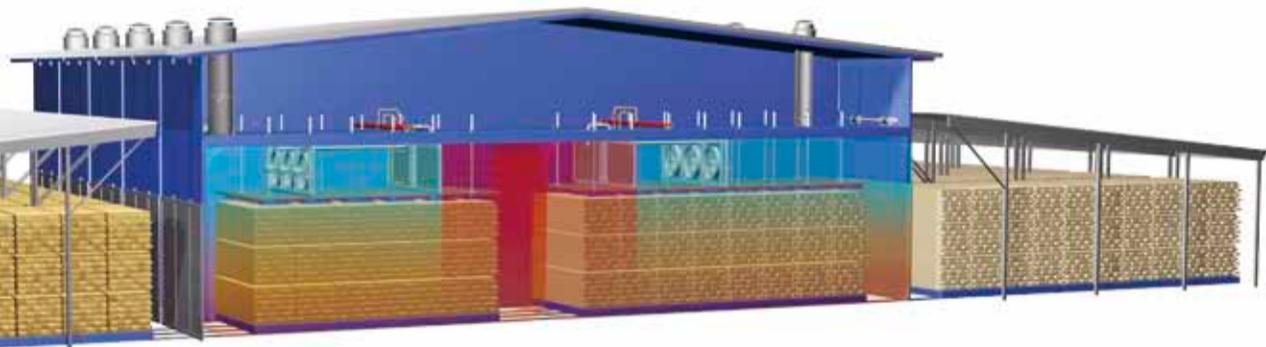


HEINOLA news

HEINOLA SAWMILL MACHINERY INC. customer magazine



KARI KIISKINEN, Managing Director

HEINOLA KILNS heating up in Otava



HEINOLA chamber kilns are already up and running at Versowood's Otava sawmill. An industrial trial run was carried out to a schedule and the drying results matched the projected results.

In autumn, we supplied Otava with two drive-through chamber kilns. The chambers were installed as the end kiln alongside the current kilns on the current frame crosshead line.

We have worked in close collaboration with Versowood for a number of decades and, on the basis of this, Versowood had confidence in HEINOLA's ability to supply kilns as well. We are proud of this level of confidence and are happy to publicise it. During delivery of the kilns, Versowood's people were able to have a say in finding a customised solution to connect the automation system and its user interface.

The kilns were designed by HEINOLA and form part of the comprehensive HEINOLA SAWMILL SOLUTIONS product programme.

The kiln structure is made completely of stainless steel and is constructed at the installation site using domestic components. As a heat exchanger, we use copper-aluminium sheet radiators and the blasters have 1600 mm diameter adjustable impellers. It is hoped that the baseline capacity of the new kilns will be about 15,000 m³ of heavy timber per year.

The stainless steel kilns are durable and maintenance-free. The outer walls and roof of the structure are insulated with glass fibre and the walls are clad with profiled sheeting. The kiln doors are insulated and made from stainless steel sandwich elements, measuring 6.5 m x 5.5 m. The doors are opened and closed using an electro-hydraulic door transfer device.

HEINOLA's own HDC-kiln automation manages the drying process, the progress of which can be monitored on a display screen. Electronic switchboards are located on the kiln roof connecting to the electric room and the kiln supervisor's control centre. The drying process can also be followed via remote control through the network. ■



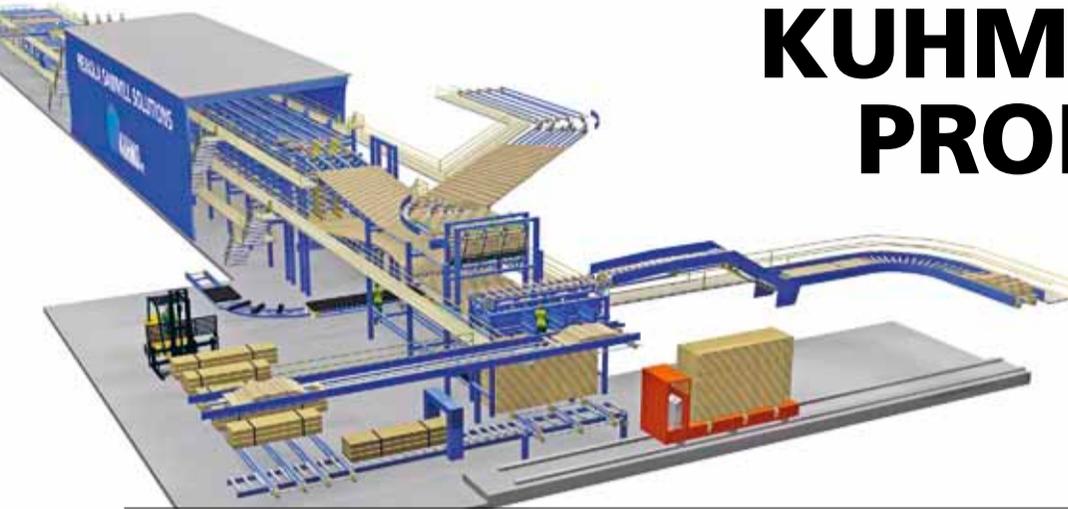
CREATIVE SOLUTIONS in challenging situations

THE INDUSTRY and our customers accordingly are now struggling in continuously changing and challenging market situations. The uneasy economic situation has its own impact on the operations. It is thus understandable that investments in new machinery have been limited. A change for better is not predicted to happen until 2013.

In the current situation we have, however, completed a few bigger deliveries as well as developed both our products and activities. These latest deliveries have also been important to us in launching new technology. In this issue we tell about our latest work.

Just now HEINOLA is dealing with a large-scale delivery to Lesosibirsk, Russia. The delivery includes two green sorting plants. In light of this delivery we can optimistically direct our attention towards the ongoing year and also towards the ever interesting Russian market. ■

HEINOLA technology used in the overhaul of **KUHMO'S GREEN PRODUCTION**



FOR ABOUT two years, HEINOLA has been continuously involved in a project to overhaul Kuhmo Oy's green production operations. Over the course of the project, the automation of the original green sorting plant supplied by HEINOLA was brought completely up to date. Once this had been completed, the building of a new green sorting plant alongside the current one began.

The new green sorting plant is big, both in terms of size as well as the number of features. In physical terms, the plant measures 160 metres in length when taking into account the new sticker stacker machine at one end of the plant. The plant sorts the sawn timber from the two Kuhmo saw lines



according to the specifications of the customer's order.

In the sorting area, the central boards of timber from the small wood line and main line are sorted simultaneously. The side boards are now sorted mainly in the old sorting plant. The plants can also be used interchangeably. Sorting is carried out using Finscan's automatic camera sorting system. Cutting is done by a trimmer and a servo-controlled positioner for non-uniform cutting sizes.

The plant has 10 horizontal bins for collecting the boards destined for stick stacking. HEINOLA automation manages the production data of both sorting plants and directs those boards destined for stick stacking through drying kilns before they are sent on to the sticker stacker as specified by the production programme.

In place of the traditional single unloading conveyor, there are two unloading conveyors between the sorting bins and the sticker stacker that unload the bins simultaneously. In turn, these automatically pass sawn timber from the surfaces to different

sticker stackers according to the production programme.

Due to the demanding layout of the plant, streams of timber are alternately conveyed horizontally and vertically using conveyor belts during the process. One single process supervisor works in the sorting plant. The sorting plant can comfortably process 200,000 m³ of sawn timber per year. The production design speed is 160 pieces per minute.

A new sticker stacker has also been installed at the end of the plant. The sawn timber can be transferred automatically from the bins to either the old sticker stacker or the new plant. The new sticker stacker can be used to lath packages into either traditional kiln loads or shipping-sized packages. The appropriate sticker types are automatically dispensed from lath cartridges for the selected stick stacking style according to the production programme. The package press and wrapping mechanism are situated in their own line alongside the new sticker stacker. One person



carries out the lathing on the sticker stacker plant while another oversees the feeding of the laths. HEINOLA also supplied two new kiln frame crossheads as part of the renovation project.

Many different conditions were experienced with the customer over the course of the project. The most challenging conditions affecting work in Kuhmo were extreme freezing temperatures and heavy snow during winter. The new plant is already running at full capacity and Kuhmo Oy's already expert staff have been trained to carry out these new operations.

After implementation of the new plant, Kuhmo Oy has set a new record in one-day production. The record is now ca. 2,000 m³ sawn timber per day. ■

HEINOLA delivered a new green sorting plant to the UPM Alholma sawmill in 2011. The installation and implementation of the plant was carried out at the end of the year. Today, the green sorting plant is already in production.

The reason for the investment was the customer's wish to replace their two out of date sorting plants with one plant. At the same time, the working environment and the ergonomics were updated to fulfill today's requirements.

The sorting process itself also became more effective because the plant was equipped with an automatic camera sorting system delivered by Lisker. The customer moved the disused

sorting bins from their other sawmill to Alholma.

The sorting bins were transported in three large parts by Silvasti's special transport through Finland, and they were mounted on the plant directly from the truck platform in just three days.

The sorting plant infeed is equipped

with a storage area between the sawline and the green sorting plant as well as with an unscrambler with versatile adjustments. The lug gap on the sorting table is short in order to keep the running speed low although the handling capacity of the pieces is high. The automatic cutting based on grading

UPM ALHOLMA modernized the green sorting plant

is done steplessly with an adjustable fence and a trimmer. The plant has already fulfilled the expectations and reached the required production level. The sorting volume is over 70,000 pieces/day. Correspondingly, the sawing volume is about 1100 m³. The green sorting plant is controlled by one person.

The plant is equipped with a new green sorting automation system by HEINOLA. The number of chain drives has been decreased and they have been replaced by electric synchronous drives. The automation delivery includes also reporting of production data transferred to the sawmill's production control system. ■



EL COLORADO'S edger going full steam ahead

OVER THE SUMMER and autumn, the Chilean Arauco Group overhauled its 20-year-old saw in El Colorado by upgrading elements including the saw feeder system, the saw line, the edger and green sorting. HEINOLA supplied the sawmill with a new ASY801-ME403-model edger optimiser for edging single-phase band-sawn boards, which is fitted with two-sided HEINOLA profile measuring equipment and a three-blade edging saw.

In addition to the two-sided measuring equipment, another special feature is the function that automatically turns over every blank in front of the operator, so both faces can be estimated visually before the shape of the blank is measured. Furthermore, after edging, each optimised board is branded with a UV mark for automatic sorting later at the green sorting stage.

The commissioning of the edging equipment and the training of production staff took place at a rate of knots in October. The local production staff are already proficient enough to take care of the maintenance and everyday use of the equipment independently. ■

News from THE KÅGE SAW LINE, SWEDEN

Jens Flodin,
Norra Skogsägarna



AFTER a combined investment of SEK 165 million, Norra Skogsägarna's saw line at the Kåge Sawmill in Skellefteå, Sweden, which was commissioned almost a year ago is now in full operation and the staff are fully up to speed in using the equipment.

The majority of the investment went into the new saw line supplied by HEINOLA, replacing the previous small and heavy timber saw lines. Fitted with an active cross-sawing action, the full profiling saw line is used to cut logs with a diameter of 105-550 mm and despite this the line can fit into a 50 m long space.

That they specifically chose HEINOLA's saw line is no coincidence. "Naturally we looked at a number of different suppliers, but after visiting HEINOLA's demonstration sawmills we were certain of the usability of this equipment," says Norra Skogsägarna project manager Jan-Olov Flodin. "Also, the fact that HEINOLA were able to offer a full profiling line for the limited space that we had available confirmed our decision," he adds.

A year after the commissioning, we can say that everything has gone as expected. The saw is in full operation and all of the functions have been phased in gradually. In addition to the fact that the feed speed and capacity are now greater than those of previous saw lines, the operators really appreciate

the improved cross-sawing and the shorter re-calibration times. The sawmill is also quieter and there is less dust, which is naturally of great benefit to the staff.

"We ourselves have carried out a fair number of control tests. We have checked the dimensional accuracy, among other features, and verified that the promised measurements are achieved and HEINOLA's saw line is fully comparable with other leading suppliers' saw lines," says Jens Flodin, who is responsible for quality control. "We have also noticed that the volume of approved woodchips is now higher than it was with our old saw."

The sawmill staff and customers alike have noticed both an improvement in quality and the opportunities brought by the new saw line. Fast re-calibration times offer the opportunity to adjust the settings to the specific wishes of the customer. ■



HEINOLA supplies green sorting plants to LESOSIBIRSK, RUSSIA

AT THE END of November, HEINOLA will deliver two green sorting and two sticker stacker plants to the Krasnoyarsk area in Russia as part of a signed supply agreement. The facilities are being installed alongside an LDK-1 saw in the town of Lesosibirsk. The supply deal includes separate green sorting plants for centre pieces and boards, as well as sticker stackers for both plants.

The sorting plants can process about 500,000 m³ of sawn timber per year. The plants are operated in two shifts. Timber is sorted automatically, with centre pieces sorted into 30 bins with low drop height and side boards sorted into 35 such bins. Centre pieces are sorted according to dimensional measurements, and side boards, in addition to sorting by measurement, are also sent for cutting according to wane. Cutting is done with a trimmer.

The plants are equipped with modern HEINOLA automation and control systems. Installation of the delivered plants will begin

in Lesosibirsk in early autumn 2012 and they will start up operations by the end of the year. The customer will be responsible for the installation of the plants.

HEINOLA and the customer have a good long-standing relationship as the customer has previously bought a number of Plan-Sell sorting plants constructed by Heinola experts. The plants have served the customer well over the past decades and now new sorting and sticker stacker capacities are being built with HEINOLA plants.

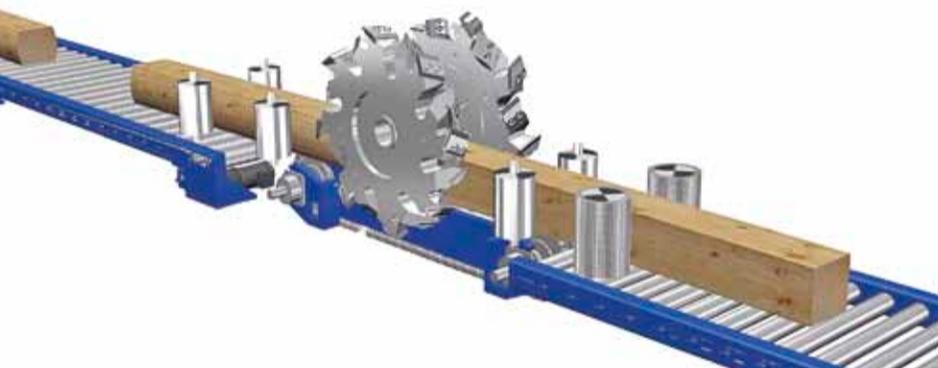
The total value of this delivery by HEINOLA is about EUR 6 million. HEINOLA's delivery is part of the new LDK-1 saw facility, the overall delivery of which is being carried out by HEINOLA's sister company Hekotek AS. Hekotek is based in Tallinn in Estonia. The supply agreement for the facilities includes two Hekotek saw feed systems, two Veisto saw lines, Valo bark stripping machines and HEINOLA sorting and sticker stacker plants. ■

Controlled active CURVE SAWING

IN HEINOLA'S patented curve sawing system the cant is fed into the secondary breakdown's chipper canter according to the curvature data optimised individually for each cant and received from the modern log or cant scanner. The rollers in front of and behind

the chipper canter are controlled based on this curvature data. The same information is also used in controlling the profiling and secondary breakdown processes. This curve sawing function can be added to the existing HEINOLA saw lines with minor mechanical modifications of the equipment. In addition, the line control and automation system is modified to handle the new curvature data. ■

CONTROLLED
ACTIVE
CURVE SAWING –
BETTER YIELD,
BETTER BLADE
DURABILITY



Haretek Oy's
newest drum chipper
HEINOLA 1310 ES

HEINOLA 1310 ES

OUR NEW mobile chipper model HEINOLA 1310 ES was presented at the METKO fair in Finland in the autumn of 2010. So far we have sold over half a dozen pieces of this HEINOLA's biggest mobile chipper model and the users have been extremely satisfied. The first units have produced well over 100,000 loose m³. In addition to the chipper's high capacity and durability, it is also well-known for its cleanliness.

One of the HEINOLA 1310 drum chipper was delivered to Haretek Oy in Huittinen, Finland at the end of May in 2011. The chipper was mounted on a FH Volvo truck. The company's owner Jouko Hakala has years of experience in chipping.

"Our company started operating in the chipping trade at the turn of the century. Our first HEINOLA

97RML chipper was in use for over 10 years. We also have experience using products from other chipper manufacturers. With this new HEINOLA chipper the produced chipper volume is substantial and the maintenance costs are very reasonable. In addition, the fuel consumption is lower than with the other brands I have used.

Due to the chip accelerator and the new design of the feeder, the chipper's impact on the environment is minimised and a lot of time is saved. The trucks are ready to leave after chipping without having to go through the time-consuming process of cleaning the chipping area.

Overall, the chipper has proved to be a reliable tool. There is no need to spend time doing repairs", says Jouko Hakala. ■

HEINOLA AFTER SALES – spare parts and maintenance services

SPARE PARTS and maintenance services are an important part of HEINOLA's operations. It is thanks to these services that our customers are able to ensure the smoothest possible operation all year round and year after year.

We know our machines and facilities inside out, we know the life cycles and availability of the parts and components that go into them and we can calculate future needs for servicing and replacement parts. More and more

of our customers are benefitting from inspection and servicing agreements with us, thanks to which they are able to safeguard the availability, speed and quality of their production facilities. Our maintenance service agreements increasingly cover the inspection, regulation and servicing of both mechanical and automated elements. Through regular and planned inspections, we can prevent problems such as worn bearings well in advance. We use modern SPM condition-monitoring facilities and

all measurements and results recorded during inspections are stored. By monitoring and comparing vibration data, we can check the progress of the condition of the facilities and take the necessary measures in good time, without any unexpected downtimes.

Maintaining cutting quality by keeping the machinery precisely aligned guarantees the consistent high quality of the sawn timber. On each visit, our expert checks the alignment of the machinery and conveyors and

carries out the necessary adjustments, and of course provides the customer with a report of the measurement results and effected adjustments. Our automation service checks and calibrates the cameras and measuring devices, and checks the functioning of the control systems. In this way, optimisation is carried out with the right measurements and the high yield level is safely maintained. ■



HEINOLA exhibition calendar 2012

SWEDEN
21–24 August
**WOOD PRODUCTS
& TECHNOLOGY**
Gothenburg

FINLAND
30 August–1 September
FINNMETKO
Jämsä

RUSSIA
22–26 October
LESDREVMASH
Moscow

FINLAND
31 October–1 November
SAHATEOLLISUUSPÄIVÄT
Hämeenlinna