

Dalkia Lens

Lens, France



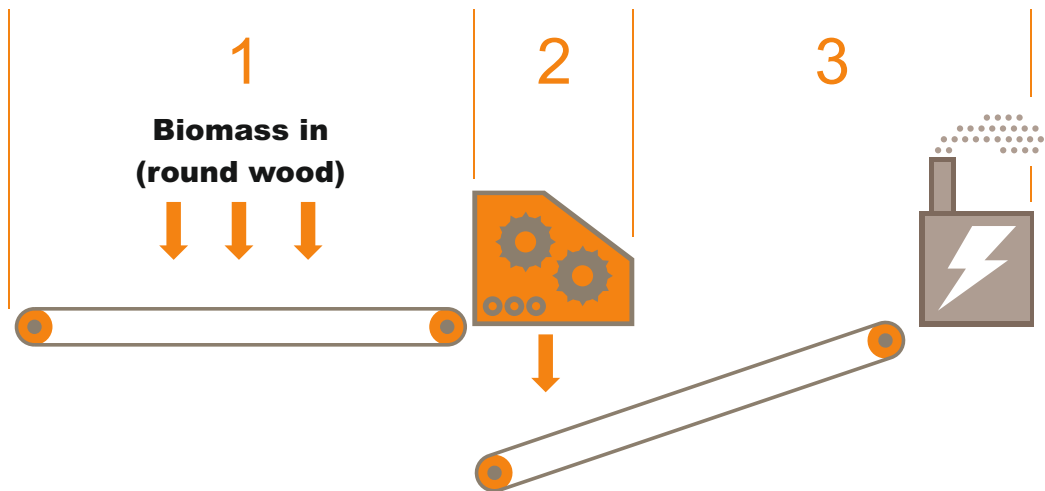
Dalkia is a subsidiary of the French utility company EDF. Dalkia has a heavy emphasis in renewable energy, so when they decided to invest in new 22 MWth power plant in the town of Lens, Northern France, a district with a population 350.000, it was naturally going to be biomass-fired. Dalkia Nord was already in charge of Lens district heating network when, in the year 2011, a decision was made to replace an existing gas fired cogeneration system with a new boiler-turbine unit utilizing wood chips as energy source. The new power plant is now producing 6,2 MWe electric power and falls under the canopy of the French Energy Regulation Commission's CRE3 program to boost major scale implementation of renewable energy.

In order to secure their biomass supply and steady flow of fuel to the boiler, Dalkia opted to install a high capacity, on-site biomass processor. Dalkia had already been acquainted to Saalasti technology – they operate the

power plant at Smurfit Kappa paper mill in Biganos - so the good experiences from that site with their Saalasti Chipper commissioned a year earlier, lead Dalkia to choose Saalasti Chipper 1212H, with processing capacity of 70 tons/hour to process their biomass. The chipper can process all kinds of biomass, trees, logs, demolished wood, pre-crushed stumps, bundles, pallets etc while it is optimized for long dimensional woody biomass, such as round wood and branches. The processed particle size is P63.

As a curious side note, the site is sandwiched between a nature reserve on one side and a residential area on the other. This posed special strain on meeting with noise emission regulations. Saalasti's success in curbing the noise is a proof of, not only Saalasti's long experience, but also of the fact that heavy machinery can be operated even in a delicate environment with right precautions to the satisfaction of all parties.

Biomass processing system



1	Saalasti Feeder: <ul style="list-style-type: none">- Size 1200 x 19700 mm- Noise red. tunnel 6700 mm- Metal detector	Loading by excavator with grapple Noise reduction tunnel extra long: residential area and a nature preserve in the vicinity
2	Saalasti Chipper 1212H: <ul style="list-style-type: none">- Installed in 2012- Main drive power 1 x 630 kW- Cutting tools: chipper knives- Capacity 70 ART/h*- Particle size: P63	Feedstock: 90 % round wood, 10 % forest residue bundles. Obtainable capacity through updates and optimization is 100 t/h*
3	Discharge Conveyor:	To the power plant (22 MWth / 6,2 MWe)

*Nominal capacity, softwood