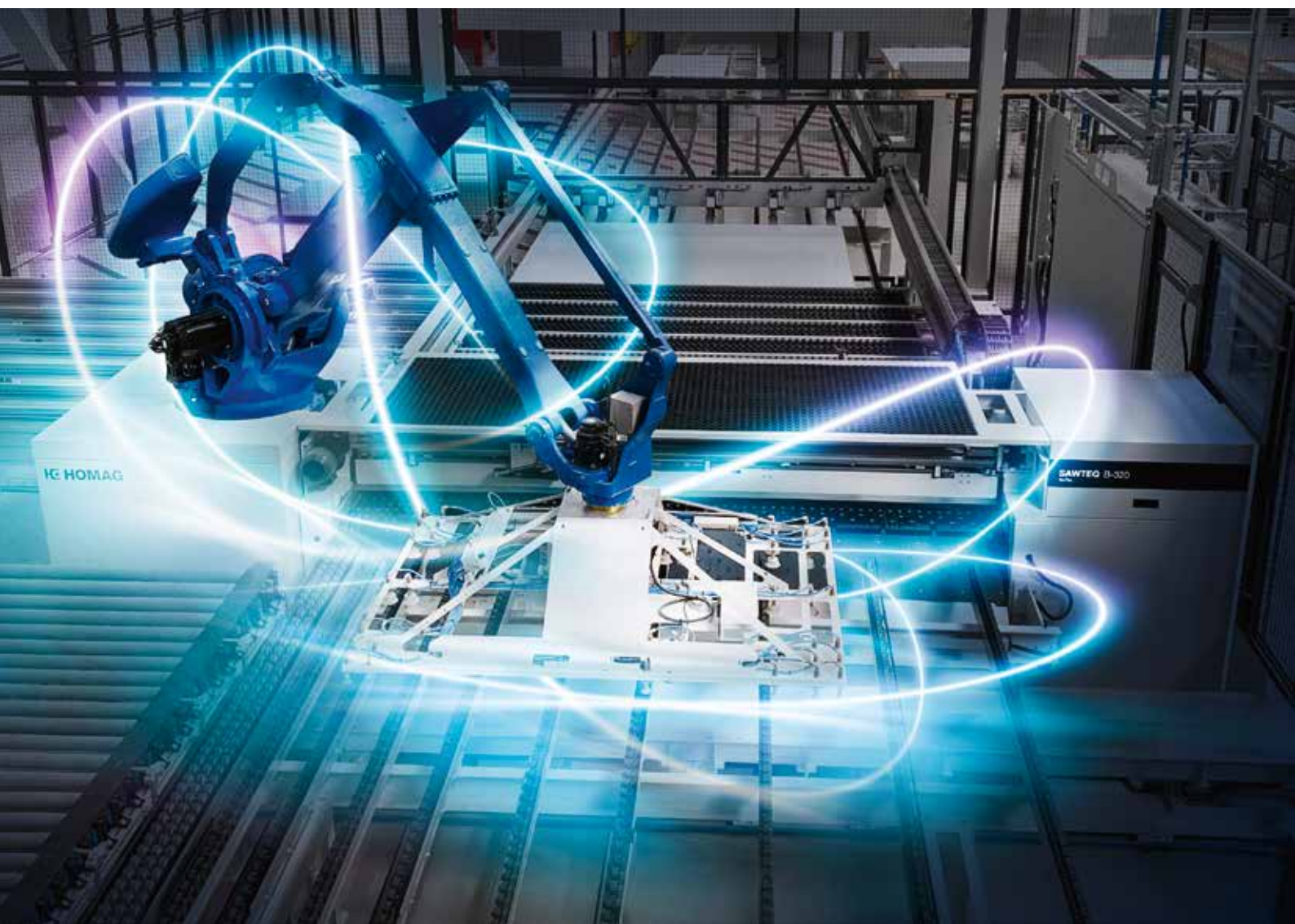


# High-tech. High-speed. High-productivity.

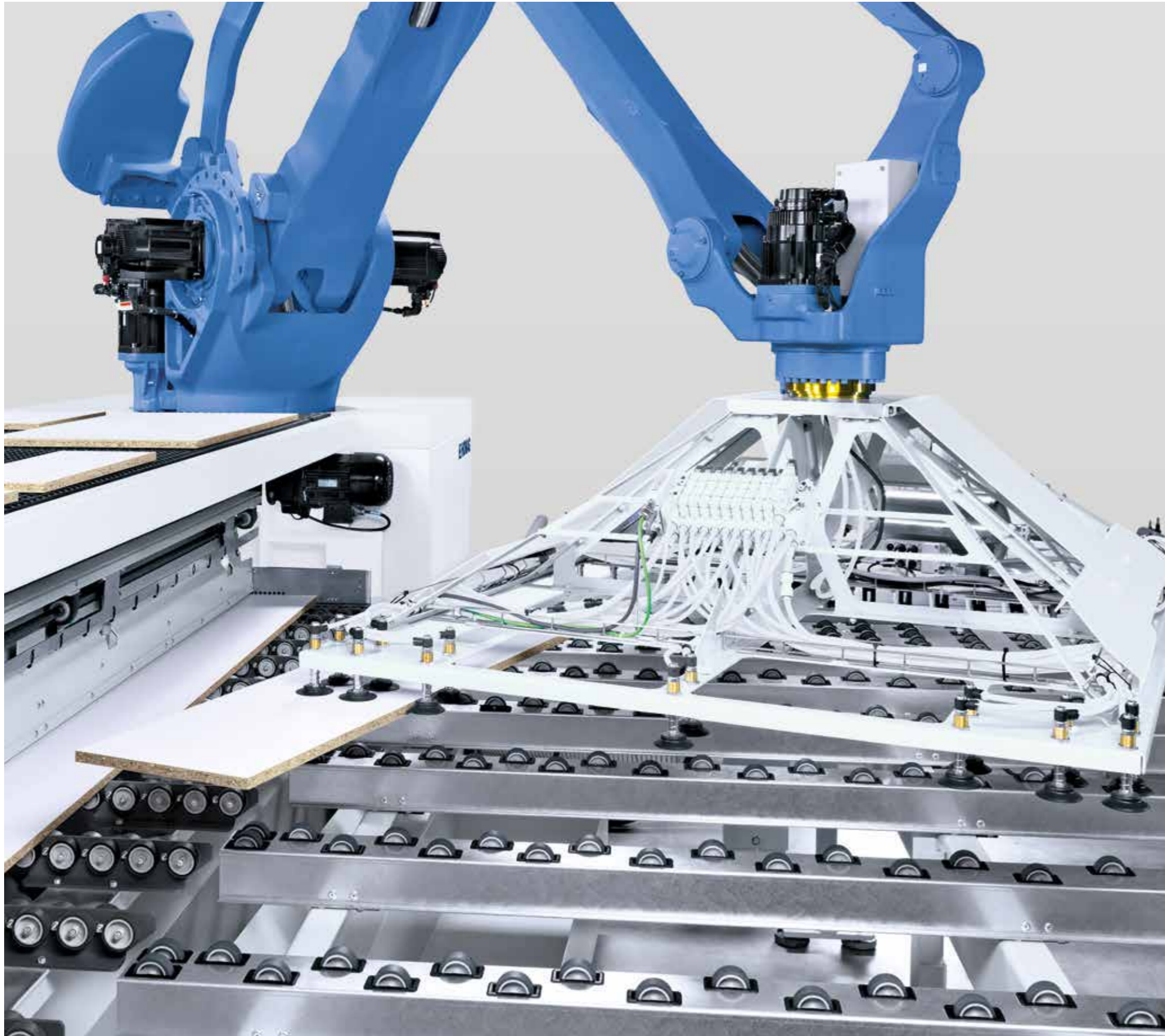
**HOMAG**

**Our panel dividing saws**  
SAWTEQ B-320 flexTec

**YOUR SOLUTION**







## SAWTEQ B-320 flexTec – customized cutting on a large scale

With the SAWTEQ B-320 flexTec, HOMAG revolutionizes cutting in batch size 1 production and allows highly flexible order-based or customer-specific production. The innovative cutting cell is designed specifically for processing single panels and completely redefines the flow of parts – whether as a stand-alone solution or interlinked. The machine concept allows fully automated processes and unlimited recuts and can operate completely autonomously over long periods, depending on the part removal version. This creates flexibility and gives your staff more time for other tasks.

Tip: Combining the SAWTEQ B-320 flexTec with an automatic HOMAG horizontal storage system will unlock the saw's full potential.

### YOUR SOLUTION

### MORE AT HOMAG.COM



SAWTEQ B-320 flexTec

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- 06 Performance
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## SAWTEQ B-320 flexTec – one innovation, countless benefits



### Highlights at a glance

- **New, improved performance:** up to 3000 parts per shift
- **Automation through robot management:** Highly flexible pattern amendment and gentle material handling with almost complete availability of the robot
- **Advanced simulation of production and standard, customer-specific configuration** provides maximum planning security and optimal production design
- **Redundant interlinking saw** for scalable performance thanks to innovative, tried-and-tested machine technology
- **Unlimited recuts** for highly flexible pattern amendment
- **Autonomous operation over longer distances** thanks to automatic destacking

### Fully automatic cutting in batch size 1

With the SAWTEQ B-320 flexTec, HOMAG has developed a cutting cell specially for cutting single panels – with highly efficient, fully automated processes including labeling.

- Processes flow smoothly from A to Z
- Optimized for batch size 1 cutting in woodworking shops or industry
- Unlimited recuts
- Fully automatic longitudinal and transverse cutting with just one saw
- No more manual panel handling, instead the option for unmanned operation – depending on the part removal version
- The robot moves the panels using gentle vacuum technology
- Production interruptions are almost completely ruled out with the proven industrial robot (almost 100% availability)

### Saves space, time, material and energy

The design makes the difference: the SAWTEQ B-320 flexTec is optimized down to the last detail for cutting single panels – from the overall design down to the saw blade. This is what makes the machine so efficient and powerful in batch size 1 production.

- Requires less space, since only one saw body, one program fence, one machine table and one waste removal system are required
- This results in a high throughput over a small area, reduced maintenance costs and low tool and energy costs
- Extra-thin saw blades increase material yields and lower energy consumption at the same time
- Energy-saving and highly efficient due to a specially designed suction device with innovative dustEx technology
- No time and effort required for manual handling
- Operating personnel are only responsible for monitoring the system
- Optimum process visualization
- Fully automatic handling of offcuts by robot

### Accurate, low-maintenance and high-availability operation

Thanks to the innovative yet proven robot technology, the SAWTEQ B-320 flexTec also sets totally new standards in terms of reliability and quality.

- High machine availability due to low maintenance requirements
- Extremely low error rate thanks to optimal chip removal (dustEx) and gentle panel handling
- HOMAG simulation software ensures the performance can be computed accurately from the planning phase
- Low life-cycle costs
- Significantly reduced unit costs in batch size 1 production
- Performance: up to **3000\*** parts per shift

### Allows unlimited recuts and flexible cutting patterns

Flexibility is essential in customized cutting processes. The panel dividing professionals at HOMAG know this from countless discussions with customers and specifically aimed for this with the SAWTEQ B-320 flexTec.

- Full flexibility in pattern amendment thanks to recut technology
- Head sections and therefore main parts in any length
- Powerful labeling with part- and order-specific information
- Outfeed of parts or their destacking on pallets can be coordinated with subsequent processing steps
- Cutting cells can be connected to an automatic panel storage unit or integrated into HOMAG production lines
- Modular cutting cells, individually configurable. The combination of several cutting cells, different material outfeed directions and various feed options is possible

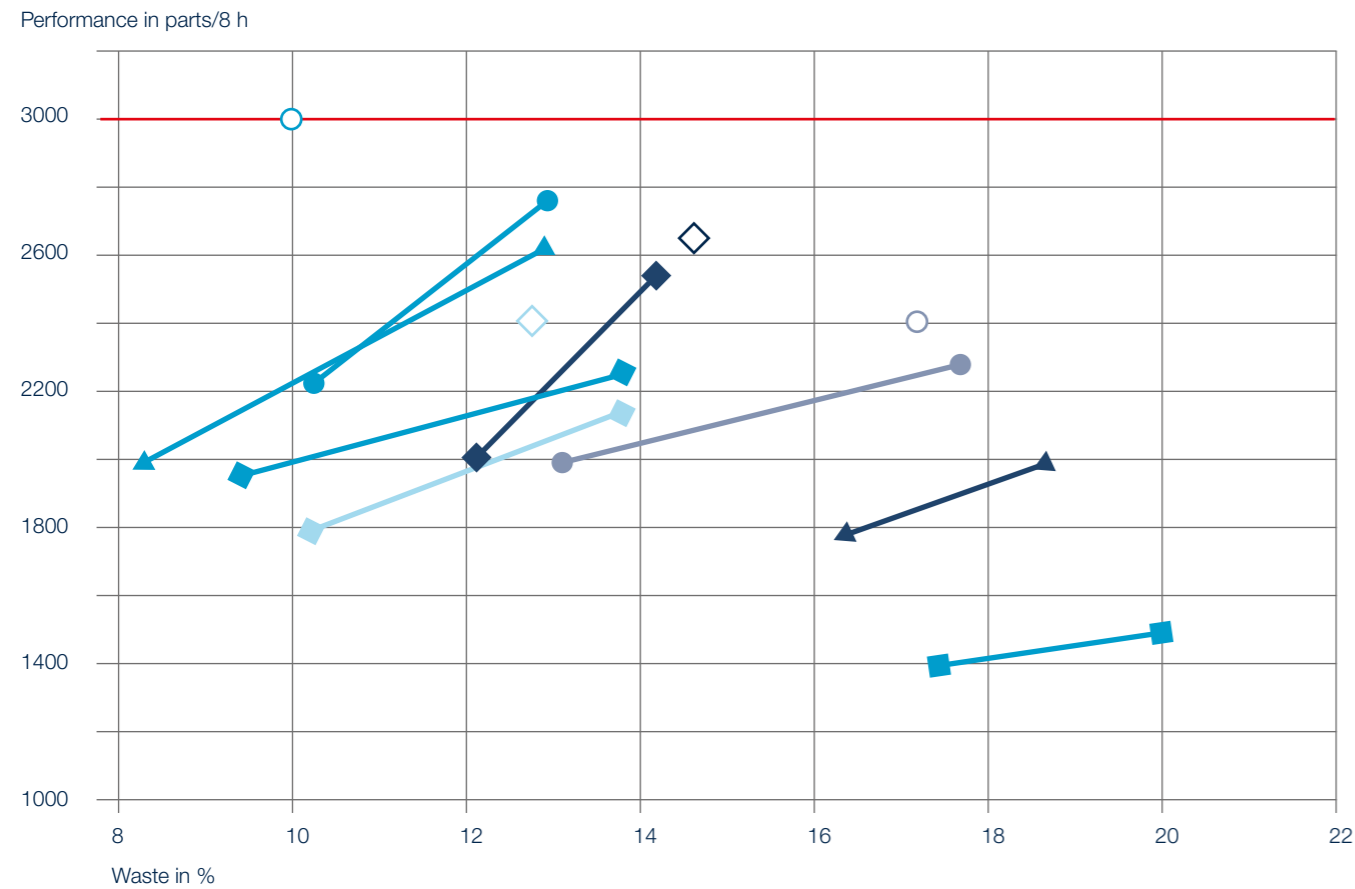
\*depending on the range of parts and cutting patterns



# SAWTEQ B-320 flexTec with improved performance – now with up to 3000\* parts per shift

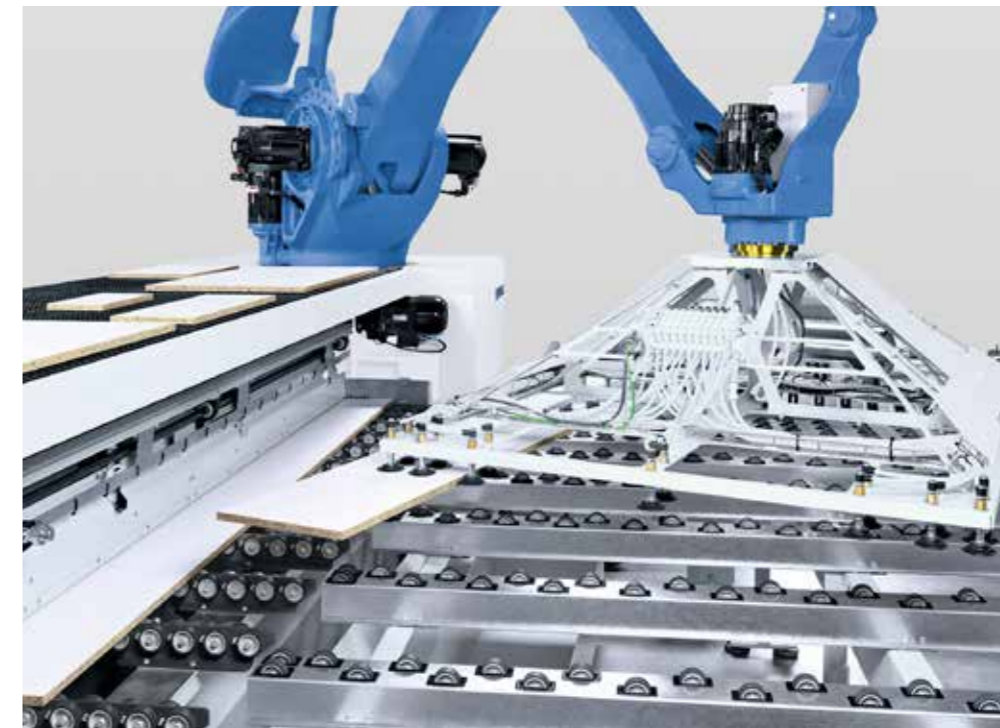
Whether you want to focus on maximum performance or minimal waste – the SAWTEQ B-320 flexTec allows you to optimize your production to meet your needs. The new performance capability of up to 3000\* parts per shift comes in useful for meeting the requirements of kitchen, bathroom, bedroom and office furniture manufacturers in particular. At the same time, the B-320 flexTec provides almost 100% technical availability, gentle material handling and exceptional cleanliness.

Take a look at the performance graph to see typical applications based on real customer data:



- Optimized for max. performance with several optional parts
- Optimized for max. performance
- Optimized for minimal waste
- Range of flexibility for the customer
- Bathroom
- ▲ Kitchen — industry
- Kitchen — fronts/cabinet
- ◆ Kitchen — partition panel
- Kitchen — industry alcoves/long parts
- ◆ Bedroom — partition panel
- ▲ Office — industry
- ◆ Office/contract furniture

\* depending on the cutting pattern/range of parts and in case of 100% availability



Thanks to its new, improved performance, the SAWTEQ B-320 flexTec has a markedly positive impact on your processes. The result can be seen in the holistic and fully integrated machine concept that improves all three aspects (performance, availability and quality) of the overall equipment effectiveness (OEE).



## Destacking software and lifting table solutions for periodically unmanned operation

The panel dividing professionals from HOMAG have developed destacking software with a completely new algorithm. This, together with the robot and the lifting tables in the secure area of the system, enables the SAWTEQ B-320 flexTec to operate unmanned over long lines. A revolution in panel dividing technology!



### The operation: clever and highly automated

The finished parts exit the saw in the order in which they are cut. To obtain the optimum destacking order for stable stacks and subsequent processing, the HOMAG experts have developed a new algorithm. Equipped with this intelligent algorithm, the robot also uses the parts buffer when destacking. This means that the lifting tables are used with a time delay and more intelligently than ever to form perfect stacks.

The cutting cell is equipped with a laser scanner. It measures the height of the part stacks on the lifting tables in real time for optimum height positioning.

### The advantage: operators are not required over long lines

When equipped with lifting tables in the robot's field of action, the SAWTEQ B-320 flexTec is already capable of working completely unmanned over long lines depending on the destacking version.

#### Continuous further development

The HOMAG destacking algorithm now provides even better results and destacks even more intelligently. This leads to longer intervals between stack changes, where part cuts are autonomous over even longer stretches. This results in less idle time and higher output in robot mode.

### The result: all-round efficiency

Thanks to its destacking software and special lifting tables in the robot's field of action, the SAWTEQ B-320 flexTec works extremely efficiently and improves batch size 1 production far beyond the cutting process.

- The robot can destack parts according to an optimization strategy based on either the destacking location or downstream processes
- The robot always tries to utilize the maximum stack height
- It forms absolutely stable and, at the same time, fewer stacks than is normal when manually destacking
- Actions by machine operators are rarely required, and no longer needed at all over long lines

This reduces the space required for handling tasks. All this adds up to a rapid return on investment.



### Cut Rite cutting optimization software

Efficiency through planning: this short phrase sums up the key benefits of the Cut Rite software. With this world-leading software solution, you can optimize waste and systematically lower the overall costs for cutting.

### Highlights

- Seamless, precise and highly efficient processes ensure optimized project control
- Efficient cutting processes which can be individually adapted to your production processes using parameter settings
- Full cost control within the cutting process: material costs and processing time are calculated automatically when the quotation is prepared
- Faster calculations by using all the processors in the PC
- Simple handling: clearly structured, easy to operate and graphics display the information

Find out more in the "Cut Rite" brochure.



## This is what our customers have to say:

**“We purchased the SAWTEQ B-320 flexTec to further automate our operating processes and save resources. So now we are able to store and process over 400 different types of panels with only one employee using the cutting cell and a HOMAG horizontal storage system. In short: for us, the SAWTEQ B-320 flexTec is part of an overall system that ensures smooth processes from ordering through to the finished part.”**

Phillip Schuon, Managing Director of Engineering and Purchasing,  
MS-SCHUON GmbH

**“Every day we process around 1500 m<sup>2</sup> of panel material and our motto is: nothing is impossible. This principle is the basis of our success – but it also requires a high level of flexibility and speed in production. When I saw the SAWTEQ B-320 flexTec at LIGNA 2015, I was extremely impressed. It was immediately clear to me that this saw was made for us. The SAWTEQ B-320 flexTec helps us to cope with the demands of the future.”**

Stefan Voit, Owner and Managing Director, Voit GmbH

**“We decided on this system because its cost-effectiveness is impressive. Flexibility, use of space, performance and waste have been all but solved with this concept. In conjunction with our two-story panel storage, we can handle the required variety very well with the SAWTEQ B-320 flexTec. As a next step, we will optimize the destacking. We will consider a robot solution here too.”**

Max Heller, Managing Director, Schüller Möbelwerk KG

**“Speed and flexibility are very important to us. We have around 87,000 current parts plus 20,000 discontinued parts that we must be able to produce immediately. That's why we have purchased two identical saw systems with robot feed that are supplied with unprocessed materials from automatic panel storage systems. By using the industrial robot, we achieve almost 100% availability – which means we are also well-equipped to meet future requirements.”**

Ulrich Weber, plant manager of the Duravit AG furniture factory in  
Schenkenzell





## Standard features

The SAWTEQ B-320 flexTec offers the full range of technical features and can be put to flexible use, either as standalone machine, interlinked with other machines or as part of a production line, depending on the production concept. This makes the SAWTEQ B-320 flexTec the ideal solution for woodworking shops and industry in many applications.

## ecoPlus – because efficiency starts with the use of resources

Energy, time, material and personnel are all precious resources. Conserving them increases productivity and saves costs. The ecoPlus technologies from HOMAG help you to achieve this aim, providing countless innovations that save energy and reduce your operating costs. What's more, ecoPlus reduces CO<sub>2</sub> emissions and protects the environment. A worthwhile investment twice over.

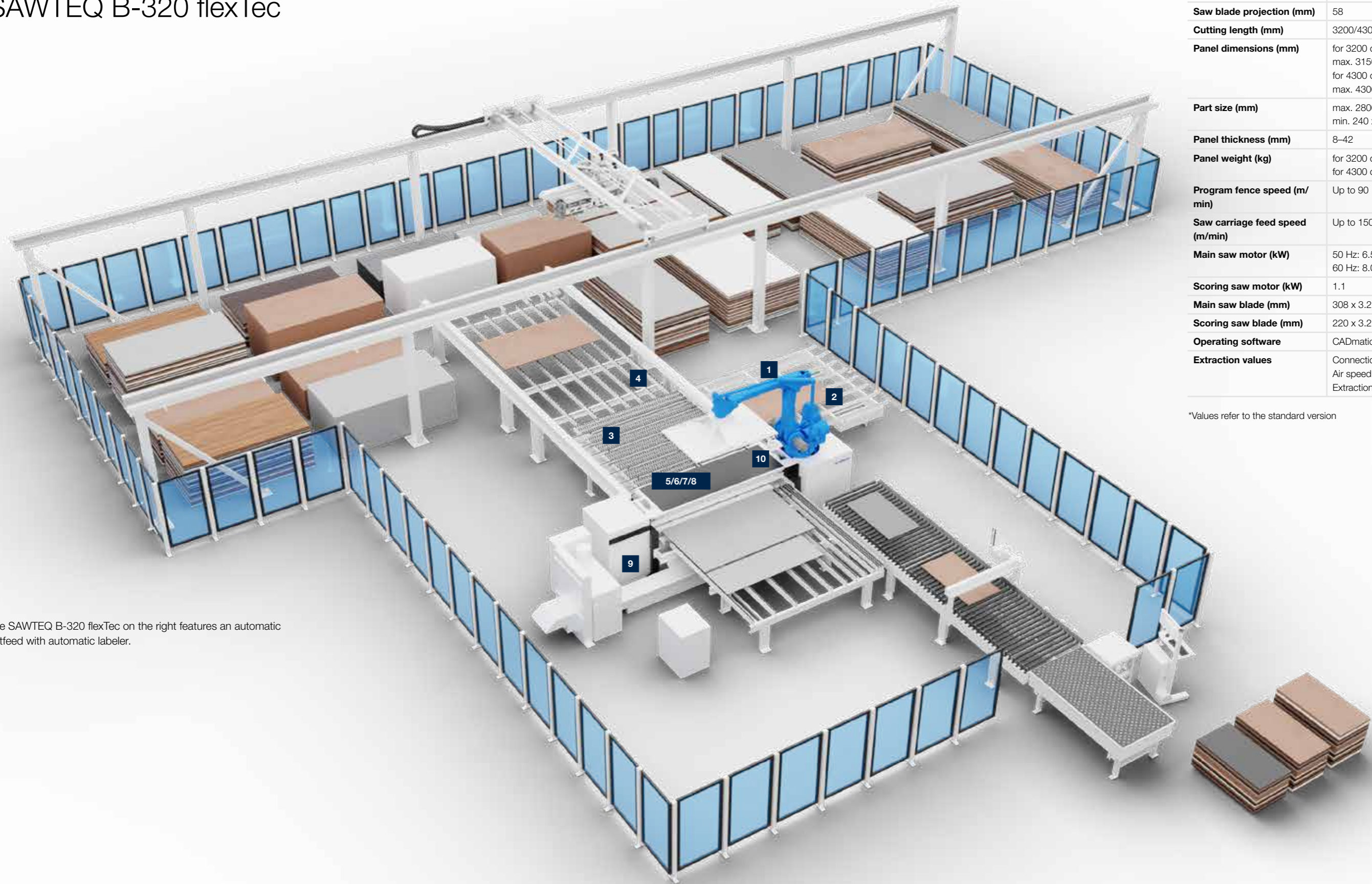


### ecoPlus technologies for maximum energy savings

- The standby button, a standard feature, puts the saw in an energy-saving standby mode at the touch of a button
- SAWTEQ B-300 with IE3 motors
- Variable speed control by means of a modern bypass circuit for all models with frequency-controlled main saw motor
- The geometry of the saw carriage enables highly efficient dust extraction
- All models are equipped with an energy monitor to monitor consumption
- Less energy required thanks to optimized dust extraction
- Thin-kerf saw blades can be used on request, ensuring less waste among other benefits
- Many innovations for improved ergonomics and smooth production processes



## Standard features – SAWTEQ B-320 flexTec



The SAWTEQ B-320 flexTec on the right features an automatic outfeed with automatic labeler.

TECHNICAL DATA*	
<b>Model</b>	<b>SAWTEQ B-320 flexTec</b>
<b>Saw blade projection (mm)</b>	58
<b>Cutting length (mm)</b>	3200/4300
<b>Panel dimensions (mm)</b>	for 3200 cutting length: max. 3150 x 2200 for 4300 cutting length: max. 4300 x 2200
<b>Part size (mm)</b>	max. 2800 x 1200 min. 240 x 80
<b>Panel thickness (mm)</b>	8–42
<b>Panel weight (kg)</b>	for 3200 cutting length: max. 180 for 4300 cutting length: max. 250
<b>Program fence speed (m/min)</b>	Up to 90
<b>Saw carriage feed speed (m/min)</b>	Up to 150
<b>Main saw motor (kW)</b>	50 Hz: 6.5 60 Hz: 8.0
<b>Scoring saw motor (kW)</b>	1.1
<b>Main saw blade (mm)</b>	308 x 3.2 x 60
<b>Scoring saw blade (mm)</b>	220 x 3.2 – 4.0 x 45
<b>Operating software</b>	CADmatic 5 with powerTouch
<b>Extraction values</b>	Connection diameter: 180 mm Air speed: 26 m/s Extraction capacity: 2300 m³/h

\*Values refer to the standard version



## Standard features



**1 Robot with suction cross rail**

At the heart of the SAWTEQ B-320 flexTec is a tried-and-tested industrial robot with a specially developed suction cross rail. The robot is responsible for all the handling of the panels, strips and parts. This is fully automatic, highly flexible, error-free and efficient.



**2 Side machine table (active strip buffer)**

The robot places the strips here. They are then automatically fed to the rear machine table. The side machine table can be connected to an additional feed table for extension as required.



**3 Rear machine table**

With integrated alignment function for longitudinal and transverse orientation and roller rails.



**4 Program fence**

Automatically positions the panels at the cutting line with the help of rugged clamps. The technology has been developed specifically for single panels: for consistently accurate positioning with a minimum of maintenance, for material-friendly handling and for maximum availability.



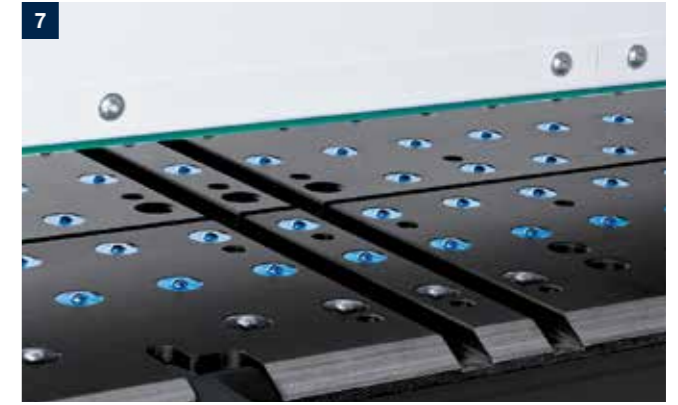
**5 New side pressure device**

Unlike the usual device for HOMAG saws, the SAWTEQ B-320 flexTec works with a side pressure device that comes from above and can be moved separately. The system presses the strips over the entire cutting length – also suitable for pressure-sensitive panels.



**6 Suction device**

The cutting direction is toward the right-angled fence. This prevents the panels from shifting and at the same time guarantees optimal extraction, as dust and chips are directly captured via the right-angled fence, the pressure beam and a special channel in the saw carriage.



**7 dustEx (patented)**

The machine table is equipped with innovative dustEx combination air jets that guide dust and chips directly to the suction device located at the right-angled fence.



**8 Ejecting device**

Automatically pushes the cut parts from the cutting line to the front machine table and thus back into the work area of the robot. Waste is removed via the waste flap.



**9 Waste disposal**

The waste flap opens and closes in the work cycle of the cutting cell; operation is fully automated and software-controlled.



**10 Parts buffer for recuts**

The system has a parts buffer directly above the pressure beam. The robot temporarily places parts here that are to be fed to the saw again (recuts).



## Optional features

More technology for customized production down to the very last detail: these features allow you to supplement the functionality of your saw in line with your requirements – from adding a link to a storage system and performing the actual cutting process to labeling and destacking. So you get exactly your solution.

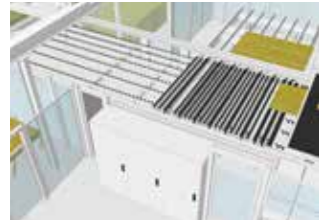
## Feeding and destacking solutions ranging from S to XXL

The core cell of the SAWTEQ B-320 flexTec has proven itself many times. There are multiple options for installation. Whether fully interlinked or stand-alone, with loading via the rear machine table or from the active strip buffer, in a right- or left-handed version, with destacking via outfeed roller tracks, on lifting tables or a combination of both – anything is possible.



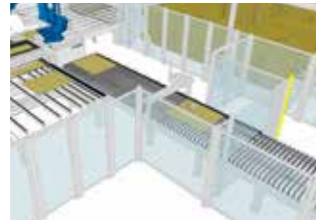


## Optional features



### Extended rear machine table

If the saw is fed from an automated storage system, the rear machine table can be extended. The advantage: if necessary, the storage system then already puts the next panel into place during the ongoing cutting process without the saw having to stop.



### Automatic outfeed

The robot automatically places all the finished parts on the outfeed motor-driven roller conveyors.



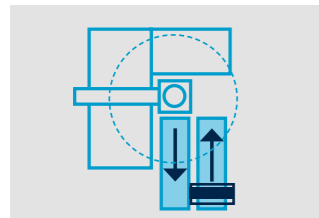
### Automatic labeling

If the cutting cell has automatic outfeed, it also needs a label printer for fully automatic labeling. Each finished part is thereby provided with the information necessary for processing at subsequent stations directly at the outfeed. There is a choice of two types of printer, each using labels in 120 mm x 80 mm format.



### Labeling at the pressure beam

The HOMAG pressure beam printer labels parts automatically – and directly where they are generated. This creates an ideal basis for partially unmanned operation when used in combination with the new lifting table destacking option, because the 76 mm x 76 mm labels contain all the information required for subsequent processing. The label position can be selected as required.



### Offcuts return

The SAWTEQ B-320 flexTec independently returns so-called automatic offcuts to the store. In contrast, manual offcuts are labeled and placed in a manual offcut store by the operator. As soon as this kind of offcut is needed again, the cutting cell requests the operator to feed it to the saw.

The operator collects the desired part from the manual offcuts store, scans its label and places the part on an offcuts roller conveyor. Here, automatic part measurement checks whether the information on the label matches the real dimensions. If this is the case, the part is fed back into the robot's field of action by the offcut roller conveyor and processed.

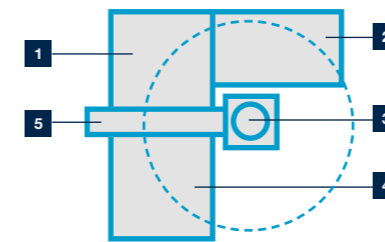


### Waste chopper and elevating waste conveyor

For smooth waste removal, a waste chopper and an elevating waste conveyor are available as options.

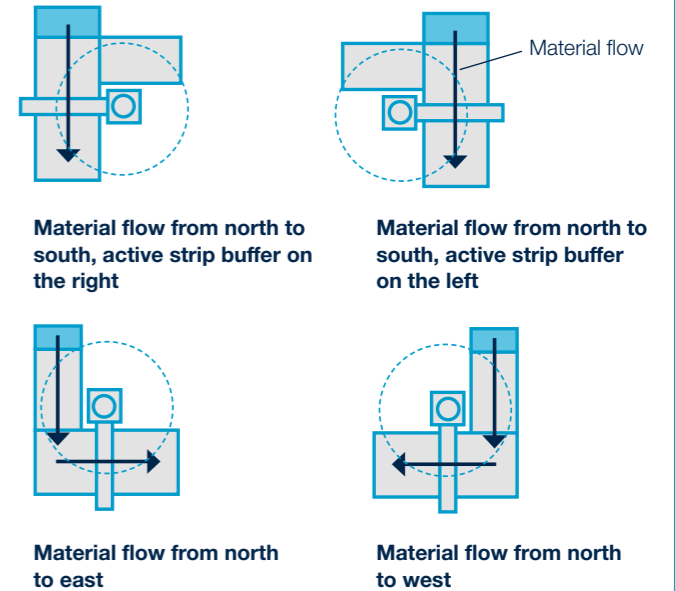
## Layout variants at a glance

### The basic machine



- 1 Rear machine table/cross transfer
- 2 Active strip buffer
- 3 Robot
- 4 Front machine table/outfeed
- 5 Saw and parts buffer for recuts

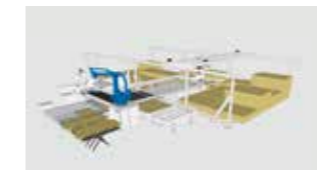
### Layout variants for needs-based feeding



## Optional features for tailored destacking solutions

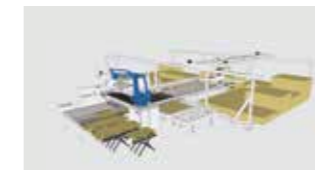
### New: automatic destacking to lifting tables

The lifting tables in the working area of the robot enable unmanned working using the cutting cells over long lines.



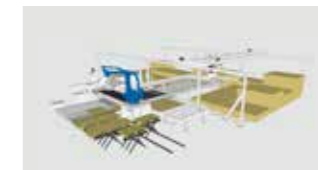
#### Variant 1

Two long-part lifting tables



#### Variant 2

Two long-part lifting tables with an additional small lifting table



#### Variant 3

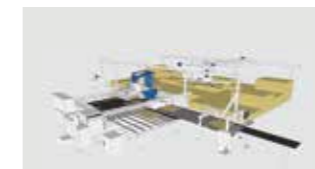
Two long-part lifting tables in combination with two small lifting tables. One of these can be moved as needed

### Automatic outfeed via roller conveyors



#### Variant 1

- Finished parts are transported at a 90° angle to the right and on mirrored versions to the left
- Fully automatic connection to downstream machines possible



#### Variant 2

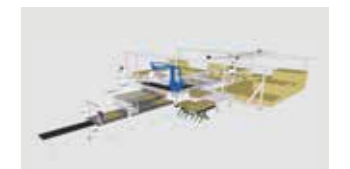
- The finished parts are transported forwards for destacking using an automatically driven outfeed roller conveyor
- Fully automatic connection to downstream machines possible

### New: combinations of roller conveyors and lifting tables



#### Variant 1

An outfeed roller conveyor with a lifting table



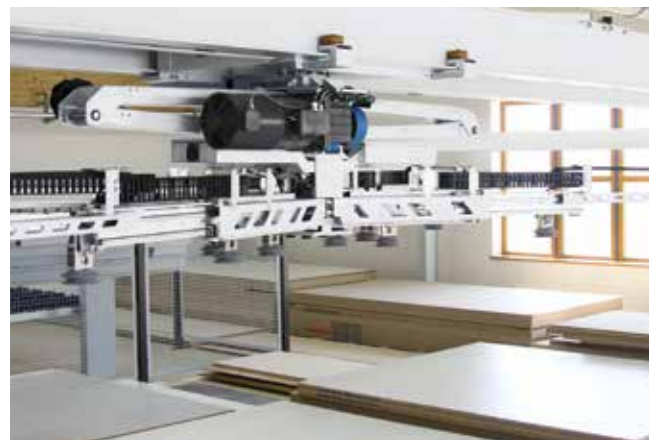
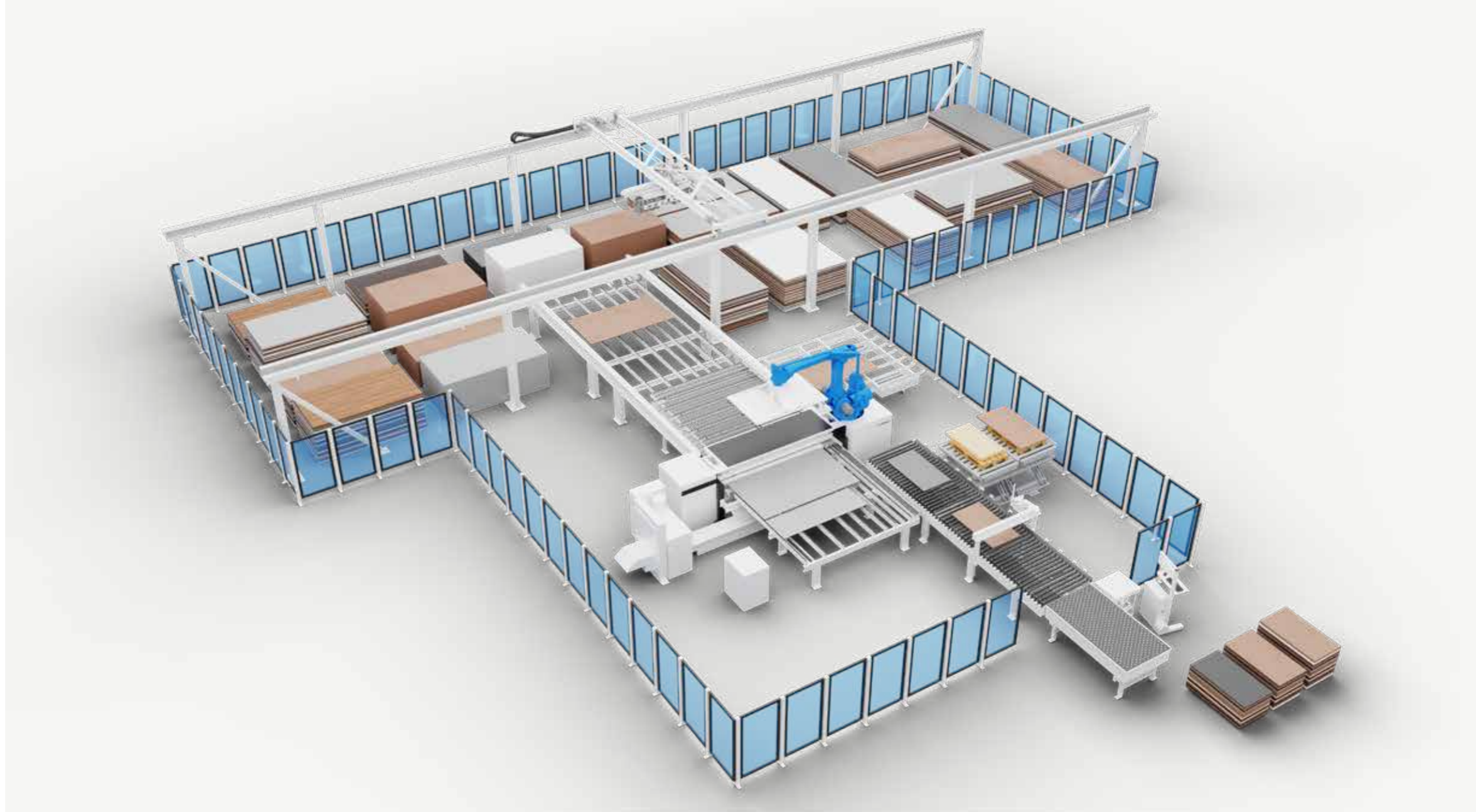
#### Variant 2

An outfeed roller conveyor with two lifting tables



## STORETEQ S-200 or S-500 – the right horizontal storage system to meet your needs

Even with the widest possible range of products, high speeds, and full equipment. The STORETEQ S-200 allows you to optimize transport routes and quantifiably save material and time. The STORETEQ S-200 provides intelligent logistics with palpable efficiencies. The STORETEQ S-500, the all-rounder among the storage systems, is used to deliver even more flexibility for a variety of materials.



The **ST71 suction cross rail** in X geometry is the ideal optional feature for the STORETEQ S-200. The self-learning cross rail generates the data required for panel handling independently and thus ensures dependable process reliability. The operator does not have to enter anything.

### The STORETEQ S-200 optimizes the storage area and saves you valuable production space

- Intelligent standby – the machine only uses energy when it is actually moving
- Optimal material consumption right down to offcuts thanks to well-thought out material management
- Handling without any extra costs – coated panels from a thickness of 3 mm thanks to the ST 61 suction cross rail, which is already included in the standard version
- High flexibility due to ideal use of the available area even in the smallest possible space
- Increase in productivity of up to 40% with the same level of personnel



### STORETEQ S-500 – flexibility and variety of materials combined in one storage system

The sturdy construction of the STORETEQ S-500 allows a great deal of flexibility when designing the system's length and width.

- Span widths of up to 16 m and travel path lengths of up to 100 m and more
- Controlled, low-vibration movements even in the largest version



### Great variety of materials

Whether it's handling plastic, plexiglass or laminate, coated or uncoated panels, the STORETEQ S-500 is also a true all-rounder when it comes to handling panels.

- Panel weights of up to 350 kg and panel lengths of up to 5600 mm
- Smooth transport of even textured surfaces
- High double scissor stability for precise panel handling
- Handling of plastic panels





## Ten important reasons to opt for the woodStore warehouse control system

1. Open database system enables seamless integration
2. Multi Terminal offers transparency and ergonomic operation
3. Smart Connected System: full integration of optimization, processing machine, and storage into one cutting system
4. intelliStore: flexible storage organization that automatically adjusts to production conditions
5. Complete offcuts management prevents the buildup of offcuts
6. Forklift operator management: enables material supply separate from cutting
7. Management of outside storage is integrated
8. Easy Edit production lists: easy to change orders and sequence
9. Various storage strategies enable easy adjustment to production scenarios
10. Optimization of the production sequence enables high performance

### woodStore 8.

Portable, networked, user-friendly.



#### Mobile operation

You can control various functions via mobile end devices connected within the machine's Wi-Fi network.



#### User management

Personnel-controlled warehouse operation with a functional range of up to 40 different user rights.



#### Smart Connected System

Complete integration of optimization, saw and storage into one cutting system with corresponding standardized interfaces.



#### Email notification

In the event of any malfunctions in the operation of the storage system, the system sends an email to the email account specified.



#### Database access analysis

Customer database is measured for performance and logged to identify digital bottlenecks.



#### Smart Separation Learning

Fully automatic panel separation that requires only two panel handling settings.



#### intelliStore

All storage movements are monitored permanently and automatically adjusted to the current production conditions.



#### Integrated image database

Easy selection and assignment of panel decor for realistic representation of the panels available in the warehouse.



#### Offcut management

Automatic return of saw offcuts to storage with built-in panel measurement as part of the material intake process and management of manual offcut stocks with corresponding wizards for easy set-up.



#### woodStore Analyzer

In a period that can be selected individually, the main functions of the storage system are examined and analyzed according to the customer's requirements in order to determine whether the customer is using the storage system optimally.

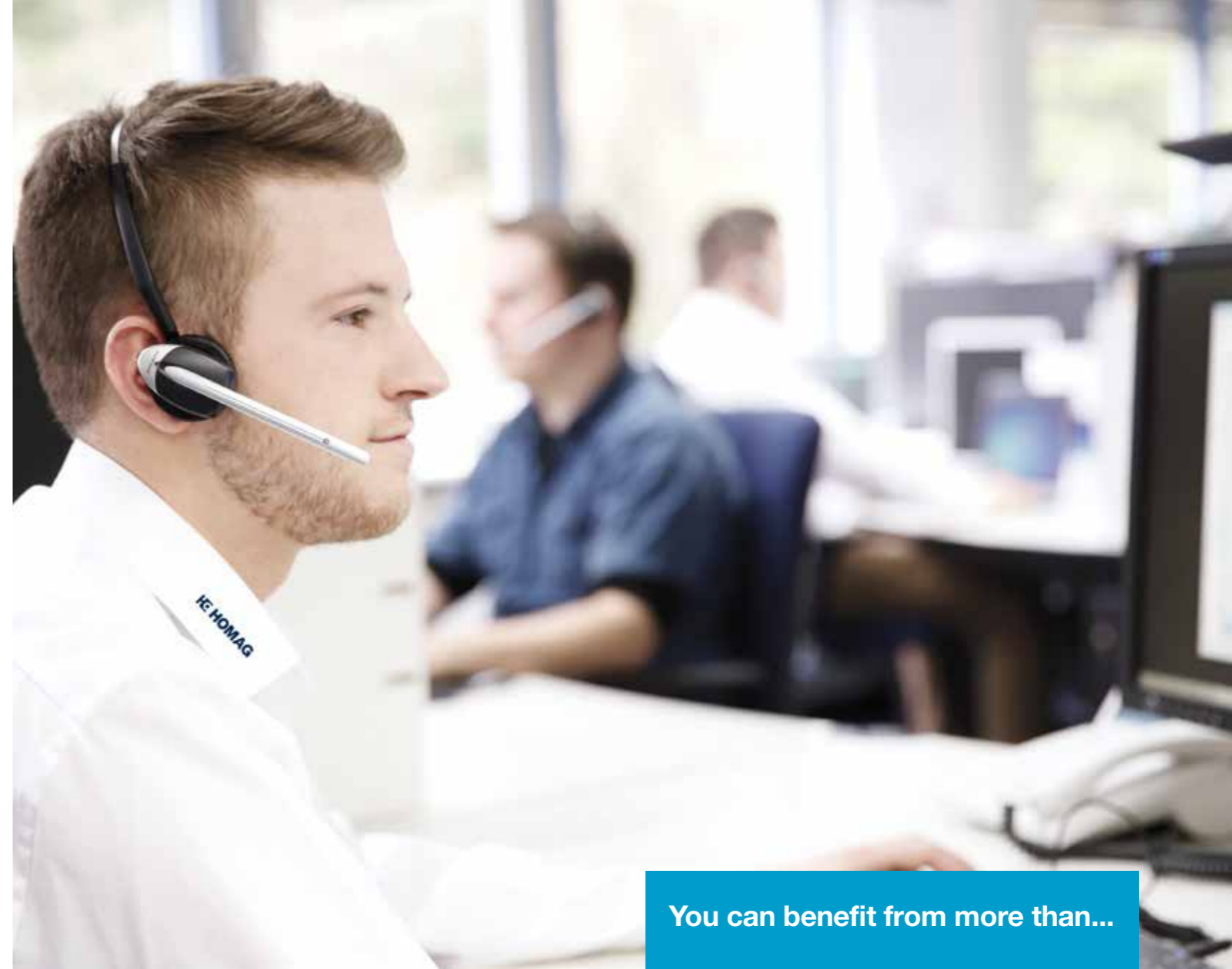




# HC LIFE CYCLE SERVICES

Optimal service and individual consultations are included in the purchase of our machines. We provide support through service innovations and products that are tailored exactly to your company's requirements. With short response times

and rapid customer solutions, we can guarantee excellent availability and cost-effective production for the entire life cycle of your machine.



## TELESERVICE

- Hotline support via our trained TeleService experts regarding control system, mechanics and process technology. This means over 92% fewer on-site service visits and therefore a faster solution for you!
- The ServiceBoard app helps to solve tasks in a fast, simple and concrete way. This is achieved by mobile live video diagnosis, automatic sending of service requests or the online spare parts catalog eParts.



## SPARE PARTS SERVICE

- High spare parts availability and fast delivery.
- Ensuring quality by predefined spare parts and wear parts kits, comprising original spare parts.
- Identify and inquire about spare parts online at [www.eParts.de](http://www.eParts.de) 24/7 or even faster and more conveniently in the new HOMAG eShop ([shop.homag.com](http://shop.homag.com)).



## MODERNIZATION

- Keep your machinery up to date and increase your productivity as well as your product quality. This is how you can meet tomorrow's requirements today!
- We support you with upgrades and modernization as well as individual consultancy and developments.



## DIGITAL SERVICES

- serviceRemote — the new TeleService solution of the future! Fast restart of production because the TeleService employee has extensive access to relevant physical data.
- serviceAssist enables you to help yourself. The preventive solutions proposed in the new app are the combination of our experience and existing machine data.



## SOFTWARE

- Telephone support and consultancy from Software Support.
- Digitalization of your sample parts using 3D scanning saves time and money in comparison to reprogramming.
- Subsequent networking of your machinery with intelligent software solutions ranging from design through to production.



## FIELD SERVICE

- Increased machine availability and product quality thanks to certified service staff.
- Regular checks through maintenance/inspection guarantee the highest quality of your products.
- We offer you the highest availability of technicians in order to reduce downtimes in the event of unpredictable trouble.



## TRAINING

- Thanks to training perfectly suited to your requirements, your machine operators can optimally operate and maintain HOMAG machines.
- In this regard, you will receive customer-specific training material with tried-and-tested exercises.
- Online training and webinars: learn without traveling — meet your trainer in the digital classroom.

You can benefit from more than...

**1350**

service employees worldwide

**92%**

less on-site service thanks to successful TeleService

**5000**

customers in training sessions/year

**150,000**

machines electronically documented in 28 languages in eParts



## **HOMAG Group AG**

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www.homag.com



## **YOUR SOLUTION**