way.

Indeed, the installation of the CHP plant itself is not currently an issue as it is a start-up company. Among other things, the sale of the end product must first ensure that production can run at full capacity. On the other hand, it always makes sense to have sufficient simple back-up systems for thermal energy in addition to the CHP. This certainly does not make the investments in the first phase, i.e. a steam boiler, superfluous.

By installing a CHP of approx. 2 MW electric, 68,782 GJ<sub>prim</sub> extra natural gas will be consumed on an annual basis and 131,746 GJ<sub>prim</sub> electricity will be generated, yielding a positive balance of 62,964 GJ<sub>prim</sub> as savings compared to the standard generation of heat via steam. The payback period of the CHP project is 3.9 years.