#1 | 2011

HEINOLA news

HEINOLA SAWMILL MACHINERY INC. customer magazine

INNOVATIONS lead us forward

Our customer magazine HEINOLA news introduces you to our new products and innovations. It also includes useful information and articles about product trends in the forest industry.
We hope you enjoy this interesting read!

KARI KIISKINEN, Managing Director

Investing FOR THE FUTURE

CUSTOMER ORIENTATION is one of the cornerstones of our operations. We are renowned for it. Our trademark is our way of delivering flexible and customer-oriented solutions for different, often quite challenging situations. HEINOLA SAWMILL SOLUTIONS speaks loudly about our way of thinking. This will also remain our policy in the future.

It is a well known fact that HEINOLA is still one of the few companies in the world, one might say we are an expert in several areas, who serve the sawmill industry with a broad range of products. Our range of products and expertise has kept us in contact with production investments in recent times on the international market. At the same time our customers and their markets have experienced great changes. Some of these changes are here to stay. The sawmill industry is a strong basic industry and used to withstanding different hardships over the years. This instance should be no exception. As the production needs of our customers have changed due to the demands of their market we have, together with continuing to deliver according to demand, been actively investing in the development of our products and business.

To improve our service for renewing saw lines we have revised the equipment of primary phase cutting of the circular saw line and brought in modern safety solutions that take into account the environment and working conditions. New saw lines are acquired and old ones replaced in a situation where existing buildings should be utilised as much as possible without major construction work. As a result of our development work we are able to use our new solutions for all primary phase cutting in a small space, according to the pattern measured on to the log. To do this operation the line needs to be approximately 13 metres. For example, an efficient full profiling saw line with pattern optimisation for both cutting phases requires only 65 metres in total compared to almost 100 metres before. The first line of this kind is already delivered and in full production in Sweden.

We have also put effort in other product segments, that will be further reviewed in this magazine.

HEINOLA at work

New circular sawline **TO KÅGE**

Sawline shrunk considerably with new solutions.

Customer's project team was satisfied with HEINOLA's work.

Installation in progress.

Modern covers keep the working environment cosy.

NORRA Skogsägarna is a forest owners' association. The association has two sawmills; one in Kåge and the other one in Sävar. The Kåge sawmill specializes in producing high-quality pine and spruce products. The annual production of the new sawline is about 200,000 m^3 sawn timber from spruce and pine, the top end diameter varies between 105–550 mm. The sawmill operates in two shifts.

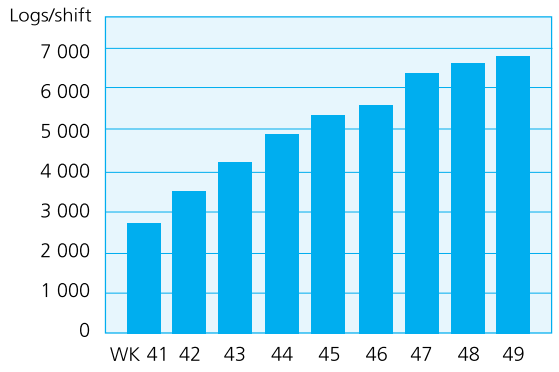
When choosing the new sawmill it was important to fi t the line functions into a rather short space between the recently renovated barking plant and the existing green sorting plant. There was about 50 m available for the new profi ling sawline in the existing building.

The primary breakdown is based on HEINOLA's new design where the log pattern is optimized and the first side boards are profi led straight on the log to the position received from the log scanner calculation. The necessary data for sawing of logs and squares is also received from the log scanner. Mainly due to these new solutions the traditional profi ling line could be shortened by about 30 m so that the sawline fits in the space available. The by Heinola Sawmill Machinery Inc. delivered sawline is equipped with a 3D log scanner and automatic log rotation. The rotation is carried out accurately with a rotator.

According to the log scanner data also the square curve is chipped on the square. The secondary breakdown side boards are profi led on the curved square, and fi nally the sideboards and the centre pieces are sawn with a double-arbour circular saw.

The chain width of the rotary gang's outfeed conveyor is adjusted so that the sawn pieces are outfed from the rotary gang as required by their curvature. The side boards are dropped on the board sorting plant and the centre pieces go on to another sorting plant. The new sawline delivered by HEINOLA is equipped with a complete automation system including a log scanner, line control systems, pattern support system, side board optimization, servo systems and electrical installations. The log scanner is a Swedish Sawco scanner and the control is done with Siemens S7 PLC. The lower sawmill was delivered by HEINOLA's sister company Nordautomation.

The implementation of the new sawline was carried out at the end of summer 2010. The basic functions of the new sawline could be tested while the customer sawed production with the old line just beside the new one. The implementation was conducted vigorously and the requested production level was achieved as planned. The increase in production is presented on the table enclosed.



New **TECHNOLOGY**

WE HAVE revised the equipment of primary phase cutting of the circular saw line. Thanks to the new solution we are able to do all primary phase cutting in a small space according to the pattern measured on to the log. To do this the line only needs to be approximately 13 metres. Features include log rotation by a rotator to an optimised position from the log pattern support system, chipper canter, two profiling units for a total of four optimised side boards and a double-arbour circular saw. The log is tightly pinned down throughout the cutting and all surfaces are worked with the saw blades. The whole unit can be covered with a modern environmentally friendly cover.

HEINOLA sawmill care

HEINOLA spare parts and service

HEINOLA Service reflects the HEINOLA way of working: offer comprehensive back up to support our customers.

SOMETIMES our clients need spare parts very quickly, and in the cases HEINOLAs storages are valuable. Well planned preventive maintenance can be an answer to many of today's emergency deliveries of spare parts.

The longer the distance from the machine or production plant to HEINOLA is, the more important it is to have a reasonable stock of critical spare parts on site. This stock must naturally have a regular refill. A vital part of preventive maintenance is to order the spare parts needed for maintenance activities well on advance.

In HEINOLA we have a comprehensive stock of the most common and critical spare parts for machines and equipment delivered by us. From this stock we can supply the correct, original and high-quality spare parts to our clients very quickly.

The standard delivery of spare parts happens by normal carriers. In urgent cases, when a critical spare part is needed in the shortest possible time, our own staff, a taxi or a courier service is used to take the spare part from door to door. This kind of deliveries happens every now and then, and very often it is a question of a few hours only, from the order to the delivery.

The clients with service agreement with HEINOLA are able to concentrate to their own business, like production and sales of sawn goods or chips. Thanks to the service program, created together, the machines and equipment will stay in shape and work reliably and safe. Service activities can, by pre-planning, be performed so without disturbing normal production.

The clients with service agreement with HEINOLA will in acute needs always have a quick service. They also will have their spare parts quickly and with a reasonable price.

Our service specialist gives a written report on every service visit, describing the work performed, the spare parts changed and recommendations for the next service activities.

HEINOLA deliveries

HEINOLA LUMBER HANDLING PLANT FOR KUHMO OY

Kuhmo Oy is a Finnish private sawmill which is located in Kuhmo in Northern Finland. The capacity for the sawmill is 350,000 cubic metres of sawn goods per year. Kuhmo Oy has been a long-term customer for HEINOLA for approximately 20 years. We are proud to inform that as part of this continuous cooperation we have been performing a significant renewal of green production for Kuhmo Oy. This includes a new lumber handling plant and stacking lines for green sawn goods and automation systems. The lumber handling plant includes automatic camera sorting and different cut-off saws for managing quality and length. The ten sorting bins have been placed horizontally. The length of the plant is a respectable 160 metres!
The plant operations are monitored by an automation system by HEINOLA. The new plant will be introduced during this spring.

HEINOLA DRYING KILNS FOR VERSOWOOD'S OTAVA SAWMILL

We will deliver two chamber drying kilns to Versowood's Otava sawmill in Finland. The drive-through chamber kilns will be installed with HEINOLA HDC-automation.

HEINOLA TECHNOLOGY FOR THE SOUTH AMERICA

HEINOLA will supply an edger optimiser for the forest industry group Arauco in Chile. It will be delivered to Arauco sawmill in El Colorado, Chile. Installation will be done during the local winter hiatus during Finnish summer. The delivery includes an edger optimiser and measuring equipment manufactured by HEINOLA. The side boards are optimised by measuring the board from both sides without turning it over. The edger optimiser is monitored by an automation system by HEINOLA.

HEINOLA GREEN SORTING PLANT FOR ALHOLMA

We are in the process of delivering a green sorting plant to UPM's Alholma sawmill in Pietarsaari, Finland. The plant will be installed during summer of 2011. The sorting will be done automatically by a camera. The cutting will be done with a trimmer. The sorting is done into over 50 vertical bins. The plant will include a HEINOLA automation system. The plant allows for sorting 150 pieces per minute.

HEINOLA exhibition calendar

SWEDEN	GERMANY	FINLAND	RUSSIA
26–28 May	30 May–3 June	7–9 September	**TEKHNODREV 2011**
SKOGSELMIA 2011	**LIGNA 2011**	**WOOD AND BIOENERGY 2011**	21–24 April, Khabarovsk
Jönköping	Hannover	Jyväskylä	13–16 September, Krasnoyarsk
			4–6 October, Saint Petersburg

HEINOLA chippers

New HEINOLA **MOBILE CHIPPERS**

New chip accelerator gives more velocity and accuracy.

THE NEW chipper models HEINOLA 910 ES and 1310 ES are based on our popular mobile chippers HEINOLA 97 RML and 1310 RML. In addition to many significant new features, these models have the same extensive capacity, strong structure and excellent chip quality as their predecessors. Their external dimensions make them suited for European road traffic.

With the new chippers, chips fly from the knife drum upwards directly towards the chip pipe as before, but this time the chips are ejected with the help of a chip accelerator instead of a fan. The chip accelerator is located above the chipper. The hydraulically operated accelerator ejects the chips through the chip pipe almost without generating any dust and directs the chips accurately on to the vehicle used to transport the chips. This saves time, as there is considerably less need to clean the chipper and transport equipment, and your work becomes more enjoyable.

The feeders also have a new improved design. Below, the chain conveyor has been replaced by more maintenance-friendly rollers, and the big feeding roll above has been improved so that it no longer has protruding shafts on the sides. The bearings and controls previously located on the outside of the feeding roll are now situated inside the roll so that the sides of the feeding platform are uninterrupted and debris does not accumulate around the chipper.

Anvils and screens have also been changed to improve use and maintenance. With these and other small new solutions we have once again created excellent new chipper models. The first new 910 and 1310 ES chippers have been working full-time and non-stop all the way from last September and their operators have been more than satisfied. The equipment passed the test of the harsh winter and it continues to be successful.

The HEINOLA 910 ES is an efficient chipper for whole trees and logging waste.

Even big trees are no problem for the HEINOLA1310 ES.

HEINOLA 910 ES

This smaller model has a Ø 900 mm knife drum and an infeed opening which is 1000 mm wide and 720 mm high. It is an extremely efficient chipper for whole trees and logging waste. Due to HEINOLA's state-of-the-art knife technology, the chipper can produce up to 300 m^3 of chips per hour.

HEINOLA 1310 ES

This smaller model has a Ø 1300 mm knife drum and an infeed opening which is 1000 mm wide and 750 mm high. Due to the large diameter of the knife drum, this chipper not only processes logging waste but is an unbeatable timber-tree chipper. Even big trees are no problem as chip production capacity can reach 400 m^3 of chips per hour.

New product category: **DRYING KILNS**

HEINOLA Hybrid kiln is versatile and adjustable.

HEINOLA'S range of products has been expanded during 2010 with drying kilns. This way we can offer our customers technology that cover an even bigger part of their process. There are basically two main kinds of drying kilns: a drying chamber, a two-stage progressive kiln, as well as a combination of these – HEINOLA Hybrid kiln™. The Hybrid kiln can, according to need, function as a progressive kiln or two chambers. The chambers are designed for small saw mills and special drying with low final moisture contents, whereas the continuous progressive kilns suit efficient drying for large units. The Hybrid kiln suits many needs and is flexible according to the need.

The planning work is mainly finished regarding the machinery and we have the capability to offer turnkey drying kilns for our customers. HEINOLA HDC Kiln automation will be further developed and a customer-oriented solution will be put on the market in the spring 2011.

The control system for drying kilns is an essential part of the drying process. Its operability is vital regarding the drying result and drying kiln workers appreciate the clarity and user-friendliness of the system.

The first HEINOLA Drying kilns are being produced and they will be introduced during autumn of 2011.