

NEWS

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Derome Rises Above Competition Thanks to System TM Line with Special Features

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J.M. Champeau Inc. Extracts the Best of the Best from Raw Material Thanks to System TM Solution

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Optimizing the hardwood veneer production at Aviva SRL in Romania

Aviva SRL investment in an optimizing cross-cut line provides high wood usage, production capacity, and reduced the company's labor costs to a great extent.

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System TM launches new flexible stacking machine **Opti-Stack 9000**

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Stacking of multiple length



Stacking with sticks



Stacking with double even end



Zigzag stacking



Brick stacking



Stacking of long length



optimization of staff and wood resources

Derome's production facilities in Veddige - Sweden.



Derome Rises Above Competition Thanks to System TM Line with Special Features

With Derome's latest investment in a System TM cross-cut line, the company hopes to efficiently produce prefabricated tongue and groove panels and at the same time stay competitive with substitute products from other industries that offer similar benefits as Derome's products. Derome's optimizing Opti-Kap 5103 line is future-proof and offers special features to enable the simultaneous production of two product types.

Personal statement by Mr. Per Andersson, Development Manager, Derome:

"System TM come across as a very professional company. It was a great advantage that the line had been tested prior to delivery, as this significantly speed up the commissioning process."

This System TM solution consists of the following:

- An automated feeding system, Opti-Feed 6000 Vack
- A Finscan cross-scanner
- Material handling
- One optimizing cross-cut saw, Opti-Kap 5103
- An automated stacking system, Opti-Stack 6000

Securing long-term success

■ Securing long-term success is about how you make a product better than that of your competitors. Derome Timber manufactures prefabricated tongue and groove panels for fast on-site assembly. Derome's boards offer many added value benefits compared to substitute products. For instance, they are environmentally friendly and better for indoor climates than plastic, plywood, and synthetic material roofing underlayment. They also make it easier for houses to take in and let out air and absorb and release moisture.

A business in continuous development

■ The Derome Group is one of Sweden's largest family-owned wood groups dating back to 1946. Since then, the family-owned business has expanded greatly. Today, the Derome Group has more than 2200 employees and an annual turnover of SEK 8 billion.

One of Derome Group's divisions, also known as Derome Timber, has five sawmills that produce a wide range of wood products for both the Swedish market and numerous export markets. The new Opti-Kap 5103 cross-cut line is situated at Derome Timber's sawmill in Veddige, Sweden.

A line with special features

■ Being a highly knowledgeable company,

Derome necessitated the need to explore smart ways to design the Opti-Kap 5103 cross-cut line. Therefore, the line is packed with special features. "I was impressed with the technical capacity which was present in Derome's entire organization. Their people are heavily involved with technology and they dove deep into technical details before choosing this System TM solution", says Allan Them, Area Sales Manager for Scandinavia at System TM.

Technical description

■ A vacuum feeding system, Opti-Feed 6000 Vack, de-stacks layers of boards, after which the boards are proportioned one by one through a Finscan cross-scanner (now owned by MICROTEC). The subsequent data from the scanner determines where the boards go next – either they move down to a system underneath or up to an Opti-Kap 5103 cross-cut saw. Thanks to this special feature, or in other words the flexibility of the distribution process, Derome can produce two types of products simultaneously.

The boards that move down are eventually turned into prefabricated tongue and groove panels. The boards that move up to the Opti-Kap 5103 cross-cut saw are intended for surplus tongue and groove panels which are eventually turned into other products later on. As the boards move up to the Opti-Kap 5103 cross-cut saw, the data from the scanner is

used to cut the boards with maximum wood utilization. Then, they exit the Opti-Kap 5103 onto sorting belt conveyors where they are either transported to a Weldum line or to an automated Opti-Stack 6000 stacker after which the boards reach a manual packing station. In fact, the Opti-Stack 6000 stacker is divided into two stackers which makes it possible to either stack short and medium components or merge the two stackers together to stack long components. This is another special feature in this line.

■ Due to the System TM line's state-of-the-art scanning, optimization, and chopping, Derome now extracts higher yield from raw material and uses wood to the fullest.

In accordance with Derome's request, the vacuum feeding system (Opti-Feed 6000 Vack) is designed to de-stack layers of boards at a higher speed than the Opti-Feed 6000 Vack normally de-stacks. After the scanner, the boards are also sorted out faster than usual since a huge number of boards are processed by the scanner per minute. As a result, Derome now has a higher production capacity which helps the company stay competitive.

J.M. Champeau Inc. Extracts the Best of the Best from Raw Material Thanks to System TM Solution

While high volume and capacity production are two of System TM's most common customer needs, that wasn't exactly the case for this System TM customer. For Champeau, it was more about the ability to extract the crème de la crème of raw material to produce high-quality products. Champeau's new System TM line enables the company to do so in great style.

An out of the ordinary project

■ The Champeau project is not your typical type of project in the sense that it is not what System TM usually designs. However, when it comes to customers with unique needs, System TM is known for thinking outside the box.

Champeau manufactures and sells planks to factories that turn planks into baseball bats, billiard cues, and drumsticks. Champeau's planks must therefore be high-end, flawless, defect-free – even their fiber orientation must be verified. In order to fabricate these high-quality products, Champeau asked System TM to design a solution that focuses less on high volume production and more on the ability to take out the best from raw material. Champeau's new cross-cut line consists of a MICROTEC scanner and an optimizing cross-cut saw, Opti-Kap 1003. "Champeau's line also offers the opportunity to make future developments. For instance, there's a possibility of adding another Opti-Kap saw in the future to enlarge production", says Jean-Luc Croteau, Area Sales Manager of North America at System TM.

Champeau

■ For five generations, the Champeau family has been converting choice hardwoods into an impressive range of quality products. Established in the early 1900s in Saint-Malo, Quebec, near the Canada/U.S. border, Champeau's 225,000 square foot facilities employ the latest cutting-edge technology. Champeau has over 175 employees who

are passionate about the company's craft, and this passion translates into Champeau's commitment to provide the highest quality standards in the industry.

Pushing the limits

■ After receiving recommendations from several System TM customers in Quebec, Champeau decided to opt for System TM/MICROTEC equipment. In terms of scanning, Champeau needed to detect even the tiniest of defects and details in raw material. Although hardwood scanning of such high caliber had never been carried out before, MICROTEC pushed the limits by working out a way to provide Champeau with this capability.

Abandoning former production methods

■ In Champeau's previous production line, it was difficult to achieve the highest amount of output from incoming workpieces due to the company's manual production processes. In addition, cross-cutting was very time-consuming. "When you compare the previous production processes with the present, there's a colossal difference, as it took a full minute just to cut out defects from one workpiece, but we can process 50-60 workpieces per minute in a normal cross-cut line", says Jean-Luc Croteau. In terms of human labor, Champeau's previous line required about 10 operators to carefully inspect each workpiece for defects due to Champeau's strict focus on high-end products.

Noticeable production results

■ Champeau has been seeing noticeable production results since the installation of the line. When visiting Champeau, Mr. Charles Giguere stated that the line had been operating for a few weeks only, but already performing quite well. They were very pleased with the installation, start-up all being on time and the quality of the equipment. Champeau has a great reputation in the industry to have high end equipment and successful projects. It is a very respected business, and they are very proud of their realisation. System TM was a perfect match for this successful philosophy.

Technical description

■ The workpieces enter a MICROTEC transversal Curvescan which examines their bow, spring, twist, and cup. Then, a MICROTEC Goldeneye 502 scanner with X-ray, camera and improved crack detection option scans the workpieces and uses the information received from the Curvescan to complete the final optimization process. Next, the workpieces enter a marking station where a cut mark and grade is printed onto each workpiece by a printer. Then, workpieces move onto an optimizing cross-cut saw, Opti-Kap 1003, which chops workpieces with high cut accuracy. Before the workpieces enter the cross-cut saw, an operator can carry out a quality inspection of the cut and grade marks and verify the scanner's decision. Finally, the workpieces exit onto a sorting belt.

Champeau's production facilities in Saint-Malo, Quebec, Canada.



Products by Champeau, Canada.

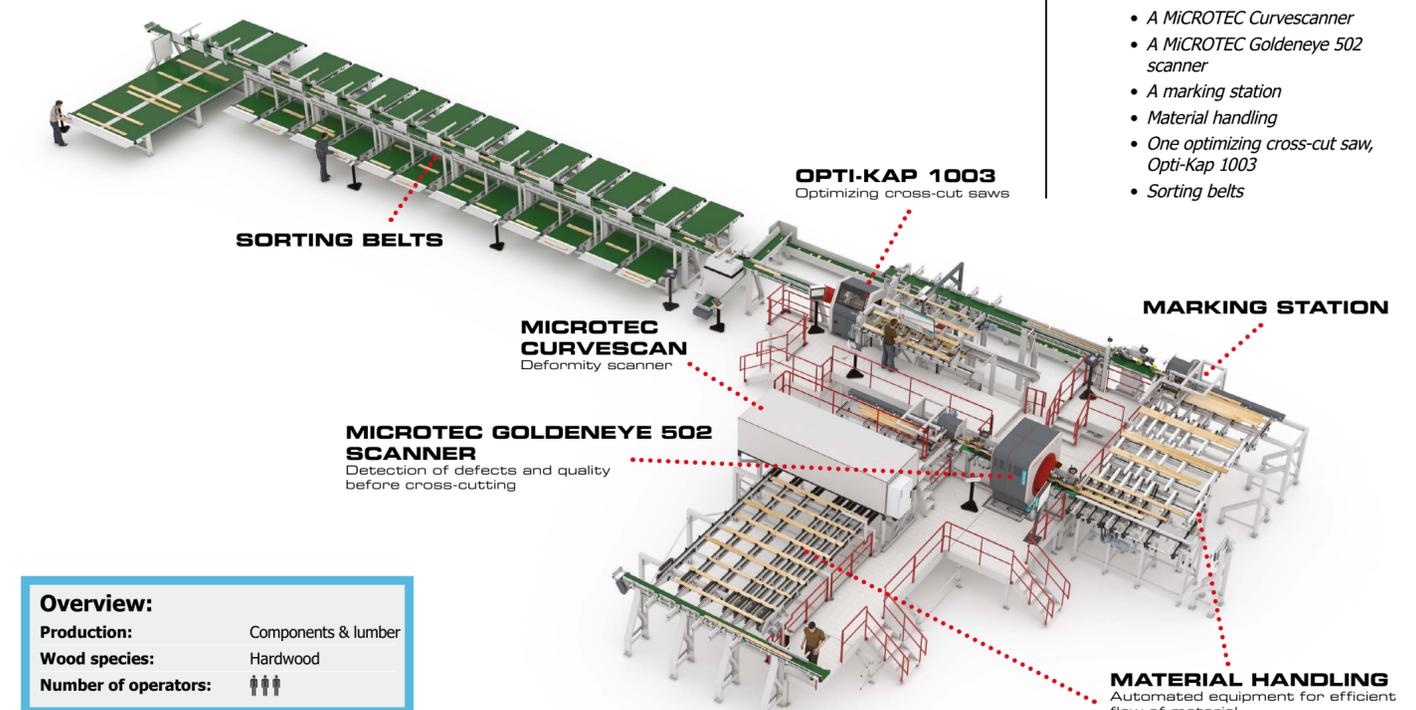
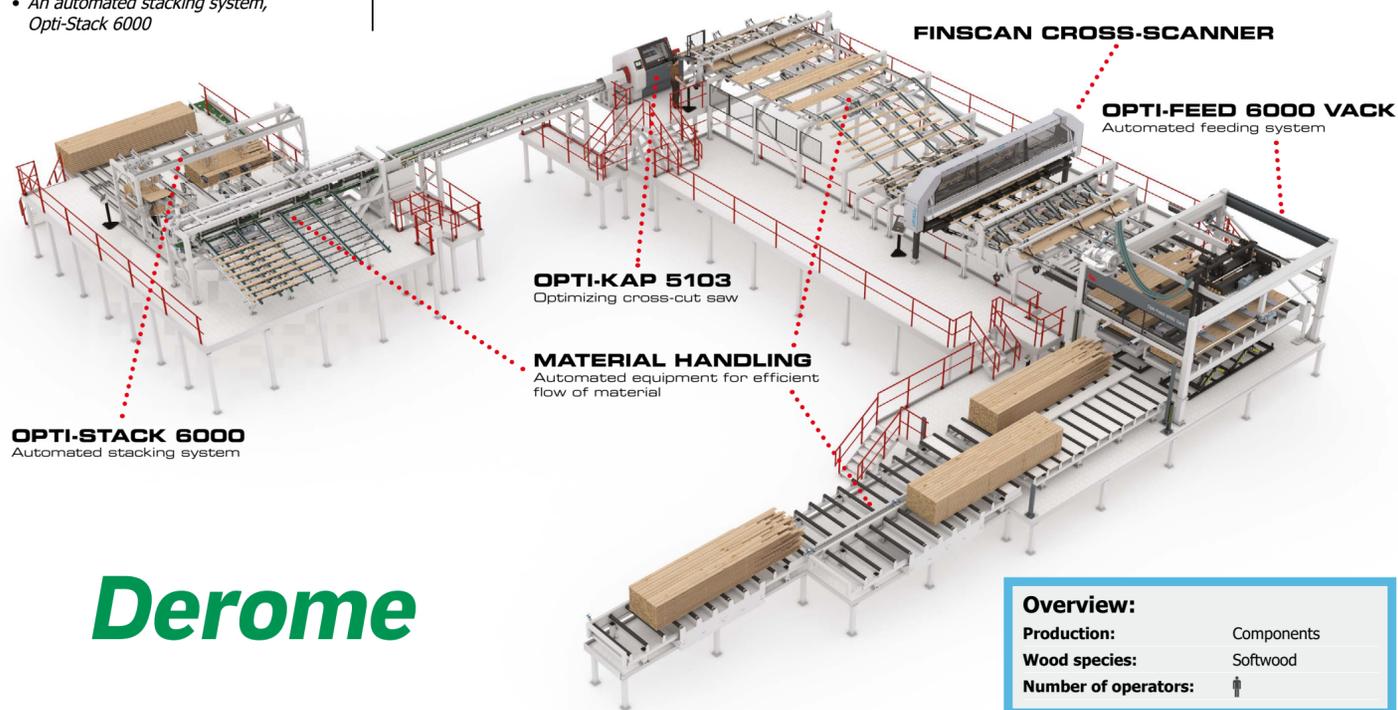


CHAMPEAU

THE HARDWOOD COMPANY

This System TM solution consists of the following:

- A MICROTEC Curvescanner
- A MICROTEC Goldeneye 502 scanner
- A marking station
- Material handling
- One optimizing cross-cut saw, Opti-Kap 1003
- Sorting belts



Derome

System TM launches new flexible stacking machine Opti-Stack 9000 and expands current product portfolio

Per Jørgensen, CSO, System TM.

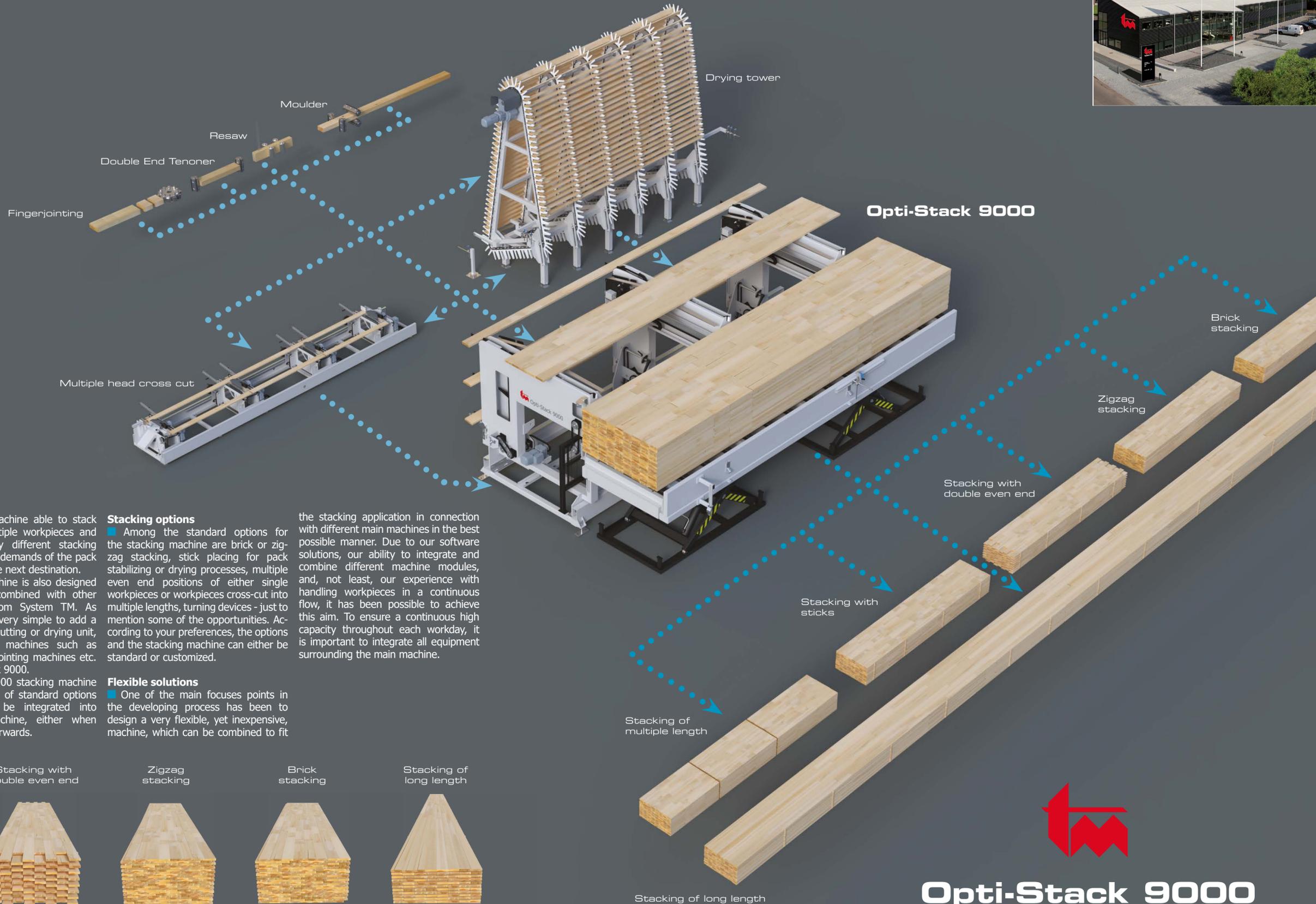
System TM's production facilities in Odder, Denmark.



Personal statement by Mr. Per Jørgensen, CSO, System TM:



"With the development of the Opti-Stack 9000, we have expanded our product portfolio in order to keep up with the demand from the industry. Furthermore, the Opti-Stack 9000 matches, and is easy to combine with, our existing product portfolio, when customizing projects for our customers"



Opti-Stack 9000

The solid wood industry's demand for more material handling automation, utilizing the main machines' maximum capacity without any use of manpower, is increasing in all aspects worldwide. Material handling automation has always been a very important product segment for System TM. To be sure to be able to offer the right solution for the application, System TM have developed and designed a new stacking machine, Opti-Stack 9000, that matches our existing product portfolio.

The design

The base design of the Opti-Stack 9000 is very flexible, being able to be

extended to a machine able to stack very long or multiple workpieces and stacking in many different stacking patterns to fit the demands of the pack appearance for the next destination. The stacking machine is also designed to be perfectly combined with other machine units from System TM. As an example, it is very simple to add a multi-head cross-cutting or drying unit, in-between main machines such as moulders, finger jointing machines etc. and the Opti-Stack 9000.

The Opti-Stack 9000 stacking machine has a wide range of standard options that easily can be integrated into the stacking machine, either when purchasing or afterwards.

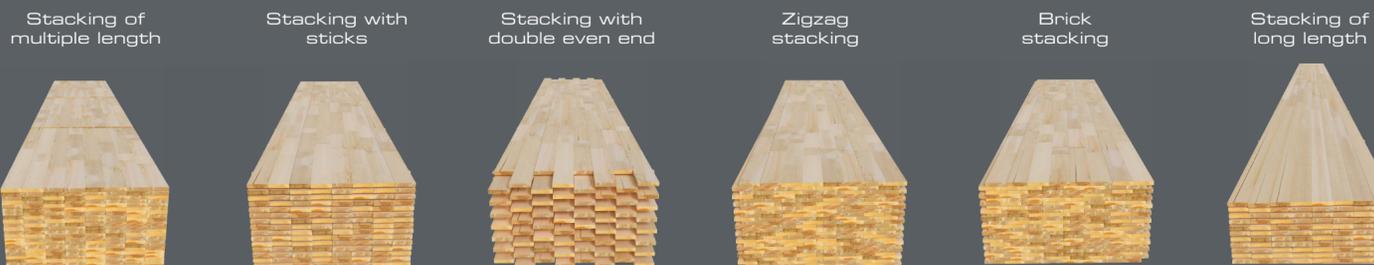
Stacking options

Among the standard options for the stacking machine are brick or zigzag stacking, stick placing for pack stabilizing or drying processes, multiple even end positions of either single workpieces or workpieces cross-cut into multiple lengths, turning devices - just to mention some of the opportunities. According to your preferences, the options and the stacking machine can either be standard or customized.

Flexible solutions

One of the main focuses points in the developing process has been to design a very flexible, yet inexpensive, machine, which can be combined to fit

the stacking application in connection with different main machines in the best possible manner. Due to our software solutions, our ability to integrate and combine different machine modules, and, not least, our experience with handling workpieces in a continuous flow, it has been possible to achieve this aim. To ensure a continuous high capacity throughout each workday, it is important to integrate all equipment surrounding the main machine.



Stacking of long length


Opti-Stack 9000



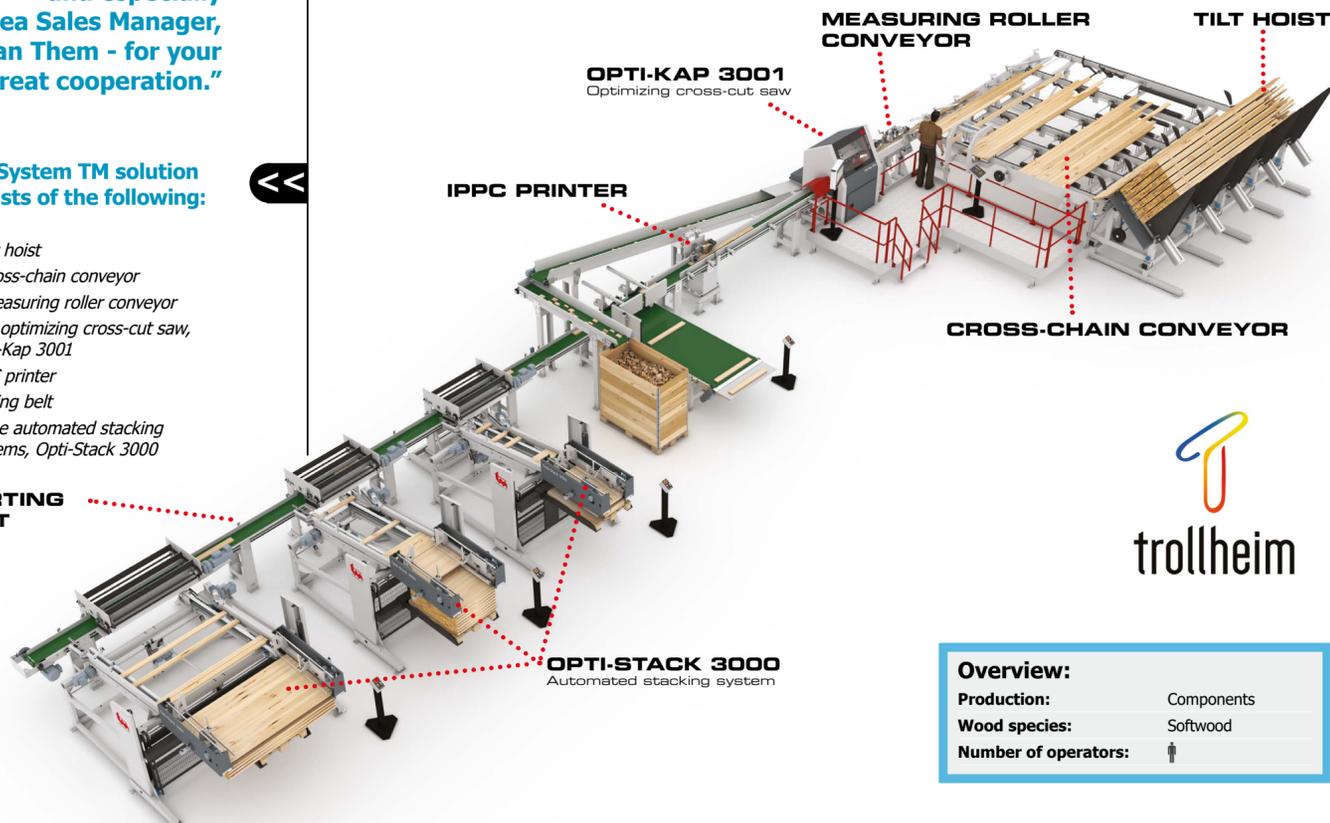
Lars Inge Kvande,
Managing Director
at Trollheim:

“Trollheim has been doing business with System TM since the beginning of the 1990s, and we have been and are very pleased with their equipment and after-sales services. The installation and commissioning of the new Opti-Kap 3001 line went smoothly, and the line was up and running after a short “Corona break”. Thank you – and especially Area Sales Manager, Allan Them - for your great cooperation.”

This System TM solution consists of the following:

- A tilt hoist
- A cross-chain conveyor
- A measuring roller conveyor
- One optimizing cross-cut saw, Opti-Kap 3001
- IPPC printer
- Sorting belt
- Three automated stacking systems, Opti-Stack 3000

SORTING BELT



Trollheim

Trollheim delivers a wide range of products and services to both companies and private individuals. The company performs an important social mission by helping people on the edge of the labour market back to work through a combination of work experience and training, but also creates permanent adapted workplaces when needed. Trollheim is owned by five county municipalities. Buying goods from Trollheim means getting, good quality items, while at the same time contributing to an important social mission. One of the services Trollheim have specialized in, is cross-cut components for the solid wood industry. Particularly components or final containers for the packaging industry are an important business segment of Trollheim.

Long-term relationship

The relationship between Trollheim and System TM dates back as far as the early nineties when Trollheim purchased the first machine from System TM. Over the years and until today, the orders placed with System TM by Trollheim have comprised several machines and cross-cut lines. Trollheim has been very happy with the services and the performance of the technologies delivered by System TM, - especially the cross-cut line has performed a very important task over the years. However, even if maintenance is carried out rigorously, all machinery is bound to wear

out at some point. This seemed to be the case for the cross-cut line at Trollheim. Although it had been running at full speed since the beginning of the 90s with a saw upgrade in 2001, its rising maintenance costs encouraged Trollheim to invest in a new line from System TM. From the installation of the first machine until today, System TM have been outstanding to work with – both in terms of sale and after-sale services. Especially the quality of the after-sales services from System TM together with the quality of the equipment made it very easy to choose this company as the supplier for the replacement of the existing cross-cut line.

Utilization of old equipment.

To accommodate Trollheim's request for a new line, including high capacity, inexpensive and quick payback time, a minor part of Trollheim's previous former System TM cross-cut line was reused and integrated into the new cross-cut line from System TM. "With this creative approach, integrating a minor part of the old line without losing line performance, we once again won the confidence of Trollheim to be the next supplier of their new cross-cut line", says Allan Them, Area Sales Manager at System TM.

Benefits

Optimization of staff and wood resources is the driving concept behind all System TM

lines. As a result, the new Opti-Kap 3001 cross-cut line generates more capacity and best lumber utilization with the same manpower needed to operate the line. The increased capacity was needed to support a growing customer base demands for cross-cut components. Based on the low maintenance costs and high capacity of the new Opti-Kap 3001 cross-cut line, the future looks bright and safe for Trollheim, having future-proofed its business area of cross-cutting components for the solid wood industry.

The Opti-Kap 3001 line

The Opti-Kap 3001 line starts with a tilt hoist and cross-chain conveyor integrating Trollheim's System TM equipment from the old line. The former equipment has been provided with an updated control system that meets today's CE safety requirements, forming an integrated whole. After this, the new System TM equipment comes in, starting with a measuring roller conveyor, which measures and transports the workpieces to the Opti-Kap 3001 cross-cutting saw. The cross-cut saw optimizes and cuts the workpieces into components lengths according to the demands from Trollheim's customers. After the Opti-Kap 3001 cross-cut saw, waste and residue move along a sorting belt, and are swept off into a waste container. Useful components are IPPC marked and finally sorted and stacked by three fully automatic stacking machines, Opti-Stack 3000.



Overview:

Production: Components
Wood species: Softwood
Number of operators: 1

Optimizing the hardwood veneer production at Aviva SRL in Romania



Aviva SRL investment in an optimizing cross-cut line provides high wood usage, production capacity, and reduced the company's labor costs to a great extent.

Aviva SRL

Aviva is a private owned company with the headquarter located in the northern part of Romania. Aviva was established in year 2000 and today the company consist of two large furniture plants, including more than 2000 employees. Aviva manufacture a wide range of furniture's and are a very important sub supplier and partner for IKEA.

Contact to System TM

The general manager Mr. Boaz Nevo and Mr. Nial Keane owners of Aviva had through their network in the furniture industry been introduced to the System TM technologies. Not only by talking to colleagues from the industry but also by visiting colleagues who already had System TM equipment at their facilities. The feedback from the colleagues where very positive related to the services supplied

by System TM and Aviva therefor contacted System TM for further investigation related to a cross cutting solution.

The solutions

The cross-cutting project was not a standard solution. Aviva wanted to automate the cross-cutting processes of grading and cross cutting very thin veneer into fix length components for their engineered wood furniture. Before the supply of the cross-cutting line from System TM, the processes of grading and cross cutting were done manually and Aviva wanted to minimize the labor cost and wanted to make sure the raw material was utilized in the best possible manner with an extremely high capacity. With the installation of the optimizing cross-cut line it is now possible to quality grade each workpiece with crayon mark placed by operators and cross-cut fix length components by saw model Opti-Kap 5102

according to the optimizing results for best utilization of the raw material. After the cross-cut saw, the workpieces are automatically sorted in regarding to length and qualities. Due to the very thin veneer, the cross-cutting saw model Opti-Kap 5102 was customized together with the material handling to be able to handle veneer with a minimum thickness of 3 millimeter.

Return on investment

The equipment of System TM is very well engineer and customized, hence capable of handling the thin veneer in the production of Aviva. Installing this solution has resulted in a very high wood utilization with a minimum of waste and extremely high capacity, leading to a fast return on investment. It has been a great process designing this solution together with Aviva, and System TM are very happy about the partnership.



Overview:

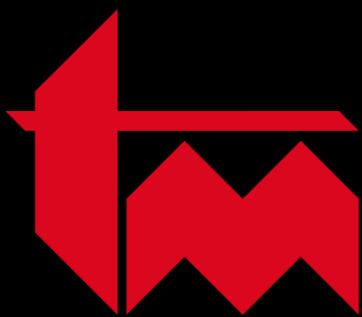
Production: Furniture components
Wood species: Softwood
Number of operators: 3

Statement by customer:

“We found the organization of System TM to be extremely professional and well organized. The installation of the equipment has been completed regarding the promised time schedule. System TM have been brilliant to work with and everything has been delivered as promised.”

This System TM solution consists of the following:

- One optimizing cross-cut saw, Opti-Kap 5102
- Material handling
- Sorting belt



Visit System TM at the following exhibitions:

NWFA Expo, Baltimore, MD, USA

Trä & Teknik, Göteborg, Sweden

NHLA, Florida, USA

LIGNA 2021, Hannover, Germany

New date

April 28 – 30, 2021

August 24 – 27, 2021

September 22 – 24, 2021

September 27 – October 1, 2021

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no. 2 - 2020

MICROTEC

celebrates 40 years in business

Microtec and System TM have been very close business partners for almost 10 years, and this partnership has been a pleasure for System TM from day one.

Already from the beginning of our partnership, we quickly realized we had the same strategy approach to our end customers. We both wanted to be the number one supplier of high-end industrial equipment, customizing our technologies to utilize the resources of our customers in the best possible manner.

The partnership with Microtec has positioned both of our companies to be the market leader in high-end cross-cutting applications in the secondary solid wood industry - not only with regard to the technologies and performance, but also to the services we provide to our customers worldwide.

Microtec and System TM have been able to combine and further develop our technologies to become the best in class in our industry.

To System TM, Microtec of today is by far the best scanner supplier in our industry, both in terms of technologies, support and collaboration.

Thanks to Federico Giudiceandrea and the management group of Microtec - you have created a state-of-the-art company in all aspects, and everyone at System TM are deeply impressed with this.

Dear Microtec, congratulations on your 40th anniversary - we are looking forward to build and grow our partnership over the next 40 years.

From everyone at  System TM Thank you

Arianna Giudiceandrea, Federico Giudiceandrea and Frank Jöst in front of the gift for Microtec presented by System TM on the occasion of Microtec's 40th anniversary. The name of the painting is "Bridge" and symbolizes the close collaboration between System TM and Microtec. The artist is the local-based painter Ole Grøn.



System TM, a leading global provider of customized solutions for the solid wood industry

System TM offers a wide range of automated material handling systems designed to provide high production capacity, maximum wood utilization and minimum labor costs. Our material handling systems are defined as standard system solutions and fully customized solutions designed to meet diverse customer needs.



Opti-Feed
Automated feeding systems



Opti-Kap
Optimizing cross-cut saws



Opti-Stack
Automated stacking systems



Opti-Joint
Automated finger jointing systems



Opti-Solution
Customized system solutions

■ At System TM, we use our technical expertise, longstanding experience and integrated approach to design the best solution that meets your business objectives.

■ Please visit our website at www.systemtm.com to find a material handling solution that fits your production requirements.



System TM A/S

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