

AUTOMATED RECYCLING OF WASTE WOOD WITH UNTHA

Penzkofer Bau GmbH

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We expanded our production capacities and needed powerful and high-performance shredders to do so. With two UNTHA LR1000 and one UNTHA LR1400, we shred even very large pieces of wood quickly and efficiently – using the wood chips in our own heating system.

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» MATERIAL
Residual wood from production

» SHREDDER
LR1000 x 2, LR1400

» THROUGHPUT
**min. 630 kg/h,
min. 800 kg/h**





CUSTOMER

Penzkofer Bau GmbH, based in Regen, Germany, is a general contractor in the field of turnkey residential, commercial and detached house construction. The company's timber construction department produces, among other things, the solid timber walls 'Woodbloc', which are made entirely of solid, natural timber – without adhesives, metallic connections or chemicals. Even the nails and dowels are made of wood.

APPLICATION

In 2024, the company expanded both its product portfolio and its production capacities. This meant that new residual wood shredders were required. Penzkofer uses Holmag, Hundegger and TechnoWood systems. The new shredders needed to be integrated into these production lines to ensure smooth operations.

SHREDDING SOLUTION

An UNTHA LR1000 recycles residual wood cuttings from a Holmag machining centre. The shredder is fed either automatically or manually by means of an ascending conveyor belt. The second LR1000 is part of a TechnoWood processing line. The chipper is installed in a floor-level pit and fed with pieces of wood up to 900 mm long by means of a scraper. The third and largest shredding machine at Penzkofer is an UNTHA LR1400. This machine is also installed in a pit and is fed with pieces of wood up to 1,200 mm in length from a Hundegger joinery machine. All three shredding machines are started automatically when a certain fill level is reached and stop as soon as there is no more scrap wood in the shredding machine. This avoids idle times and reduces energy consumption. The feed belts are equipped with an emergency stop mechanism – if a light barrier is broken, the shredders are also stopped immediately. The built-in perforated screens ensure the wood chips are classified as G50 or P45S. These are then transported by a suction system to a wood chip storage area. The in-house wood chip heating system then ensures that the material is fully utilised.

REQUIREMENTS

- » Throughput: at least 600–800 kg/h
- » Shredding of large pieces of scrap wood
- » Space-saving integration into a fully automated plant concept
- » Energy efficiency and maximum safety
- » Minimal maintenance



We definitely recommend UNTHA. The cooperation was very good during the planning process and the construction, and we are absolutely satisfied with the performance of the shredders.

– Maximilian Ernst
Head of the Woodbloc
Department at Penzkofer
Bau GmbH

