WESTERWÄLDER HOLZWERKE

# Wood waste disposal rethought

**Slabs with bark and splinters are shredded into dryable material directly in the sawmill**

Wood waste disposal processes in sawmills are often complex and require numerous conveyor systems and screens to separate sawdust and wood chips of various sizes. At Westerwälder Holzwerke, Rudnick & Enners implemented a completely new and, so far, unique wood waste disposal solution for the new bandsaw line.

& Martina Nöstler

In order to be able to process log wood of all diameters in a targeted manner, Markus Mann, founder and managing director of Westerwälder Holzwerke in Langenbach/DE, decided to build a sawmill for large-diameter log wood in addition to the saw line for small-diameter logs. The former has been in operation since December 2024. Mann estimates the target cutting volume at around 80,000 m³ of log wood a year in two-shift operation (see Holzkurier issue 12/2025, pages 12 to 13). Together with the saw line for small-diameter logs, around 200,000 m³ are to be cut each year in the future. The focus is mostly on the processing of softwood logs, including those with larger top diameters. However, the managing director does not rule out the possibility of processing hardwood logs: "Our machines – from the EWD log band saw to the post-cutting machine and wood waste disposal system – are designed for those, too."

Speaking of wood waste disposal: As already mentioned above, Westerwälder Holzwerke relies on technology from Rudnick & Enners, Alpenrod/DE. The two companies have been working together successfully for many years and value each other's expertise. Rudnick & Enners already supplied the pellet mill's machines and conveyor technology, including the pellet contact cooler (see Holzkurier issue 19/2025, p. XX). The disposal system connected to the saw line for small-diameter logs was also built by the systems experts. That is why Mann also opted for a solution from Rudnick & Enners for his new sawmill.

## Innovative disposal system

At Westerwälder Holzwerke, all the residual wood that accumulates in the sawmill is sent to the company's own pellet mill. "Together, we rethought wood waste disposal. At the beginning, the question was: What is actually needed and how can we implement it as efficiently as possible?" Rudnick & Enners's managing director Sven Rudnick recalls and emphasizes: "What was needed was a straightforward plant design, and chips and sawdust that can be dried efficiently. We produce these byproducts with a machine directly in the wood waste disposal system. This is a novelty. We have never implemented anything like it in the sawmill sector before." The special feature: Material which is ready for drying and has been produced from splinters, slabs with bark, and residual wood cuttings, for example, is transported directly from the sawmill to the adjacent pellet mill without the need for additional wet grinding. This made possible thanks to the Rudnick & Enners Twin Chipper.

## Straightforward solution

"Due to the limited space available, we implemented a straightforward disposal system," Rudnick tells us. The slabs from the band saw are transported to the downstream vibrating table via a sturdy conveyor belt. Rudnick & Enners installed resonance conveyor chutes below the edge trimmer and the NKU circular saw. Due to the close resonance tuning of the vibrating chutes, they are particularly energy-efficient and transport the slabs, splinters, and residual wood cuttings towards the Twin Chipper.

The RE-TC 500x1000 Twin Chipper has an infeed width of approximately 1 m and an in-

*The Rudnick & Enners Twin Chipper is the heart of the wood waste disposal system in use at Westerwälder Holzwerke's sawmill for large-diameter logs*

*The innovative wood waste disposal system significantly reduces conveyor routes*

**WESTERWÄLDER HOLZWERKE**

**Location:** Langenbach/DE
**Established in:** 2001
**Managing director:** Markus Mann
**Employees:** 100
**Cutting:** around 200,000 m³ of log wood (target for 2025)
**Pellet production:** 50,000 t/yr

*Rudnick & Enners's managing director Sven Rudnick and Markus Mann, managing director of Westerwälder Holzwerke (from left), have maintained a good working relationship for many years and have also developed solutions together*

feed height of 50 cm, allowing it to easily produce a dryable grain size for pellet production from all kinds of slabs, splinters, and residual wood cuttings from the saw line. Subsequent external infeed of material is also possible. The Twin Chipper in use at Westerwälder Holzwerke has an output of approximately 60 to 70 stere of dryable wood chips and sawdust an hour, and higher peak outputs are possible. "With this machine, there is no need for screening machines, which offers investment advantages. Also, we don't need additional buffers and conveyors for downstream wet grinding. This simplifies the entire material handling process. The chips produced by the Twin Chipper either enter the pellet production dryer directly or they go into a buffer upstream of the belt dryer," Mann explains and adds: "The chips from the Twin Chipper are very easy to dry." A bucket elevator and a chain conveyor from Rudnick & Enners are used to transport the chips. The Twin Chipper is a versatile machine: "We have customers who use this machine to produce either wood chips or sawdust. Others feed it with industrial wood or logs," Rudnick tells us.

Mann is very satisfied with the energy-efficient sawmill waste disposal system. Another advantage: "We have sufficient buffers in the raw material supply to the pellet mill. We produce around 50,000 t a year and, with the sawmill, we have enough raw material for an annual production output of 65,000 t," Mann says. //

*With its powerful drive, the Twin Chipper effortlessly shreds slabs and splinters, creating the perfect raw material for pellet production*