“This UNTHA technology makes us 70 % more economical than if we were using diesel power and 30 % more economical than the conventional star-delta drive. The slow running cutting principle of this shredding system keeps the noise of our pellet production at a very low level and produces a very low amount of fine particles. The high flexibility of this shredding machine not only allows for the processing of category 1-3 waste wood but also of category 4. Beyond that we are able to sell the metals separated from the wood to the steel industry.”

- Thomas Breitsamer (Managing Director)
Breitsamer Entsorgung Recycling GmbH is a waste disposal company based in Munich, with an annual approved inbound quantity of 205,000 tonnes of waste for processing and storage. In addition to the in-house sorting plant for construction, commercial and production waste, the company also operates its own waste wood processing facility.

The challenge

Breitsamer wanted to exchange its diesel-powered hydraulic pre-shredder for an electric-drive, mobile shredding solution. The company was looking for a single-phase processing solution for 40,000 tonnes of waste wood per year, with a throughput of 35 t/h and a particle size of less than 120 mm. Breitsamer mostly processes A1 to A3-graded waste wood, but also A4-graded wood with metal inclusions.

The purchasing decision

The decision in favour of the XR3000C mobil-e was taken due to its unique combination of the energy-efficient UNTHA Eco Power Drive, a high level of mobility, and the option of producing different grain sizes using a single shredder. For maintenance and service, the mobile unit is taken from the machinery hall to the workshop located nearby, where all necessary works may be completed safely and with the appropriate tools.

Shredding solution

To fulfil the specified requirements in the best way possible, Breitsamer invested in an XR3000C mobil-e. The shredder comes equipped with a “timber package” for single-phase waste wood processing and is particularly energy efficient, thanks to the UNTHA Eco Power Drive. The specially developed shape of the blades ensures a particularly aggressive intake behaviour for the waste wood. The screens come with chip breakers, creating a homogeneous grain size without excess lengths. Thanks to the hydraulic quick-change screen system, the screen may be exchanged in less than 30 minutes. Wear protection surfacing ensures a long lifespan for the rotor as well as lower maintenance costs.