

THINK WEINIG –
DISCOVER THE CUSTOMER BENEFITS

WEINIG *Times*

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Big data for the benefit of customers: MindSphere World is here

In January, WEINIG joined 18 other renowned companies in Berlin to take a giant step towards digitization. But what lies behind the new organization MindSphere World and what can you expect as a customer? We speak with WEINIG's representative on the advisory board Dr. Mario Kordt.

Dr. Kordt, what were the considerations that led to the formation of MindSphere World?

In the cloud-based IoT platform MindSphere, Siemens has a unique operating system. However, Siemens quickly recognized that the digital revolution can only be driven forward if the customer actively helps to shape it. That is why the MindSphere World association was formed. Members come from a broad range of sectors and bring a variety of perspectives.

What are the particular strengths of the MindSphere platform?

For WEINIG, it is the unlimited, open structure of the platform. All machine types can be connected – even without Siemens controls. The range of the connectable cloud platforms extends from SAP and AWS to Microsoft Azure. This allows customers around the world to access the optimal cloud in their region. All companies, including third-party providers, have the opportunity to create app stores. This opens up enormous potential for end customers.

Why do you believe MindSphere will be the leading IoT platform going forward?

The booming "cloud technology" market is heading for consolidation. Siemens MindSphere will emerge as the winner from this process.

It is not limited to a cloud system. It coordinates everything. MindSphere World will constantly feed the platform with new information. And it will do so worldwide since there will soon be sub-groups of the association everywhere.

Data security is a major concern, particularly for medium-sized companies. What is the situation with MindSphere in that regard?

The agreement with Siemens provides that Siemens will only manage customers' data but does not have access to it. Hence, MindSphere is currently the most secure system on the market. In addition, the regional clouds ensure that the legal provisions of the relevant country are always observed.

The MindSphere World organization includes many high-caliber companies from a variety of sectors. What does WEINIG expect from this collaboration?

The members include many companies that have the same or similar challenges to overcome as us. MindSphere World is a melting pot of synergies that can optimally benefit us and, in turn, the customers.

To what extent will MindSphere fuel the technological development of WEINIG?

In W4.0 digital, WEINIG has already created its own standard for its product world, which will be continuously further developed. MindSphere will be a technology partner when it comes to live data we need from the machine. Our challenge is to equip the entire portfolio on the software side so that it can communicate with the IoT platform. MindSphere will also enable big data analysis, allowing us to offer assistance systems, for example.



Pioneering Spirit

Weinig CEO Wolfgang Pöschl (left) and Head of Product Unit Dr. Mario Kordt, who represents Weinig on the advisory board, present the MindSphere World membership certificate

How will WEINIG customers benefit from the MindSphere digital initiative going forward?

First and foremost, customers are already benefiting from W4.0 digital. We deliver simple, transparent tools in the form of a functional toolkit. The advantage of MindSphere is that the system will function worldwide and also integrates third-party machines. In W4.0 digital, the customer is "backing the right horse". The technology makes customers' production more future-proof, even if they have not currently advanced very far in the digitization process.

Could you give an example?

One pioneering development is our App Suite with the Machine Monitor software. Central themes include production control and predictive maintenance. MindSphere technology runs invisibly in the background for the customer but the real valuable asset for them is the WEINIG-designed cockpit, which is tailored precisely to their requirements. As world market leader, we simply know their processes better than anybody.

THINK WEINIG

Special: The WEINIG Group offers its customers a vast spectrum of products and services. THINK WEINIG is the key to making optimal use of this potential.

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Change requires strong partners

Wooden dowels are here to stay. Whether for roofs, walls or floors, dowels are increasingly complementing traditional joining methods with nails or glue, including in North America.

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Maximum yield

There is practically no decorative profile or wall cladding that Finnish company Maler cannot make. In order to balance product diversity, quality and price, the company invested in a new WEINIG finger-jointing line.

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"All types of corner joints are possible"

Austrian carpentry firm Nagl specializes in windows. To ensure the required precision, the company has worked with WEINIG technology for many years.

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Mayr-Melnhof Holz Richen entrusts its glulam beam production to a highly automated solution. The integration of a WEINIG X-ray scanner allows strength grading to EN 14081.

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Family business Lange Bros. Woodwork is one of the premier addresses for high-quality interior fittings in the USA.

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A sector with huge potential

German company Tricor Packaging & Logistics AG in Eppishausen produces around 360 pallets for in-house use per hour on a fully-automated WEINIG system.

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Wooden dowels are here to stay. Whether for roofs, walls or floors, dowels are increasingly complementing traditional joining methods with nails or glue, including in North America.

Recently, StructureCraft in Canada established the first industrial production site for dowel-laminated timber (DLT) in North America. The optimism of the company is reflected by the concept. Thanks to its modular timber construction, the 4,700 m² factory can be adapted quickly and easily should capacity requirements increase. This may soon be the case after a high-performance, fully-automated production line was installed in Abbotsford.

The WEINIG Group supplied a CF 300 compact finger jointing line linked to an OptiCut S 90 Speed cross-cut saw. Indirectly driven, offset tool spindles ensure optimal availability of drive performance. Glue application is performed on both sides using PUR adhesive certified in Canada. The machines are used for the production of solid wood boards.



CF 300 compact finger-jointing line

Hardwood dowels play a crucial role here. These are used to positively connect the upright lamellae, creating a board that can be used for particularly efficient

horizontal spans while enabling significant architectural flexibility.

TECHNOLOGY NEWS



New: Unimat 20 – strong entry-level moulder

In the new Unimat 20, WEINIG presents a compact four-sided moulder that is particularly interesting for small businesses. This is demonstrated, above all, by the favorable price-performance ratio. The high level of user-friendliness is particularly impressive, significantly elevating the machine above comparable models in this performance category. The machine is highly accessible for set-up and only a few operating tools are required. The integrated memory system enables the storage of profile settings and ensures precise reproducibility. The spindle speed of 7,000 rpm guarantees outstanding surface quality combined with high productivity. A further benefit of the new machine is the high safety standard.



Maximum yield

Shaking on it: For Jani Oikari, a deal is not least a matter of trust

There is practically no decorative profile or wall cladding that Finnish company Maler, based in Ylivieska, cannot make. In order to balance product diversity, quality and price, the company invested in a new WEINIG Turbo-S 1000 finger-jointing line.

Finger-jointing lines can optimally utilize even lower quality material. Jani Oikari, Managing Director of Maler, was optimistic from the outset: "Finger jointing is the key to efficient

production." Consequently, he invested in a Turbo-S 1000 along with various customer-specific options. He turned to WEINIG and our Finnish representative Penope in Lahti following years of positive experiences. "When you are investing such an amount, you also want to be certain that the required production capacity will be achieved," says the entrepreneur. Following consistent strong growth, the company now has to fill a 12,000 m² warehouse while also fulfilling special requests quickly and at a reasonable

price. Maler serves both DIY stores and industrial customers, imposing high standards in terms of volume, delivery times, quality and consistency.

The new system will align the partly very delicate and short pieces highly precisely lengthwise and transport these to the milling and gluing station. Thanks to the WEINIG Trimsaver system with two laser measuring units, parts cut at angles are to be detected and accurately aligned. With an upgrade, these parts can even be discharged at the separation station by switching the belt into reverse. This means no more open joints and in consequence an increased timber yield. Work pieces with wane are centered at each belt transfer so that no wood can get jammed. Maler uses these resources deliberately for profiles on which this area will be removed in any case. This way, the manufacturer aims to gain the maximum yield from its raw materials.

"We advised Maler to use a 7 mm joint to almost eradicate tears," says WEINIG expert Dirk Bartens. The customer is clearly convinced by the results. Jani Oikari is delighted with the consistently high jointing quality.

Source: Holzkurier



New: Conturex 125 Vario Furniture – flexible and highly productive

WEINIG has made a further addition to the Conturex CNC system with a new solution for furniture and frame construction. The Conturex 125 Vario Furniture is based upon proven patented clamping table technology and combines maximum output with optimal flexibility. The new development is designed as a double-part system with special individual clamping technology. In keeping with this design, the Conturex 125 Vario Furniture has parallel charging and unloading. This allows an output of two parts per minute in furniture applications. Two interpolating 5-axis heads ensure optimal flexibility with complex curved parts. The large parts buffer for up to 240 parts fulfills the prerequisites for long-term unmanned production.

Austrian carpentry firm Nagl specializes in windows. To ensure the required precision, the company has worked with WEINIG technology for many years.

Axamer Lizum is not only the largest ski resort in the vicinity of Innsbruck. It is also home to Nagl. The small business supplies primarily private customers with wood and wood/aluminum window elements. Some 2,500 units are designed and produced each year, comprising windows as well as many large lift/slide doors. The company has been using WEINIG machines in its production for 40 years. However, requirements in the market have changed dramatically in recent years. Today, individually designed windows, special sizes of up to 6 x 12 meters and stronger profiles due to multiple glazing are a reality at Nagl. "Our old WEINIG system could no longer meet these requirements so we had to look around," says Franz Nagl. Ultimately, they decided on WEINIG technology once again. "WEINIG plays a leading role in the window manufacturing sector. So it made sense to stick with the brand," says Franz Nagl.

The new Powermat 700 moulder and Conturex Compact CNC machine are designed specially for profitable window production for smaller operations. An important criterion for switching to the new

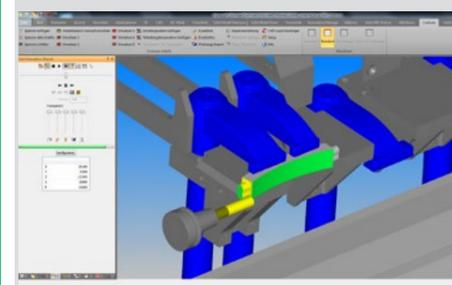


Heading for success as a family: Gerhard, Verena, Franz and Hildegard Nagl (from left)

technology was the potential for flexible single-part production with relatively short set-up times. The two machines are now responsible for the complete processing of windows. The Powermat 700 performs pre-planing on all four sides of the window scantlings. Then, the Conturex Compact "takes over" and completes all required work stages in a single pass. The tool changer provides space for 70 tools for milling, drilling or profiling. Window frames

can be produced in their entirety. "With the Conturex, we can produce all corner joints required by the market as well as processing slanted and round work pieces," says a delighted Franz Nagl.

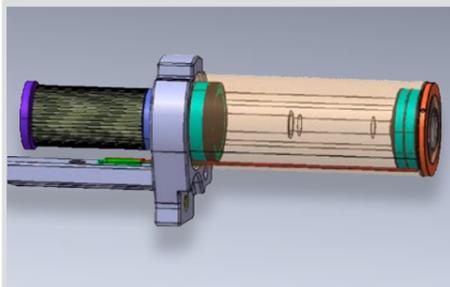
Source: Tischler Journal



New: WEINIG CAM – 3D programming from the office

The high-performance 3D CAD/CAM system can be integrated into any Conturex. Simple and fast programming is just one of its many outstanding qualities. As a geometry-based system, WEINIG CAM also offers a fully-fledged drawing program with smart commands. All standard CAD formats, such as dxf, dwg, solid, stl, rhino and parasolid, are supported. Unlike conventional systems that do not allow 3D surface processing, WEINIG CAM includes 3D 5-axis interpolation. Other customer benefits include greater reliability thanks to detailed simulation down to single-item batches, simple operation via macro programming and modular design from 2D to 3D-interpolation. Furthermore, WEINIG CAM significantly increases flexibility. Unlike comparable systems, installation takes place in the office.

TECHNOLOGY NEWS



New: Spindle temperature measurement for perfect predictive maintenance

A high degree of machine availability is a prerequisite for profitable production. The new WEINIG spindle temperature monitoring makes a crucial contribution towards this objective. When a threshold is exceeded, the machine operator initially receives a warning on the touchscreen. If the temperature continues to increase, the spindles and feed are automatically switched off. Such preventative measures allow bearing damage to be identified prematurely, reducing repair costs. This also avoids consequential damage to the spindles and surrounding components through fire, for example.



New: ProfiPress L B – gluing press with simple handling

The ProfiPress L B combines all of WEINIG's know-how in high-frequency gluing and press technology in a single machine. The machine offers an unprecedented range of applications from panels to scantlings and significantly simplifies production. The ProfiPress L B can process wood lengths from 650 to 6,200 mm and delivers almost offset-free glued products, minimizing post-processing and increasing yield. An automatic pressing force setting ensures rapid set-up and avoids operating errors. The ProfiPress L B is available from a manual system to a fully automated production line.



W4.0 digital – extended functionality for the WEINIG App Suite

WEINIG has provided its customers with smart tools for everyday use in the workshop for some time via the WEINIG App. In the latest generation of the App Suite, WEINIG starts a new chapter. Major new features include the integration of Siemens MindSphere applications and the Machine Monitor, which allows operating statuses and current orders on machines connected to the cloud to be monitored directly on a smartphone. This enables the operator to respond rapidly where necessary. Additional benefits include the improved maintenance planning and the potential to implement rapid preventative maintenance. One of the many new features is spindle temperature monitoring, which can now be performed conveniently on a smartphone. Furthermore, the latest version of the WEINIG App Suite allows the operator to establish direct contact with local service partners.

Menu for technology connoisseurs



High spirits in Moscow WEINIG CSO Gregor Baumbusch (right) and Angara Plus Managing Director Vladimir Kashishin (2nd left) celebrate the progress of the project with the team

Angara Plus from Bratsk, Siberia, manufactures solid wood components for furniture production on a large scale. The company recently commissioned its second fully-automated production line. WEINIG Concept designed the tailor made solution.

The Russian wood sector is characterized by complex requirements. Tailoring industrial systems requires partners who understand project business. WEINIG Concept is a proven specialist in the field with a worldwide reputation. Something Angara Plus also appreciates. Having been very satisfied with the fully-automated

production line for solid wood panels purchased in 2013, the company also turned to WEINIG as its first choice when it came to expanding its operations with a production line for finger-jointed products. What was required was a complete process ranging from checking wood humidity and cutting out defects to cutting fixed lengths, finger jointing, block gluing and destacking. The complete provider WEINIG was able to present a convincing solution. This included the integration of the ultra-fast OptiCut 450 Quantum optimizing cross-cut saw, the EasyScan+ 200 C scanner system and two Powermat moulders that deliver particularly high performance. The centerpiece of the production line, however, is the Turbo S-1000 short timber finger-jointing line with an output of up to 200 parts per minute. The process stage is completed by a ProfiPress C 6100 L high-frequency press. Naturally, the entire automation comes from the WEINIG Group. The production line is designed for 300 production days per year. To achieve maximum machine availability, the production line was equipped with a remote maintenance system. This allows the WEINIG technicians to assist where necessary without having to travel.

Source: Holz-Zentralblatt

The Langdale Company (TLC) in Georgia, USA, is a diversified company with around 5,000 employees. The company has recently found an innovative solution for re-using the leftover pieces from MDF production.

At its Willacoochee facility, TLC produces MDF panels as well as MDF profiled mouldings and decorative mouldings. The company was seeking a solution to re-use leftover pieces from cutting the MDF panels during moulding production and to enhance value creation. This called for efficient technology aligned with issues important to TLC, namely the environment, sustainability, reforestation, tradition, innovation and taking responsibility during each production process. Consequently, they turned to WEINIG. The jointing technology specialist in the WEINIG Group developed a customized solution. Besides the required performance, major challenges of the project included the selection of the profile and profiling as well as joining and pressing the profiled parts. The ProfiShape double-end tenoner plays a key role with its versatility, processing accuracy and high performance. As a "hybrid", the model combines the features of finger-jointing lines and double-end tenoners in a single machine. The ProfiShape offers a particularly efficient solution for cross and longitudinal processing, e.g. for work steps with tongue and groove, trimming or scoring and milling. The



WEINIG ProfiShape: Setting standards in flexibility

machine also impresses with the shortest set-up times, high repetition accuracy and a high level of flexibility when it comes to processing a large number of materials. However, the installation in the USA represented a novelty. It was the first time a supplier had completed a finger-jointing project in the MDF sector. However, the move has proven successful for TLC. The ProfiShape fulfills all customer requests and enriches the production with infinite

possibilities. This is also attributable to the individual combination of units. These include scoring units, hogs, double hogs, shaping units in synchronized and counter rotation, compact switch shaping units, drilling units (vertical and horizontal), servo-controlled aggregates and special units for various applications.

Major technological advance

Mayr-Melnhof Holz Richen entrusts its glulam production to a highly automated solution. The integration of a WEINIG "CombiScan EVO X" X-ray scanner allows strength grading to EN 14081.

With its long tradition in glulam, the German location in Eppingen-Richen is an essential component of Austria's Mayr-Melnhof Holz Group. The plant processes around 100,000 m³ of wood per year from the company's own sawmill into glulam products. The new centerpiece of the production facility is a WEINIG sorting and optimizing line. At the heart of this is the "CombiScan EVO X", an X-ray scanner for determining differences in wood density – irrespective of the external appearance of a board. One absolute innovation is certified strength grading. Jörn Dittgen, WEINIG Regional Sales Manager: "We recently obtained EN 14081 certification for the automatic strength grading of construction timber with a load-bearing function." For Luxscan, the scanner specialists within the WEINIG Group, this represents a milestone in technological development. In addition to strength grading, the "Combi-Scan EVO X" also determines the typical wood features for optical sorting with a four-sided

laser and color sensors. Cracks, resin pockets, knots, discolorations and wane are reliably detected and evaluated in the underlying software. The customer can define and program quality categories according to their own preference using specially developed software. The new installation is completed by a "ShapeScan", which analyzes the curvature, and the marking station, which is able to draw cut markings and prints quality markings on sorted boards. WEINIG is proud of the rapid completion of the project. Since the customer did not want to interrupt production, the installation was performed on shift-free days. "We completed the installation on three weekends," says Jörn Dittgen. Planning was based upon existing layouts specified by Mayr-Melnhof. Martin Rupp from Mayr-Melnhof Holz is satisfied with the outcome: "The prior training and instruction particularly helped us to seamlessly commission the scanner system."



On a plant tour (left to right): Jörn Dittgen (Luxscan), Martin Rupp (Mayr-Melnhof Holz), Kevin Östlich (Mayr-Melnhof Holz) and Josef Weinlein (WEINIG)

Source: Holzkurier

SPECIAL

The WEINIG Group offers its customers a vast spectrum of products and services. **THINK WEINIG is the key to making optimal use of this potential.**

"Successful entrepreneurs make investment decisions that secure them a competitive advantage," says Chief Sales and Marketing Officer Gregor Baumbusch. "THINK WEINIG creates the optimal circumstances for them to do so." Combined expertise comprising knowledge, forward-looking and wide-ranging state-of-the-art technology represents the core of the THINK WEINIG strategy.

"Our message is: No matter what challenges customers have to deal with in the market, WEINIG is always their first point of contact."



Gregor Baumbusch, Chief Sales and Marketing Officer:
"Digitization for its own sake does not guarantee success. It is essential to engage the people involved."

With its strong product brands, WEINIG and HOLZ-HER, the WEINIG Group has an extensive product portfolio across the entire value chain. All solutions are clearly targeted towards providing maximum benefit to the customer. WEINIG technologies allow customers to plan, produce and undertake maintenance efficiently and in a manner

that saves resources. In doing so, they can rely on our Sales, Development and Service teams that combine decades of industry experience and in-depth expert know-how.

How will the market look in a few years? What will be customers' main concerns? In which areas can we start preparing today for the changes of tomorrow? WEINIG recognizes **market trends** prematurely and capitalizes on these for the benefit of the customer. The leading position of each and every group member in its market segment is another component of THINK WEINIG. The highest **standards in quality** produce **synergies** that benefit the customer in a variety of ways. WEINIG technology is also particularly groundbreaking when it comes to **sustainability**. In the age of **digitiza-**

tion, WEINIG has adopted a pioneering role yet again. The W4.0 digital standard is setting benchmarks. Now, our membership of MindSphere World adds a further dimension. Customers can now access the benefits of a powerful cloud-based platform. W4.0 digital powered by MindSphere is the formula for tomorrow's world of production. Even in this highly technical stage of development, however, WEINIG is remaining true to its principles.

Going forward, customers can benefit from the fact that WEINIG solutions will be customized for individual requirements with user-friendly designs. In a networked world, the THINK WEINIG philosophy will mean incomparable benefits and a unique selling proposition for the WEINIG Group.

THINK WEINIG

WEINIG Service:

winners of the prize draw announced
Feedback from customers following service interventions is an essential aid for us, to maintain a process of continuous optimization and offer a first-class WEINIG Service to our customers. As a thank you for all of the feedback flyers we are able to analyze, we hold an annual prize draw for WEINIG vouchers with a value of EUR 150. The winners for 2017 have been announced. They are Wigger GmbH Fenster + Fassade and Schwarz Fensterbau GmbH from Germany. Our sincere thanks for the high rate of response. Please continue to return your feedback flyers to give us your thoughts on our service.



Love at first sight:

It is appreciated by woodworking professionals throughout the UK. Now, Alsford Timber has become the 100th business to say "yes" to the compact WEINIG CUBE. And immediately declared its love for the machine.

Established English company Alsford Timber has grown from humble beginnings to the largest timber merchant in the south-west of the country. The company recently invested in a WEINIG Cube Plus for its headquarters in Erith (Kent), which includes a sawmill and the company's central production facility. The order was also the hundredth installation of the compact S4S machine in the UK. Roy Stevens of Alsford Timber immediately recognized the benefits of the Cube: "We have to make sure our machines can be used as effectively as possible. Since we've had the Cube, we no longer need our large automatic moulders if we just have to S4S. The Cube is incredibly easy to operate. Within a few minutes it's ready to go." He is also proud that his company made the landmark order. "We're delighted to share in the celebration of this milestone," says Roy Stevens.



Intelligent ripping? No problem with a WEINIG

This is what satisfaction looks like: The Lange Bros. Woodwork team

In 1932, brothers John and Rudy took their German grandfather's knowledge of wood as a raw material to Wisconsin. Today, the family business Lange Bros. Woodwork is one of the premier addresses for high-quality interior fittings in the USA.

When it comes to refined and sophisticated finishes, the Lange Bros. Woodwork team can provide the inspiration. The result is impressive reference projects throughout the country. The company has a particularly excellent reputation as a restoration specialist. With a dynamic pair of siblings

at the helm, the new generation of the family is currently on a growth trajectory. The company is currently in the process of optimizing and expanding its moulding and cutting operations. This included the acquisition of a rip saw. The chosen model was a VarioRip 310 with infeed automation. Rory Lange explains why the saw had to come from WEINIG: "When we were looking for a rip saw, we were particularly concerned about reliability, quality control and simple operation. The VarioRip 310 has precisely these benefits." He was particularly impressed by the convenient adjustment of ripped widths to meet changing requirements and the laser measuring system that helps the operator to achieve optimal wood yield with minimal waste. Another of his favorite features on the VarioRip 310 is the lineal counter, which automatically stops the machine when a preset production volume is reached.

Rudy Lange: "It is exactly innovative technology like this that will allow us to embrace the future."

WEINIG OFFERS MORE

The current WEINIG event calendar can be found at fairs.weinig.com

A sector with huge potential

Gigantic would be the right word to describe the Tricor Packaging & Logistics AG production facility in Eppishausen/ Germany. Every hour, the fully-automated WEINIG production line produces around 360 pallets for in-house use.

Freight transport is one of the world's major growth markets. Manufacturers of wooden packaging are also benefiting from this. One outstanding representative of the sector is Tricor, the European market leader in heavy-duty corrugated cardboard packaging. Customers come primarily from the automotive and mechanical engineering sectors as well as the electronics, medical technology and chemical industries. For a long time, the company purchased its annual requirement of 1,300,000 special pallets externally. Then they turned to WEINIG. Besides increased productivity, im-

proving the value chain was also on their wish list. In June 2017, a highly automated cutting system was delivered to the Eppishausen plant. Central components comprise three parallel OptiCut 260 optimizing cross-cuts saws with Variospeed infeed belt and downstream sorting as well as an Ultra TT finger-jointing line for leftover pieces from 150 mm. The finger-jointed lamellae are then fed back into production. Only three employees produce up to 360 pallets per hour on the high-performance production line, which is linked to a Corali pallet system. For a pallet measuring 1,220 x 820 mm, this equates to approx. 80 m/min of incoming materials to the cross-cut saws or around 30,000 running meters per shift. The system is charged via vacuum destacking, which takes up to three infeed stacks simultaneously with three different wood dimensions. The boards are checked via automatic humidity



A WIN-WIN situation for supplier and customer: Manfred Ness from WEINIG (right) with Tricor project manager Maik Christmann

measurement before a layer allocator assigns one dimension to each of the three saws. Dr. Mario Kordt, Managing Director of Weing Dimter, underlines WEINIG's special position in the packaging segment: "With our technology, we provide a unique service to an area that ranges from 2-man operations to the industrial sector." With WEINIG's expertise in cutting, gluing and scanning, the WEINIG Group customer receives from a single source everything that is needed to ensure the efficient and economic production of pallets and wooden packaging.



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