

Drying *with* acoustic protection

The Bürk sawmill invested in a power plant as well as in four of Mühlböck's Type 1306 Pro dry kilns with a heat recovery system.

Since 2017, Daniel Bürk has been investing in the modernisation of his sawmill in Seebach, Germany. Four years ago, the sawmill line was modernised (refer to *Holzkurier*, edition 20/2017, pp. 26/27), then added a sprinkler system in 2018 followed, last year, by a planing unit and an expansion of the storage building for cut timber, catering for lengths of up to 100 metres.

This year, the new power plant entered service. It consists of a wood gasification unit and a combined heat & power (CHP) plant from Burkhardt (refer to *Holzkurier* edition 44, p. 19) and four dry kilns from Mühlböck's Eberschwang plant. In 2021 the company plans to acquire another wood gasification unit and to expand its solar power plant.

Its own kilns instead of outsourcing the drying operation

In 2018, Bürk began planning and sending out invitations to tender for its dry kilns and power plant. "I looked at two of Mühlböck's Type 1306 Pro drying units and was quickly convinced by the concept of its heat recovery system", acknowledges Bürk. According to the manufacturer, the unique layout of its kilns cuts the need for heat by up to 25% as well as its power consumption level, all without any restrictions on the drying process. "It was clear that we had to build dry kilns in order to operate successfully on this market", explains Bürk. In the past, the Bürk sawmill outsourced the drying of all of its cut timber. Once its own kilns had been commissioned, it saved 500 truck journeys a year.

Support with building approval and noise reduction

Right from the building application stage, CAD drawings from Mühlböck were submitted. One year later, in December 2019, building approval was granted. Mühlböck's principal agent in Germany, Lauber, based in the German town of Alfdorf, was to deliver the plant. Construction work started in February and commissioning took place in July.

Sound insulation is a central topic at the Bürk sawmill. Lauber helped to configure the kiln design on the basis of the expert opinion. "Fortunately, they have experts who really know their stuff when it comes to noise reduction", affirms Bürk. To reduce the emissions of noise and heat, Lauber recommended double insulation of the kilns using an additional 200 mm layer of mineral wool insulation. The alternative to this double wall would otherwise have involved a reduction in the performance rating of the kilns.

Small kilns – to cater for all requirements

"The kilns, one measuring 80 m³, two measuring 50 m³ and one measuring 60 m³ are also the perfect size for drying smaller batches to state-of-the-art standards", advises the Lauber CEO Michael Lauber. The high levels of power saving result from the combination of the installed heat recovery system and the air intake and discharge system on the 1306 Pro. In addition, the uniform distribution of air is also of decisive importance to the drying quality. "I can dry my entire product range to the same quality in all of these kilns", recounts Bürk. Handling of the dry kilns is a simple and structured task for Bürk, and service from Lauber and Mühlböck is good and prompt. "The documentation from Mühlböck is outstanding and the K5 control software is structured very clearly. It is clear to see that these kilns come from the market leader", emphasises the sawmill proprietor.

The sawmill produces and refines coniferous timber for timber construction, packaging and pallets. The focus is on Douglas fir. For the most part, this timber is supplied from southern Germany in long strips. "We are a specialist for mezzanine solutions and we offer supplements to the mass-market range of products. Very small and very large dimensions are what we do", informs Bürk.

- 1) *The Type 1306 Pro dry kilns from Mühlböck are characterised by great power savings and drying quality*
- 2) *Three kilns have lifting-sliding doors (right) and one has a lifting-folding door (left)*
- 3) *Sawmill superintendent Justus Könecke transports cut Douglas fir timber to the dry kilns*

