

# Strong links to a line's success

---

21 January 2013

Holtec GmbH & Co KG has been specialising in log handling systems for over 40 years and has supplied its equipment to both sawmills and panel mills throughout Europe – and beyond. Mike Botting visited its Hellenthal HQ

Founded in 1970, Holtec is located in Hellenthal, around 80km from the city of Cologne (Köln).

The company today employs about 150 staff and turns over €30-35m/year.

Of that turnover, 80% is in log handling for two markets: sawmills and wood based panels. Historically, sawmills were the main customer base, but more recently the company has put more emphasis on the panels side, according to general manager Alexander Gebele.

"In the past five or six years, we have become the main supplier to the top three European panel makers, Kronospan, Egger and Swiss Krono," said Mr Gebele.

Holtec supplies complete logyard systems as a turnkey contract from foundations to the first log, if required. It manufactures log chain conveyors and stair feeders, log singulators and sorting/grading lines, flake conveyors and log cross-cutting lines. Those cross-cut saws can be big - up to 2.5m in diameter.

The company also builds log soaking ponds and de-icing units for countries which experience the harshest winters.

"De-icing is a special feature for us and we de-ice after debarking so that the bark is not wetted before the furnace," said Mr Gebele.

The de-icing is carried out in enclosed conveyors with hot water nozzles in the top and the used water collected from the bottom.

Holtec cooperates with chipper and strander makers such as Leonhardt, Pallmann and Carmanah, and with crane suppliers, to incorporate their machines into a complete woodyard system.

As well as turnkey contracts, Holtec offers upgrading and modernisation of existing log handling/woodyard systems.

One of the most recent contracts for the company was for Kronospan's 200,000m<sup>3</sup>/year expansion of its OSB mill in Brasov, Romania, for which it ordered its second debarker and strander line from Holtec.

Again for Kronospan this year, but this time at Egorievsk in Russia, Holtec supplied a new debarker line. This was necessary because Kronospan was relocating the OSB line of Grant Forest Products from Timmins, Ontario, US and had modified the log length used.

Altogether, the Kronospan Group has purchased systems for 10 plants from Holtec for OSB lines, and one for an MDF line, in places as far apart as Luxembourg, Czech Republic, Romania, Latvia and Russia.

One of these lines was supplied through Dieffenbacher as part of a complete-line contract for Kronospan in the Czech Republic, illustrating that Holtec works mainly as an independent supplier, but has also operated in cooperation with the complete plant suppliers Dieffenbacher and Siempelkamp.

The Swiss Krono Group has purchased log handling equipment from Holtec for its panel manufacturing plants in Russia (Scharja), Ukraine and Poland. This included an infeed line for chipping for MDF as well as equipment for OSB lines. For instance, at Swiss Krono's Zary OSB plant in Poland, Holtec supplied the handling for the new 150tph Leonhardt chipper. The line started up in early 2012.

The Sonae Group, another major panel maker, has purchased equipment for its OSB logyard and debarking and flaking lines at its Glunz factory in Nettgau, as well as equipment for two sawmilling lines in Portugal.

OSB logyard and debarking and flaking lines at its Glunz factory in Nettgau, as well as equipment for two sawmilling lines in Portugal.

Egger, Norbord and Homanit are also clients of Holtec and last year it renovated the whole woodyard for Egger's Rion, France, particleboard line. This involved a new Hombak flaker and an existing Pallmann chipper brought together with one CE (European certification) certificate.

Again for Egger, Holtec supplied its Radauti, Romania, OSB plant in the last year with a line incorporating two Leonhardt debarkers and two Pallmann stranders.

"We are particularly successful in OSB because there is a high percentage of log handling in those mills. It is also very complicated log handling because bundles of logs have to be delivered to the strander in the correct form and presentation," said Mr Gebele. "The log handling in the last eight investments in OSB in Europe, since Egger's Wismar plant in 2000, right up to Egorievsk in 2012, were all done by us.

"We are now looking to expand into the whole [panel] market. For example, we supplied Homanit's MDF line this year - our first [involvement] in that panel product."

Holtec describes itself as a 'System Integrator' and can meet CE standards for the whole system, including the chippers/ stranders. "We will supply whatever the customer wants," said the general manager. "The big panel making groups tend to buy machines individually and need a good company to coordinate it all, otherwise the woodyard can become the 'bottleneck' for the whole factory. We offer one set of drawings, one engineering package."

In the past, some panel makers have not considered this aspect carefully enough, said Mr Gebele, treating log handling almost as an afterthought. But the equipment has to be strong to withstand the battering by heavy logs and cheap systems often fail, stopping the whole panel production line.

"All our equipment comes with performance guarantees. For our chains, we use 827kN breaking-strain links, bought from a Canadian specialist manufacturer. Some mills operate at -40 or -50degC and the chains have to be strong to withstand those temperatures. We also use thousands of bearings and they must be strong as well.

"Our hydraulic and electrical systems are boxed in against extreme weather conditions, assembled here in Hellenthal and supplied to site as modules. So we see a big market for us in modifying and upgrading lines to improve log handling and its reliability."

Talking of strength, Mr Gebele said that his company was the first to supply chain conveyors for logs instead of the commonlyused belts. He said that the belt has a life of about three months with heavy logs with sharp-edged branch stumps (especially beech logs) being dropped on them, while Holtec's chains typically last five years or more.

In 2012, Holtec operated as a subcontractor to Siempelkamp on the OOO DOK OSB line in Karelia, supplying the complete woodyard, including log pond, and a Sennebogen crane on rails, custom-designed by the crane maker to Holtec's specification, to lift logs from the pond and onto the conveyors.

Taking advantage of its sawmill background, Holtec won a direct contract from Swedspan in Orla, Poland, for all the log handling for its 300,000m<sup>3</sup>/year sawmill and associated MDF line. The logs had to be sorted for sawing or MDF production.

Flake conveyors present a particular challenge because of the low-weight, highbulk nature of the material, which requires very wide conveyors, explained Mr Gebele.

"Existing equipment on the market led to jamming, so we used our welded-link chain conveyor to drive a metal plate with scrapers to spread and move the strands along. Egger ordered 650m of this new conveyor."

A new offering from Holtec is a combined x-ray/optical scanning system for logs to detect knots and defects to grade the logs. This system can operate at up to 150m/min and the first such line was due to be installed at the end of

A new offering from Holtec is a combined x-ray/optical scanning system for logs to detect knots and defects to grade the logs. This system can operate at up to 150m/min and the first such line was due to be installed at the end of 2012/beginning of 2013.

Holtec's main factory remains in Hellenthal but it also has a workshop in Dresden in eastern Germany. As stated earlier, the chains are imported from Canada, but everything else is produced inhouse, including all hydraulic systems and electrical controls.

A panel manufacturing line is only as efficient as the least reliable of its components and some inexperienced manufacturers may forget that. Log handling may look simple and something that can be 'homemade' on site, but there is a lot more to it than that. And the failure of cheap, sub-standard equipment can certainly bring a whole factory to a standstill.



*Kronopol, Zary with  
crane feeding  
Leonhardt chipper line*



*chain conveyor at  
Egger's MDF plant,  
Wismar, Germany*



*Kronopol OSB  
Leonhardt chipper line*



*flake conveyor at Egger  
OSB, Radauti,  
Romania*



*debarker line at Egger  
Radauti;*





*stair feeder, Egger  
Radauti.*



*Three-channel de-icing  
unit at Egger Radauti*