

L A B E W O O D

New big sawmill started up

One million m³ production site in the Czech Republic went into operation

At the end of December 2018, there were news from Steti: "We are already building."

The announcement was made by the company Labe Wood – a joint project of Eco-Invest, Unitimber, Holzindustrie Maresch and paper giant Mondi. In mid-March, the project obtained permission for trial operation.

✍ Martina Nöstler (translated by Eva Guzely) 📷 Labe Wood, Rudnick & Enners (1)

The name Labe Wood is derived from the location: Steti is located on the river Labe, which is Czech for Elbe. The sawmill is adjacent to Mondi's pulp factory which has a logistical advantage: The group buys all the wood waste. The sawn timber is marketed by Labe Wood.

€ 115 million for a new sawmill

Labe Wood invests around € 115 million in the sawmill – one of the most modern sawmills in the region according to the company. Cutting capacity is one million m³ a year in a two-shift operation. "This way, we create an enormous chance for the processing of domestic log wood in the Czech Republic," says Radim Strava, technical managing director of Labe Wood. The company wants to cut log wood, mostly from sources previously used for exports, without added value.

Construction work for the new sawmill started in December 2018. "On 19 March, we reached a decisive milestone: The project satisfied the necessary requirements and ob-

tained permission for trial operation," confirms commercial managing director Tomas Soltes.

The sawmill needs but a few suppliers. For this purpose, Labe Wood turned to producers of world-class technologies: The log yard, the infeed in front of the saw line as well as the two sorting plants for main assortments and sideboards are supplied by Springer of Friesach, the debarker is produced by Valon Kone of Lohja/Fl. Linck of Oberkirch/DE supplied the chipper canter line for a cutting capacity of up to one million m³ a year. Rudnick & Enners of Alpenrod/DE are responsible for the entire waste disposal system as well as the online connection to Mondi's pulp factory. A dedusting system by Scheuch of Aurolzmünster guarantees clean air in the halls. The transport of logs and sawn timber is done with machines by Volvo, Liebherr and Kalmar. The company already obtained permission for the drying chambers which have not been built in the first phase of construction, however.

Start as planned

After a long planning phase and about a year of construction work, the first logs passed through the Linck line in February. "We began assembling components in September and started up the saw line as planned," explains Alexander Gleich who supervises the project for Linck. Since the end of March, the official trial operation is underway. The Linck line is designed for logs of 3 to 5 meters in length and a top diameter of up to 50 cm.

The presorted logs reach the saw line via a Springer infeed system. A special feature of this system: The logs are debarked immediately before being cut. First, the wood passes the Microtec 3D scanner. Taking the data into account, the Linck optimization determines the best possible cut. According to the cutting pattern, the system turns the log in the optimal position for primary processing. The first VM 50 chipper canter generates a two-sided cant. After that, the wood is turned by 90 degrees and is conveyed on to another VM50 chipper canter for secondary processing.



Linck line: Infeed of the primary chipper canter with a pre-centering unit and a pair of double rotating rollers for automatic turning



Always keeps an eye on supply: The saw line operator sits facing the log infeed



Labe Wood's new office building in Steti



A look into the sawmill hall with the new Linck chipper canter line

This chipper canter's infeed device is equipped with a model optimization which can position the model diagonally for a better yield. Next, another 3D measurement is done. On the basis of the data obtained, sideboards are optimized in their width, position and length. Optimization is not done based on volume but on value by means of a customer-specific database.

The implementation of the optimization result is done by the first profiling group which consists of two VPM 450 profiler units and a CSMK375-A1/B1 saw unit. Labe Wood opted for the VPM 450 as a profiler unit because it produces surfaces without tear-outs. This is possible thanks to two saw blades per side which are mounted at right angles. The directly connected CSMK375-A1/B1 saw unit separates up to four sideboards.

Up to eight sideboards in total

The cant is again turned by 90 degrees and conveyed on to the second profiling group. This machine group consists of the same machines, i.e. two VPM 450 profiler units and a CSMK375-A1/B1 saw unit. This way, up to eight sideboards can be produced in primary and secondary processing.

After turning the wood again with the DV56 device, one of the special features of this Linck line follows: The horizontal and vertical separation of the main assortments which is done separately. For this purpose, a machine group is used which consists of the HKM360-A1 horizontal circular saw and a MKS 350 double-arbor circular saw. Since the sideboards were already produced and separated in the previous machine group, the horizontal cut can be made before the

LABE WOOD

Location: Steti/CZ

Founded: 2018

Managing directors: Radim Strava and Tomas Soltes

Investors: Mondi, Holzindustrie Maresh, Eco-Invest, Unitimber

Investment: € 115 million

Employees: currently 130, 160 at full capacity

Cutting capacity: 1 million m³/year

Products: sawn timber in all common dimensions

Sales markets: Europe and North Africa



Radim Strava, technical managing director of Labe Wood, in the new production site in Steti



Sideboard separator with dust cover connected to a Scheuch extraction system

vertical cut. This significantly increases the flexibility and variability of the cutting pattern design, which makes it easier to adapt the cutting pattern to different markets and their respective requirements. Gleich mentions another special feature of the system: "With all units, i.e. the chipper canter, the profiling units or the double-arbor circular saw, the people responsible at Labe Wood opted for the strongest and most stable versions which Linck has to offer."

Good collaboration – individual concept

Rudnick & Enners is responsible for the entire wood waste disposal in the sawmill. The waste disposal system is designed for more than 700 loose cubic meters of wood chips per hour. Sawdust and wood chips are collected below the Linck saw line with RE-RB roller belts and then transported to the Rudnick & Enners screens with high-performance trough chain conveyors. The screens separate sawdust and wood chips.

The sorting line disposal is connected, among other things, by means of Rudnick & Enners RE-RGF-O tubular belt conveyors. "These are characterized in particular by easy maintenance and efficiency combined with a high throughput," explains Sven Rudnick, authorized representative at Rudnick & Enners. The waste disposal specialist installed a total of five screening machines of the latest design for separating the material in three fractions. The flow of material from the saw line and sorting can be distributed to the screening machines in a variable and load-dependent way.

When designing the sawmill, attention was paid to a solid and dust-optimized design and redundancy. For the shredding of the residual wood, Rudnick & Enners installed three drum chippers, inclu-

ding the RE-TH 500/1.050/9. Robust bucket elevators transport the sifted wood chips and sawdust to the automatic box loading. "The filling of the boxes is optimized in terms of demand and fill level and is done by means of conveyor belts," says Rudnick. An online connection of the wood chips fraction with Rudnick & Enners tubular belt conveyors between the sawmill and the adjacent Mondi pulp mill over a distance of around 700 meters is currently under construction.

In addition to the plant technology, Rudnick & Enners also supplied the entire switching and control technology including the complete visualization.

Extensive construction phase

At various times during construction, the project employed around 300 companies from the Czech Republic and several other European countries and gave work to more than 1,400 people, most of whom came from the region, according to Labe Wood. Additionally, the project had many indirect positive effects for local suppliers from segments like accommodation, transportation or restaurants.

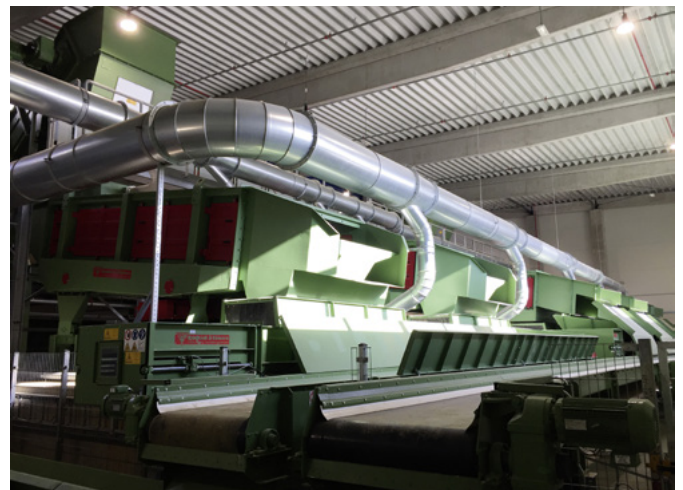
Apart from the already mentioned suppliers, Labe Wood thanks its most important partners for the excellent work and coordination: The construction work was carried out in the highest quality by a consortium of Strabag and Metrostav. The timely installation of technology in the desired quality was made possible by the companies Axis, ISE, Wikbud, Fischer Elektro and Oratec. The IT infrastructure services were provided by Timbertec, Softip as SAP provider and Uniprogram Solutions as system integrator. And last but not least, Bilfinger Tebodin provided personnel for the construction site management, and PMC Consulting, Elite Permitting and Inspekt-Servis provided consulting

RE Rudnick & Enners
Maschinen- und Anlagenbau GmbH

We thank the company **Labe Wood** for the good cooperation!

- pelletising plants
- sawmill technology
- grinding machinery
- drying systems
- screening machines
- conveyors

RE Rudnick & Enners
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Screening for three fractions with RE-RS rotating screeners by Rudnick & Enners



Also provided by Rudnick & Enners: Box loading optimized in terms of demand and fill level with RE-MB conveyor belts

services. Sberbank ensured the co-financing of project investments and the required working capital.

Currently, Labe Wood directly employs 130 staff. "In the coming quarters, we are going to focus on increasing production and raising the number of employees to 160," explains Soltes.

The current situation which resulted from the spread of the coronavirus also had an impact on Labe Wood. "So far, we are glad that none of our employees has been infected. Our main focus is on the health of our employees," emphasizes Soltes. Due to the developments caused by the corona pandemic and restrictions imposed by the Czech government, Labe Wood had to temporarily postpone the inaugural ceremony which was scheduled for 25 March. The company hopes that the current situation will calm down soon and that Labe Wood will have the possibility to organize an inaugural ceremony at a new date so as to be able to celebrate with its partners and guests its success story and the milestones it reached.

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Transport of wood chips and sawdust with RE-GBW bucket elevators