



3 goals achieved with pallets



CIRCULAR ECONOMY, ENERGY INDEPENDENCE, CARBON NEUTRALITY



THE INSTALLATION IN NUMBERS

Boiler	Global
Power	5.000 kW _{th} + 535 kW _{el}
Fuel	Treated wood chips
Production	Steam 7.500 kg/h at 19 Bar

A CIRCULAR ECONOMY PROJECT IN THE NETHERLANDS In Dongen (NL), a pallet manufacturer approached Uniconfort for an innovative project to be able to enhance its waste and become independent in energy production. Thanks to the installation of a steam plant, the company has acquired the title of "circular producer": the waste pallets are used as fuel to produce thermal and electrical energy for the production process of new pallets.

SUSTAINABILITY AND ORIENTATION TOWARDS THE FUTURE The project began with the customer's twofold need to reuse its own waste and replace its old boilers, both to be more energy efficient and to increase the capacity of its dryers. The biomass plant was manufactured by Uniconfort, from the preliminary design to the on-site installation, through constant collaboration with the customer and the support of its local partner in the Netherlands. Thanks to the plant, the company has become "carbon neutral" from an energy point of view and at the same time reuses waste in a circular economy perspective. A shredder machine has been installed in the building to shred the waste wood which is then transported and collected in the storage silo with Top Loader technology, the innovative system that allows greater storage autonomy than traditional systems. The boiler produces 5 MW_t used in the drying process of the pallets and in the heating system of the company (part of the heat is also introduced on a small district heating through which is sold to the neighboring company) and 535 kW_e used in the process or fed into the network when in excess. Every hour 1,500 kg of treated material in poor conditions are used: in a year about 11,000 tons of waste wood turns to energy. This material has proved to be an excellent fuel because it's dry and with a high calorific value.

CASE HISTORY PALLET PRODUCTION Dongen/The Netherlands

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BIOMASS PLANTS & CHP SYSTEMS



ATTENTION TO THE ENVIRONMENT Due to the usage of treated wood as fuel, it was necessary to implement the technologies for controlling emissions, to comply with the restrictive limits imposed by the Country. SNCR technology for NOx control and a continuous monitoring system for emissions and dust have been added.



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