



Perfect waste wood processing

Vecoplan designed and implemented one of the most powerful and efficient waste wood recycling plants in Great Britain for R PLEVIN & SONS LTD. In Hazlehead, each year 150,000 t of waste wood is recycled into high-quality fuel wood chips with a minimum proportion of fine material for a nearby 30-MW combined heat and power plant.



Fuel for a 30-MW biomass CHP

R Plevin & Sons Ltd., one of the biggest wood recyclers in Great Britain, supplies high-quality biomass wood chips made from recycled waste wood. The biomass is supplied to a local 30-MW biomass combined heat and power plant (CHP) in Sheffield, UK.

The CHP plant provides electricity for approx. 40,000 homes and is ready to feed hot water into a district heat network. To ensure that the power plant operates with maximum safety and efficiency, the fuel is subject to stringent performance overall process quality requirements in terms of purity and degree of size reduction.

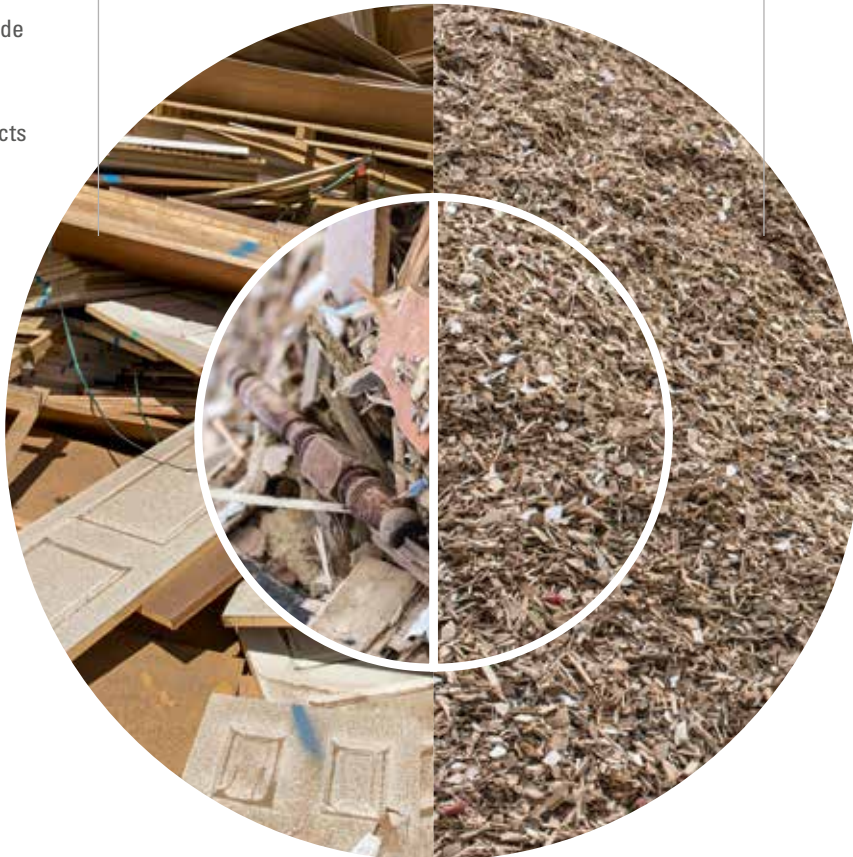
Vecoplan has implemented a suitable plant with high output quality and maximum energy efficiency. The plant performance totally fulfils the requirements of Plevin's customer to ensure compliance with all contractual obligations.



Input material

Waste wood

- From an extremely wide range of sources and disposal areas
- Includes foreign objects (metal, non-metal)



Output material

High-quality fuel wood chips

- Defined fuel wood chip size between 4 and 100 mm
- Free from metallic and non-metallic foreign objects
- With minimum proportion of fine material portion
- Complies with the fuel quality defined by Plevin

Completely from Vecoplan

From a single source

The entire plant was designed and implemented by Vecoplan as a complete provider. Intensive on-site support was ensured by contacts at the Vecoplan Ltd. at all times. The scope of service:

- Consulting
- Project planning
- Delivery of machines
- Installation
- Commissioning

High-performance overall process

All Vecoplan components in the Plevin waste wood processing plant are harmonised with each other in the overall process and designed for performance, efficiency and output quality. With a capacity of up to 80 t/h, the plant in Hazlehead is one of the most powerful in Great Britain. The Vecoplan components include:

- Scraper floor bunker
- Trough belt conveyors VFB
- Overbelt magnetic separator VÜB
- Disc screen
- Sorting cabin
- Re shredder
- Drag chain conveyors
- Eddy current separators
- Double screw conveyor
- Oscillating screens
- Truck loading station





High performance, high efficiency



Re shredder VNZ

- Special double-shaft re shredder for the re shredding of pre shredder waste wood
- Adapted for re-shredding as well as single-stage shredding
- Minimising of fines production by slow speed HiTorc re shredding (only 160 rpm)
- It's also possible to feed the re shredder directly with unshredded material
- Inclusive patented HiTorc-Drive (reduces the power consumption by up to 40 %)

Oriented to customer's benefits

Only shortly before the contract was awarded Plevin asked Vecoplan about an overall solution for a high-performance, efficient waste wood processing plant with high output quality and minimum fines production. On the basis of leading recycling and shredding technology, a corresponding plant was designed, implemented quickly and placed in service. The result: All the requirements were met and surpassed.

Compliance with the specified fuel requirements:

- Fuel wood chip size between 4 and 100 mm
- Minimum proportion of fine material
- Free of foreign objects

High energy efficiency of the entire plant

Intensive consulting and support by Vecoplan

Contacts on site through the UK subsidiary

The key to minimising fines production



„As Engineering Manager, I was convinced that the slow speed re shredding offered by Vecoplan, was key to minimising fines production. Vecoplan`s solution is also incredibly efficient, thanks to their patented HiTorc-Drive technology. The entire plant is fully automated and can exceed the specified 60 tph.“

Steve Ellison, Plevin Engineering Director



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