HOMAG

SAWTEQ

S-200 flexTec
S-300/S-400 flexTec
S-310/S-410 flexTec

Performance tailored to your needs.
Our panel dividing saw

www.homag.com

YOUR SOLUTION

Building living spaces.

From furniture to homes: The future is built with wood.

Together, HOMAG, WEINMANN, SYSTEM TM and KALLESOE provide comprehensive production solutions for manufacturers of optimized timber, engineered wood, timber construction, interior fittings, furniture and more. With over 500 years of combined experience in machinery engineering, automation systems, and software technology, our focus is on building strong partnerships that enhance your productivity, precision, and profitability.

This is how we are Building living spaces. Together, with you.

HOMAG – YOUR SOLUTION

High-precision panel dividing solutions.

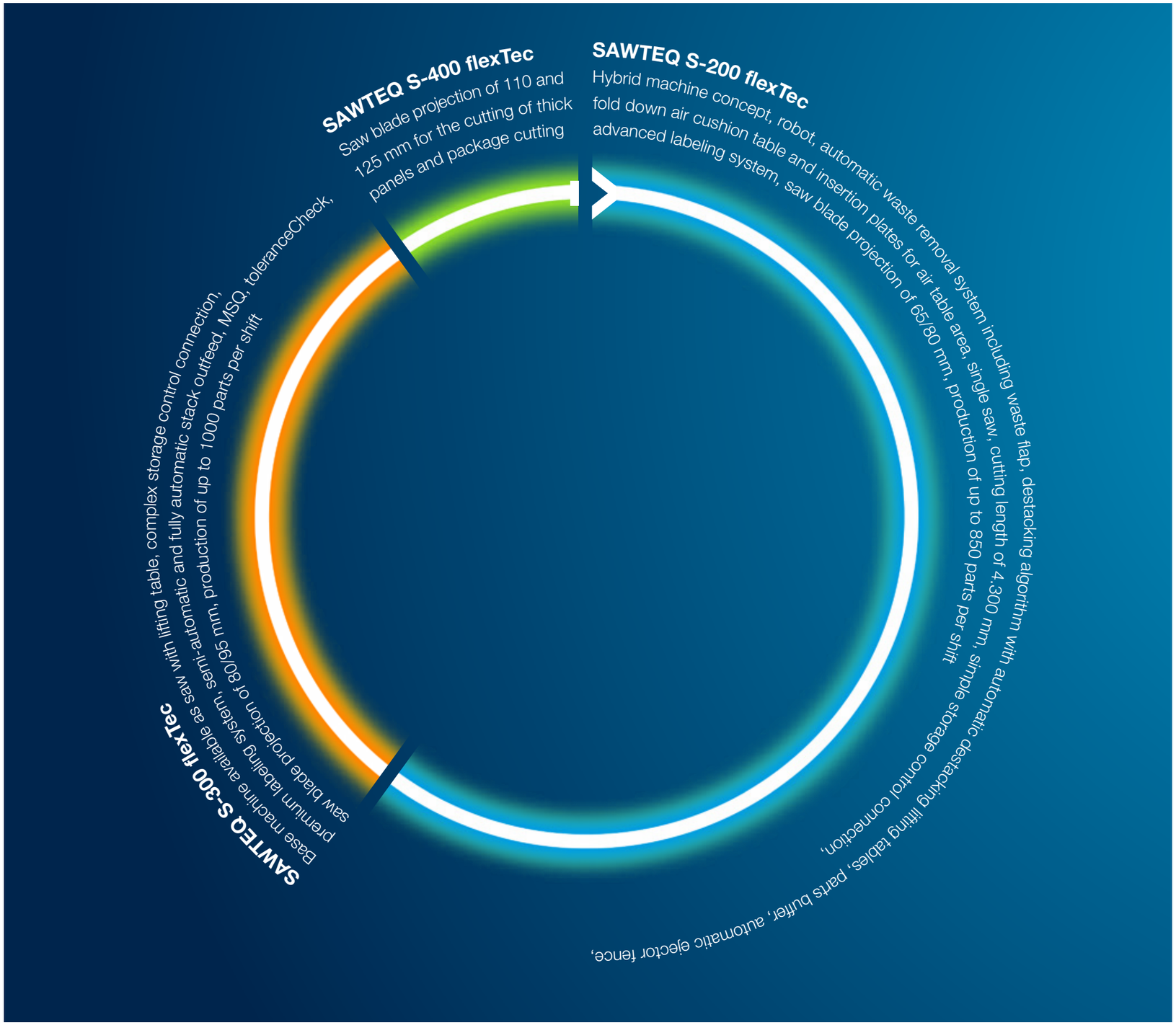
Exact angles, exact cuts, over and over again. With maximum precision in cutting, joiners lay the foundation for the high quality craftsmanship valued by customers. However, horizontal panel dividing saws from HOMAG not only impress with real precision work, but also with flexibility, speed and economy.

To ensure that your individual furniture transforms rooms into living spaces in the future, too.

Building living spaces.

Building precision.

Zero tolerance for tolerances.



Manual or automatic production — you decide

For companies with a wide variety of orders and a limited production area, robotics is the key to more efficient batch size 1 production in the cutting process. Discover our innovative hybrid concept consisting of a saw and a robot. With the advanced flexTec robot saws, you can cut unmanned for batch size 1 production. You also benefit from the processing diversity of classic HOMAG saws, for example, for cutting books or thin panels.

YOUR SOLUTION

MORE ON HOMAG.COM

SAWTEQ S-200 flexTec	SAWTEQ S-300/310 flexTec	SAWTEQ S-400/410 flexTec

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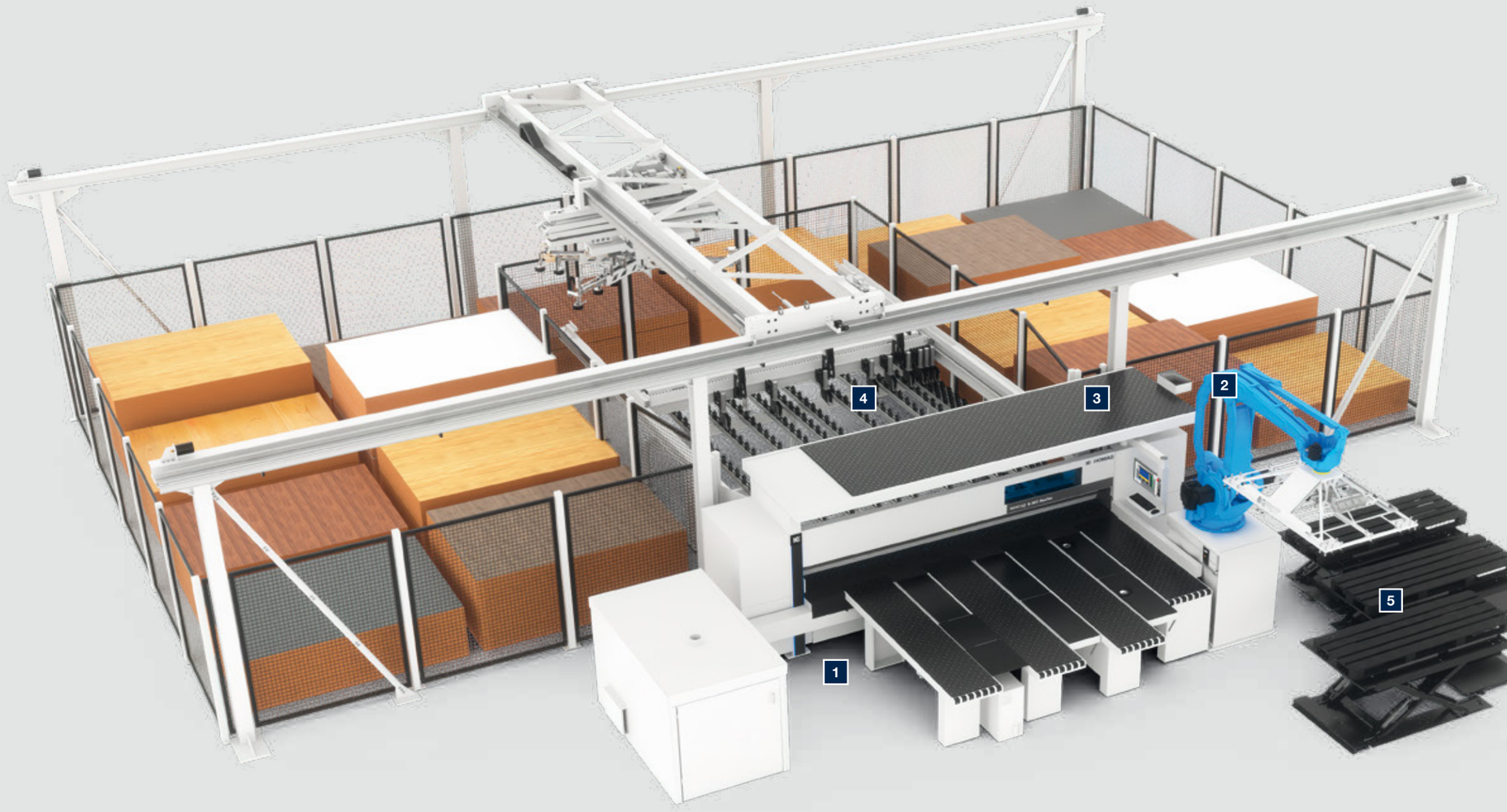
Proven technology in new combinations



THE MODEL VARIANTS AT A GLANCE

- SAWTEQ S-200 flexTec as single saw
- SAWTEQ S-300 flexTec as single saw
- SAWTEQ S-310 flexTec as single saw with lifting table
- SAWTEQ S-400 flexTec as single saw
- SAWTEQ S-410 flexTec as single saw with lifting table

YOUR BENEFITS

In robot mode:

- Highly efficient batch size 1 production with up to 850 parts with the S-200 flexTec and up to 1000 parts per shift with the S-300/400 flexTec
- Low unit costs per part
- Unmanned operation until stack change
- Extremely low error rates
- Ghost shift — saw continues to work autonomously after the workday has ended

In operator mode:

- Complete operating freedom in the cutting process
- Maximum flexibility
- Can be used to cut thin panels and books

1 Saw design

Essentially, the model variants correspond in both design and features to the SAWTEQ S-200, SAWTEQ S-300/310 and SAWTEQ S-400/410.

2 Robot technology

SAWTEQ S-200 flexTec, SAWTEQ S-300/S-310 flexTec and SAWTEQ S-400/S-410 flexTec are equipped with the same robot technology as the fully automatic batch size 1 cell SAWTEQ S-320 flexTec. Your benefit: in this point too, you are opting for proven technology and maximum reliability.

3 Wide variety of features

The robot saws can be tailored to different requirements and production environments. Just like panel dividing saws without robots, this is ensured by a wealth of additional technical equipment for improved output, ergonomics and flexibility.

4 Feed options

Whether by hand or via a single-axis feeder, storage control connection or integrated lifting table: There are many options for panel feeding to choose from. Find out more from page 36 onwards.

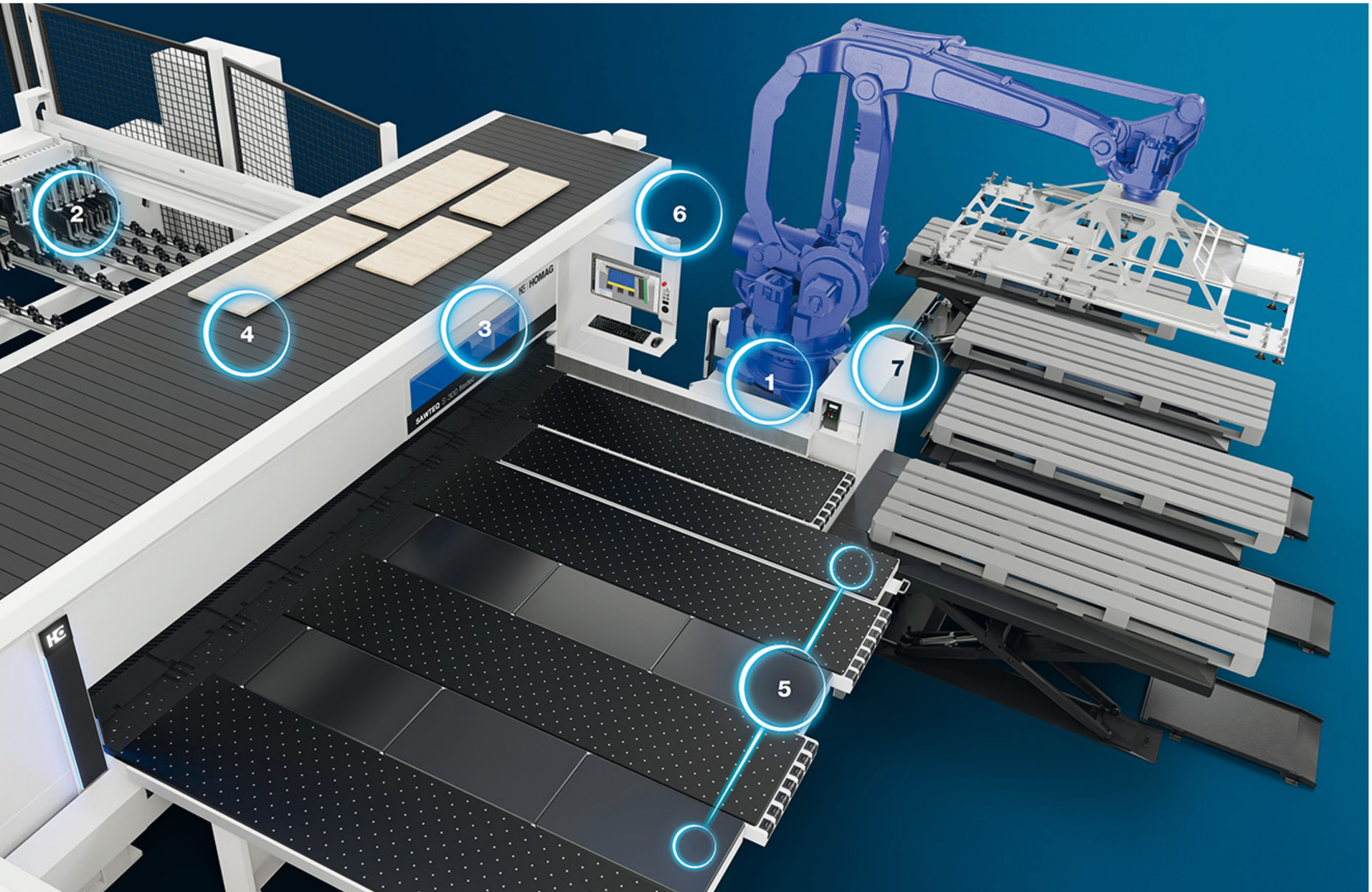
5 Intelligent destacking

Highly intelligent stack formation when destacking onto lifting tables with pallets or protection boards is the key to unmanned production. When it comes to destacking hardware, the flexTec robot saws can be individually adapted to your requirements.
Find out more from page 38 onwards.

Cutting-edge automation, even at entry level.

The latest developments in the flexTec series offer the full range of functions for semi-automatic and fully automatic production. The new SAWTEQ S-200 flexTec, specially developed for woodworking shops, offers flexibility and automation in material flow, thus complementing the existing flexTec robot saw portfolio. In addition to robot-assisted automatic mode, which allows production over long distances without operator intervention, the flexTec saws can be quickly and easily switched to manual mode, for example to process special materials or package cuts.

The saw benefits from the knowledge gained from customer applications and offers a more cost-effective entry into fully automatic panel cutting. By switching to the higher S-300/310 or S-400/S-410 series or by adding optional extensions, part output, flexibility in automatic mode and ease of operation in manual mode can be increased individually.



Overview of new features

1 **Robots and base** — state-of-the-art robots, adjusted robot position and redesigned robot base.

2 **Panel alignment** — no aligning device included as standard (panel is ejected and aligned by the robot), additional "on-the-fly" alignment or aligning device available as an option.

3 **Labeling on the pressure beam Advanced** — entry-level variant for fully automatic labeling with three defined positions. The premium variant provides greater flexibility.

4 **Redesigned parts buffer** — redesigned construction including support surface made of grooved MDF.

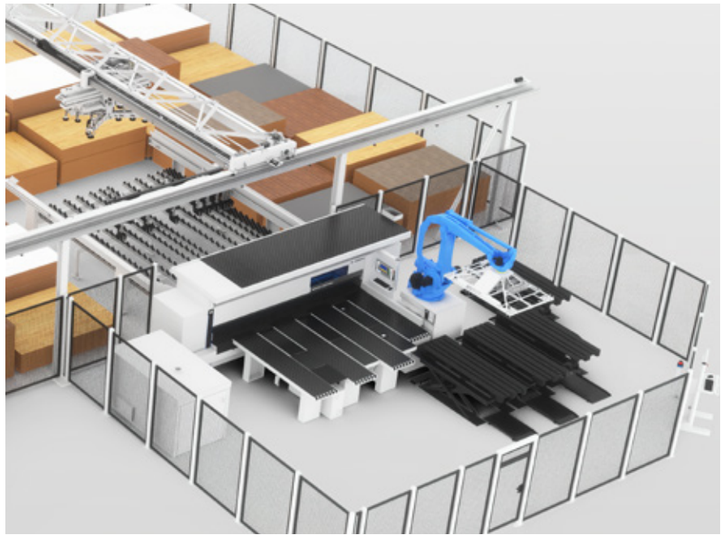
5 **Air cushion table area** — with a one-piece, fold-down air cushion table in lane 1 and three insertion plates in lane 2 and 3 as standard. These can be removed when switching to manual mode and attached to the protective fence.

6 **Swiveling and tilting multi-touch display** with a new operating position on the pressure beam* including a quickTip – the assistant for optimal machine settings.

7 **Manual label printer** available as an option for even greater part-designation flexibility.

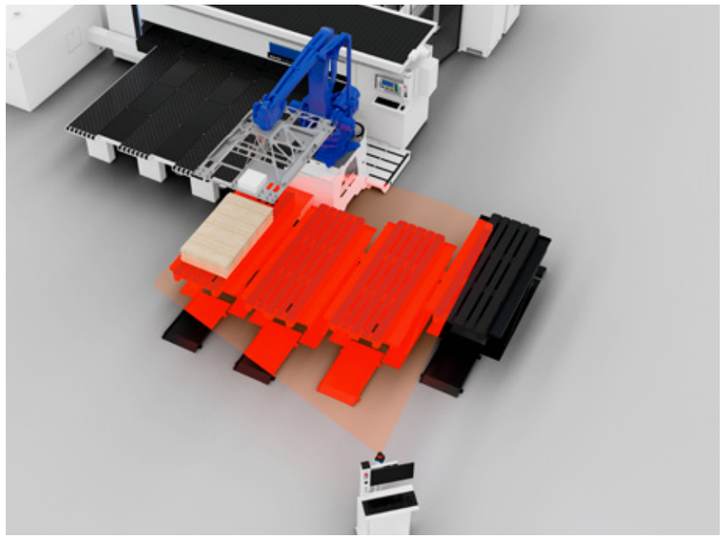
*Only with the S-300 flexTec

Your flexTec benefits at a glance



Fully automated batch size 1 cutting process

- All saws are optimized for the single-panel cutting process in woodworking shops, but are also suitable for use in industry
- The modular design provides the basis for numerous variants — individually aligned to your requirements
- The result: seamless workflows with high throughput in a compact space
- Minimal operating effort, low tool and maintenance costs
- High output with up to 850 parts per shift with the S-200 flexTec and up to 1000 parts per shift with the S-300/400 flexTec in robot operation
- Carries on working after the shift is over thanks to the ghost shift



No special robotics or programming knowledge is required!

Perfect handling

- Fully automatic rip and cross cutting with just one saw
- No more manual panel handling, instead the option for unmanned operation — freely selectable depending on the operating mode
- The robot even takes care of handling the offcuts, provided that offcuts are automatically destacked to a place reserved for this purpose or returned to the store
- Automatic labeling of the finished parts is possible — with part- and order-specific information for further manufacturing operations
- In manual operating mode, it is furthermore possible to cut books of panels or to cut thin or larger/smaller-than-average panels in the usual way. The robot itself can move panels of up to 3200 mm in length, and, with optional additional equipment, panels of up to 4300 mm in length can also be cut with a modified sequence.

An investment that pays off

- Production simulation of your cutting patterns during the quotation phase
- Simulation results optimized for maximum automated cutting or performance
- Transparency regarding expected part output, production time and number of stack changes
- Displays the automatic production times in which the saw operator can be used in other production areas to create added value
- Shows optimization potential, e.g. use of the ghost shift or lower production times

- **Note:** Naturally, we provide our customers with this information during the quotation phase, based on their individual part production, configuration and series selection, as well as the selected destacking strategy

Unmanned operation

- In robot mode, unmanned operation is possible over longer periods
- The robot moves the panels using gentle vacuum technology, works accurately, requires little maintenance and is highly available
- Production interruptions are almost completely ruled out thanks to the tried-and-tested industrial robot (almost 100% availability)
- No special robotics or programming knowledge is required
- Extremely low error rate in robot operation

Recuts almost at will

- Full flexibility in cutting pattern amendment thanks to recut technology
- Allows unlimited recuts provided that the panel materials comply with certain minimum and maximum dimensions
- Head parts and thus main parts of any length are possible within the maximum panel dimensions

Systematic safety

- For robot operation, the operator terminal at the saw is parked in a safe position. The position is continuously checked by sensors while the robot is working
- During robot operation, the saw can be operated from a separate machine terminal. This is outside the fenced-in safety area
- During manual operation, the external operator terminal is automatically switched off
- A (three-color) indicator light on the fence informs operating personnel of the current operating status of the saw
- In automatic mode, the lanes between the air cushion tables are closed using insertion plates

Apps and digital assistants.

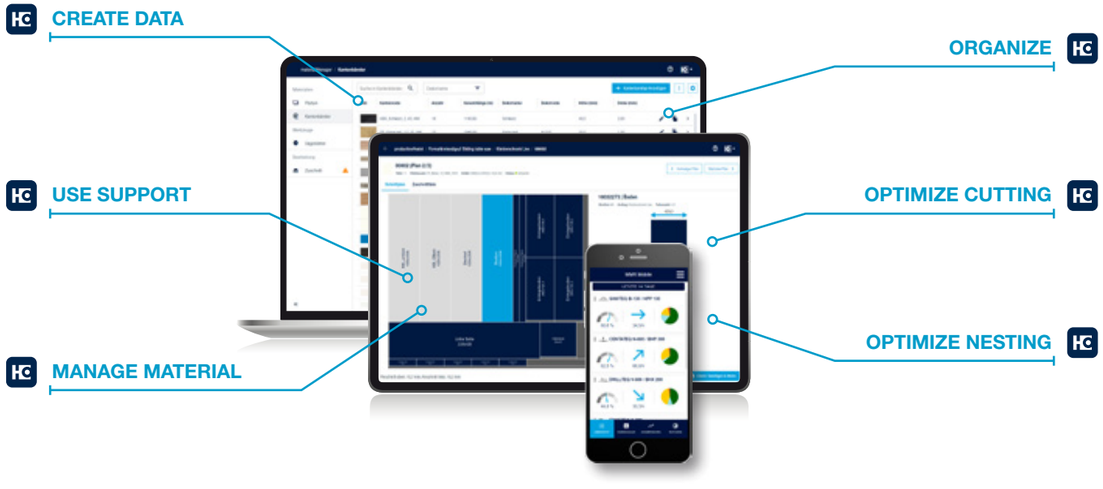
Quick and easy support in the machine environment.

Some people still use pen and paper to create their cutting patterns. But they look at their smartphone if they want to know what the weather is like — instead of looking out of the window. We asked ourselves: Why not combine the best of both? Our apps and digital solutions make your everyday work easier: machines, material, tools, cutting patterns, components — you always have everything in your pocket or on your desk.

More information at digital.homag.com

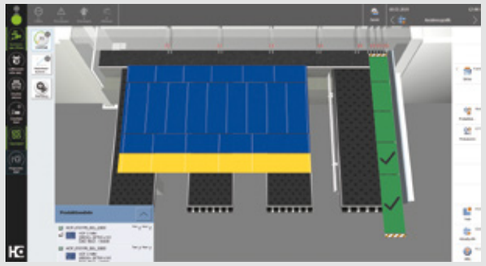
WE HAVE DEVELOPED POWERFUL AND SMART SOLUTIONS FOR YOU:

- ✓ **Always low investment**
- ✓ **Always up to date (no updates necessary)**
- ✓ **Always easy to use (no complex software)**
- ✓ **Always helpful**



Software

Always up to date, intelligent and developed by HOMAG experts: tailored software solutions ranging from optimization to machine control and destacking allow you to get the most out of your saw. Highly efficient and reliable.



MACHINE CONTROL UNIT

CADmatic 5 — the change in perspective

The latest generation of the HOMAG saw control system has a new assistance graphic that clearly shows the machine operator all the steps in order. Compared to the previous process graphic that showed all the work steps of the saw 1:1 (and can still be called up if required), this new graphic represents a 180-degree change in perspective!

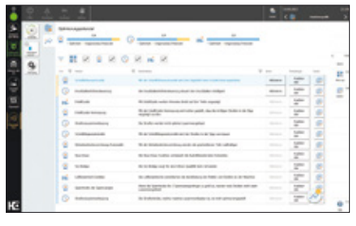
Highlights:

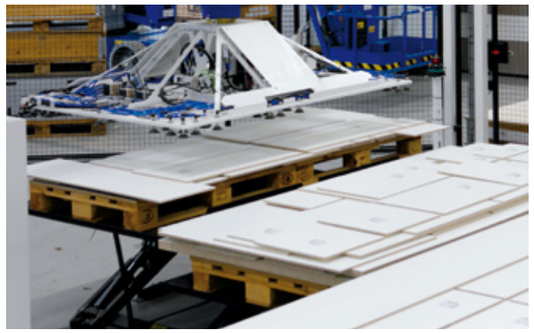
- The 3D assistance graphic supports the operator directly at the saw and is intuitive to operate, which shortens the training period and reduces errors to a minimum
- This results in efficient processes and a steady output
- 24" full-HD multi-touch display in widescreen format is easy to use by swiping, scrolling and zooming
- Uniform operating concept thanks to the powerTouch user interface
- All HOMAG saws with CADmatic 5 are automatically tapio-ready

Find out more in the "CADmatic" brochure.

NEW: quickTip — the assistant for optimal machine settings

quickTip supports the machine operator with recommendations for the optimal saw setting. Functions and parameters can be set centrally in one place in CADmatic — this simplifies work, ensures smooth processes and enables consistently high performance.





DESTACKING

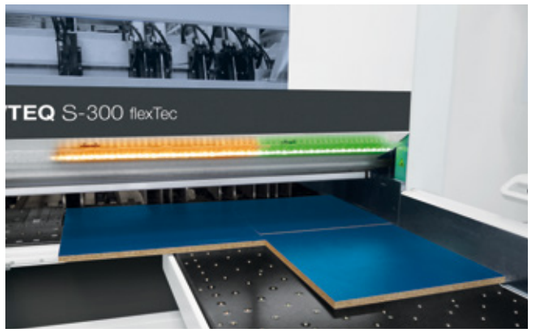
The HOMAG destacking algorithm

The control center for intelligent destacking via robot is an algorithm that has been developed in-house and is continually improved (for more information, see page 38).

The new functional highlights:

- Single-type, chaotic or individually defined stack layouts
  - For even more flexibility and significantly easier handling
- Graphically formatted stack preview
  - The software determines the number of stacks to be produced in advance and simulates them in CADmatic
  - A preview graphic shows what the planned stacks will look like
  - This ensures transparency and also makes production planning easier
- Accurate prediction of production times
  - The algorithm continuously calculates the remaining production time until completion of a stack
  - If desired, data is transmitted to the tapio MachineBoard app
  - The app notifies the operator in good time when a stack is finished and operator intervention is required
  - This makes planning easier and ensures a smooth workflow
  - Operators do not have to monitor the saw and can use their work capacity to create value somewhere else

Software



OPERATOR ASSISTANCE

intelliGuide Classic (optional feature)

intelliGuide always shows the operator the next step directly at the saw. The system accomplishes this by means of an LED strip at the cutting line. The LED strip produces light signals that appear directly in the operator's field of vision.

- Colored LED signals at the cutting line allow intuitive operation and a quicker, safer way of working
- Using the colored LED elements, machine operators can immediately see if a part has been fully processed, needs to be cut again or can be disposed of as a waste part
- Based on the LEDs that are lit up, the operator can determine whether the workpiece being processed meets the required specifications

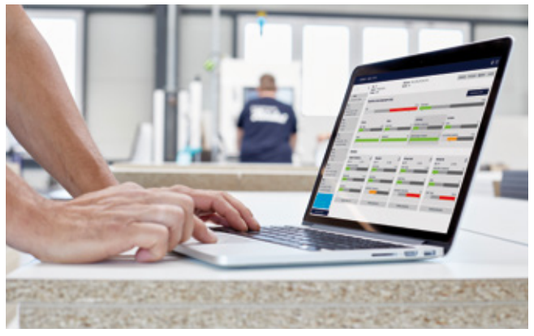
OPTIMIZATION

Cut Rite (optional feature)

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.

- Seamless, precise and highly efficient processes ensure optimized project control
- Efficient cutting processes that 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
- Cutting pattern optimization takes only a few seconds
- Simple handling: Clearly structured and easy to operate, with graphical display of information

Find out more in the "Cut Rite" brochure.



OPTIMIZATION

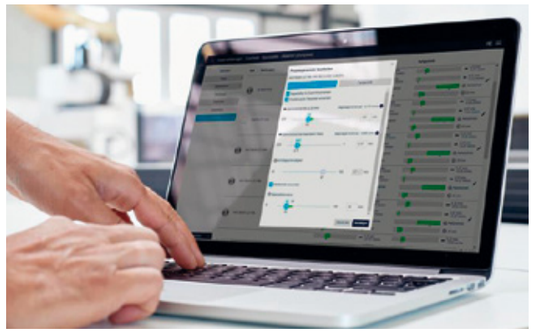
intelliDivide (optional feature)

Simply upload the parts list. Done! The result? A choice of several alternatives for cutting patterns and entire runs. That's how easy intelliDivide makes it.

In detail: the cloud-based optimization software intelliDivide utilizes significantly higher computing capacities than are available for locally installed optimization software and can therefore swiftly provide the user with several alternative optimization results.

This means that with intelliDivide, the operator can choose from a variety of options, including cutting plans based purely on reducing waste, on the shortest processing time or on the simplest handling — each perfectly adapted to the relevant requirements.

Applications are varied and are geared toward both woodworking shops and industry.



OPERATOR ASSISTANCE

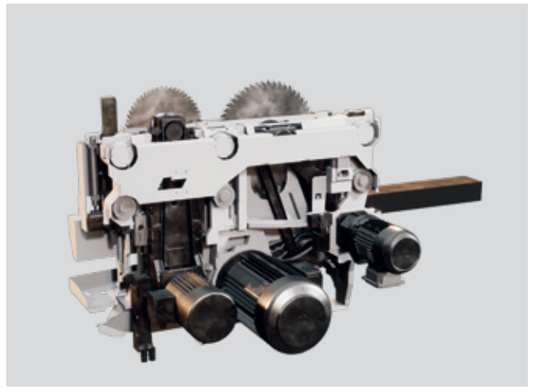
materialManager Advanced

- Automatically optimally adjusts the machine to the material being cut, thereby ensuring greater performance and quality in production
- Also helps less experienced operators get more out of the machine
- Extends the service life of the tool and reduces interruptions due to tool changes

Illustrations may show the technical principle but not the precise machine variant described. Optional features, for example, may be shown.

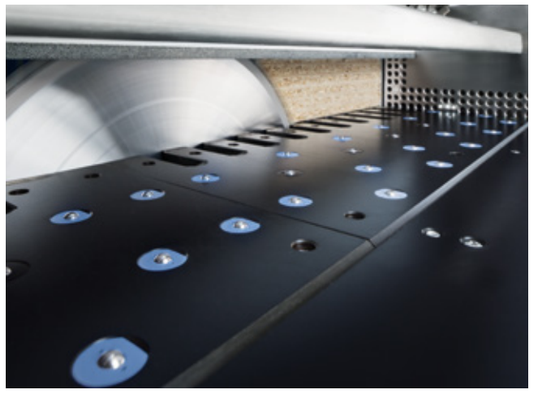
Standard features

The standard flexTec saw is designed so that no optional features are needed for partially unmanned operation. The difference to the classic saw is that flexTec machines have a wide range of options as standard.



One saw carriage, numerous benefits*

- Torsion-resistant, rugged and resilient basic design of the steel plate body for maximum dynamics and precision
- Infinitely variable feed speed — for precision cutting of demanding materials
- Long-term accuracy of saw blade projection
- Fast, precise, low-wear and infinitely variable positioning of the main saw blade by means of linear guide system with rocker arm (patent)
- Energy-saving feature: main saw motor is not raised
- Improved chip guide reduces the suction power by up to -12%**



Patented dustEx technology

dustEx guides dust and chips on a direct route toward the dust extraction system. How does it work? Using combination air jets and an optimized extraction geometry at the right-angled fence. Furthermore, the machine table is fully equipped with nozzles. This is particularly advantageous when cutting sensitive material or handling especially heavy panels and books. To round off the dustEx package, we recommend using a dust-trap curtain.

Robot with suction traverse including alignment suction device

At the heart of these saws is an industrial robot with a specially developed suction traverse including alignment suction device. It deposits the strips and parts close to the right-angled fence, where the alignment suction device pushes them against the right-angled fence and into the back of the clamp. Additional sensors in the right-angled fence simultaneously monitor the position and alignment of the parts. This ensures the highest cutting quality in automatic mode.

Handy cleaning flap

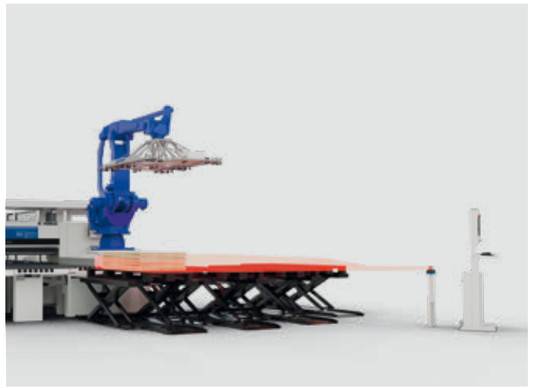
Quick and convenient: The area under the saw carriage is easily accessible via flaps, allowing easy removal or vacuuming of cutting waste.

Illustrations may show the technical principle but not the precise machine variant described. Optional features, for example, may be shown.

*Illustration shows saw carriage of the S-300 flexTec **Chip guide only available from S-300 flexTec

Standard features

The standard flexTec saw is designed so that no optional features are needed for partially unmanned operation. The difference to the classic saw is that flexTec machines have a wide range of options as standard.

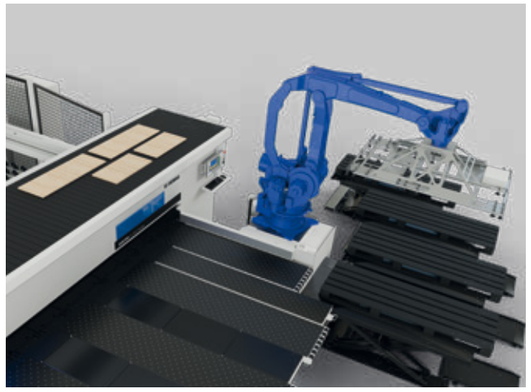


Surface scanner

- Automatic lowering of the destacking lifting tables for optimum stack construction.
- For the robot to deposit the part, the level of the surface scanner must pass through the highest point of the lifting table or stack to avoid collisions with adjacent stacks

Air table area

- 1. The lane is equipped with a folding air cushion table for easy switching between automatic and operator modes.
- Lanes 2 and 3 are each closed using three insertion plates. These can be removed when switching to manual mode and attached to the protective fence.
- In robot mode, the air cushion table is folded up in the lane 1 and the three insertion plates are inserted for each lane



Parts buffer

The system has a parts buffer directly above the pressure beam. This is where the robot temporarily deposits parts that are to be either destacked or fed to the saw again later.

In order to ensure maximum process reliability, the parts buffer is equipped with a cleaning station for the alignment suction device on the suction traverse. Dust deposits on the suction cups are regularly blown off.

Central side pressure device

- Integrated directly into the saw carriage — shortens cycle times by up to 25% in comparison with conventional systems
- Infinitely variable adjustment of contact pressure — depending on panel thickness. This allows even thin panels, laminates or sensitive materials to be processed perfectly. Another key feature here is the book-height-dependent control of the contact pressure: the higher the book, the greater the pressure

Illustrations may show the technical principle but not the precise machine variant described. Optional features, for example, may be shown.

Standard features

Clamps

- Robust clamps, all with two fingers
- Gentle positioning of material
- The bottom fingers of the clamps can be removed at any time to allow the back of the clamp to be cut in perfect alignment — a fast way to adjust
- The contact pressure can be adjusted (manually) to suit each particular material
- The short, rugged design allows material to be precisely held and guided more gently
- Irrespective of the book height, the top fingers of the clamps do not exert any leverage; instead, they are lowered horizontally and their entire contact surface rests on the material. This increases the working depth and ensures material is held firmly
- Designed for continuous, multi-shift operation

Fully automatic labeling system
Advanced located on the pressure beam

A must in robot operation and an advantage in operator operation: the labeler is an integral part of the standard configuration. It labels the finished parts or the top part of the finished part package automatically (in operator mode).

Good to know: The labeler is located near the pressure beam, i.e. in your field of vision, and has two labeling positions and one maintenance position.

- Labeling position 1: For parts up to 130 mm in width
- Labeling position 2: For parts over 130 mm in width
- Maintenance: 500 mm from the right-angled fence and directly in front of the maintenance flap – for easy access and simple label replacements

The premium version is available for greater flexibility, particularly in terms of labeling positions.

Fully automatic labeling system
Premium located on the pressure beam

Thanks to the servo-motor axis, there are individual labeling positions along the cutting line and the right-angled fence — even if several strips are processed side by side at the same time (Power Concept).

Advanced and Premium* labeling systems

- Label size: 76 x 76 mm
- Suitable for panels, offcuts and finished parts
- Gives precise details of the destacking location
- Gives precise instructions for further processing
- Saves time
- Minimizes errors
- Guides the operator

Program fence for precision and dimensional accuracy

- Resistant to torsion and bending
- Electronically controlled
- Precision guidance on H-girder
- Electromagnetic measuring system guarantees a positioning accuracy of +/- 0.1 mm per meter
- Measuring system involves no wear and no maintenance

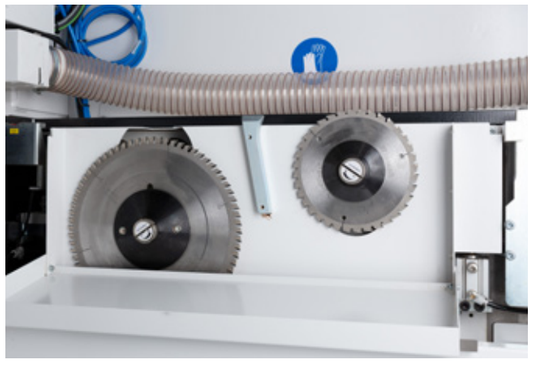
Rugged pressure beam for first-class cut quality

- Increased pressure beam elevation. The suction traverse can move under the pressure beam
- Large-area pressure zone directly at the cutting line reduces material vibrations to a minimum
- Linear guide on both sides
- Toothed rack and pinion ensure the necessary parallel adjustment
- The result is accurate cuts, for books too
- With height control on request (available as an option)

Illustrations may show the technical principle but not the precise machine variant described. Optional features, for example, may be shown.

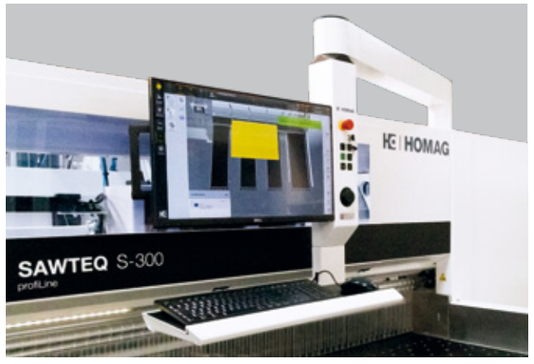
*The Premium labeling system is only available as an optional feature from S-300 flexTec

Standard features



Power-Loc system

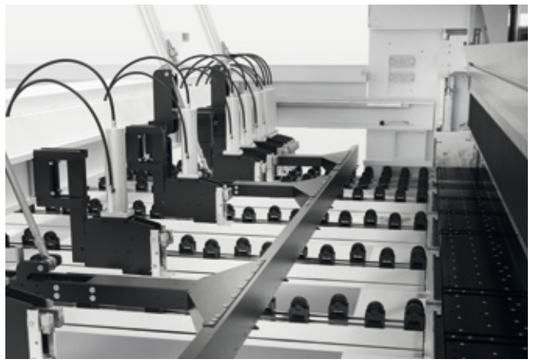
- **NEW:** Flange support making it quick and easy to change the saw blade
- **NEW:** Reduced maintenance time as well as less damage to the tool and material thanks to easy, central and ergonomic access



Swiveling multi-touch display with new operating position on the pressure beam

Display with a new operating position on the pressure beam enables ideal orientation and a clear path for waste disposal.

Figure shows placement on the S-200



Automatic ejector fence

- Pushes panel remnants from the rear machine table to the front

Clamp activation

This option prevents damage to edges. Now also available: clamp activation in "measuring" mode.

Optional for the S-200.

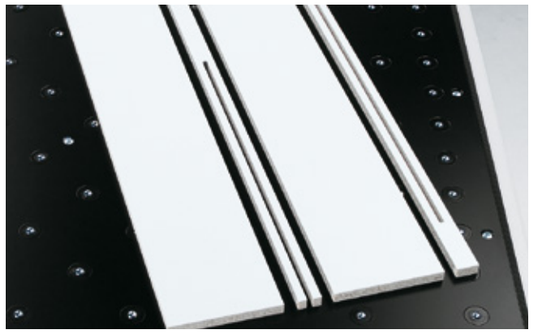
Illustrations may show the technical principle but not the precise machine variant described. Optional features, for example, may be shown.

Optional features

The HOMAG SAWTEQ S-300/S-310 flexTec and SAWTEQ S-400/S-410 flexTec saws are designed for maximum flexibility. This is achieved by the innovative machine concept, but also by the many optional features. The choice is yours!

Cut-out and stress elimination cut

Stresses in the material are released when the material is cut and can influence the quality of the dimensions and cuts. The stress elimination cut provides a solution here. Systematic preliminary cuts can be defined during optimization and release the tension in the material. In manual operation, the cut-out feature allows you to produce even cut-outs and insertion grooves immediately — for example, for doors or kitchen sinks.



Cut-out function can be used in operator operation only. Single, two- and three-step stress elimination cut can be used in operator mode. Two- and three-stage stress elimination cut can be used in robot mode.

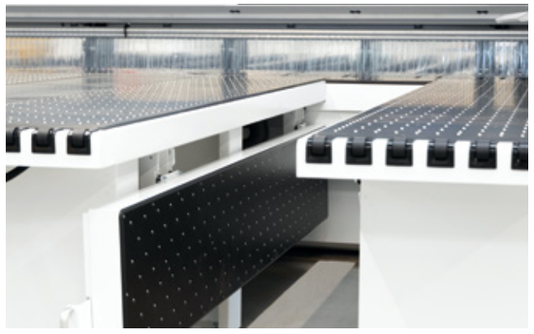
Control scanner

Mounted directly on the pressure beam printer, the control scanner checks just in time whether the parts cut are correctly labeled.

- Ideal for quality assurance in automatic production
- Minimizes sources of error: the system checks independently whether parts are labeled and barcodes are legible
- If labels are missing or illegible, they are reproduced automatically

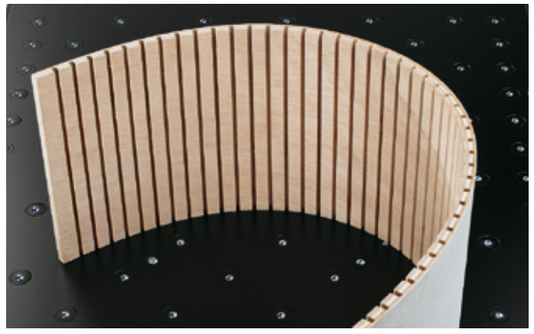
Additional start-stop key

- Allows the program sequence to be started independently of the control panel
- Equipped with an emergency stop key



Fold-down air cushion tables (optional feature)

- The lanes between the air cushion tables are equipped with folding tables
- The additional table in lane 1 is equipped with nozzles as standard
- In operator operation, the tables can be folded up or down to enable easy access to the cutting line or to prevent thin materials from sagging and to increase the work area
- For robot operation, the additional tables are raised and all gaps closed



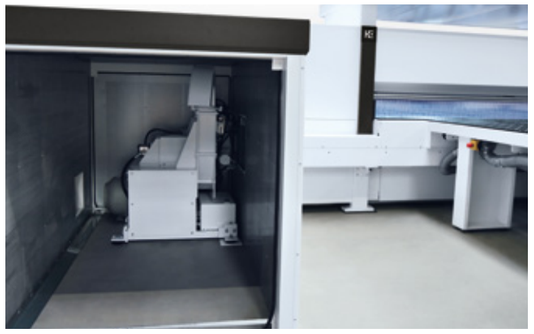
Grooving and turbo grooving

These options save you an entire work step in post-processing. This is because your saw will also groove the panel material. The turbo grooving option even completes the grooves much faster than a processing center.

Can only be used in operator operation.

Illustrations may show the technical principle but not the precise machine variant described. Optional features, for example, may be shown.

Optional features



Automatic waste removal

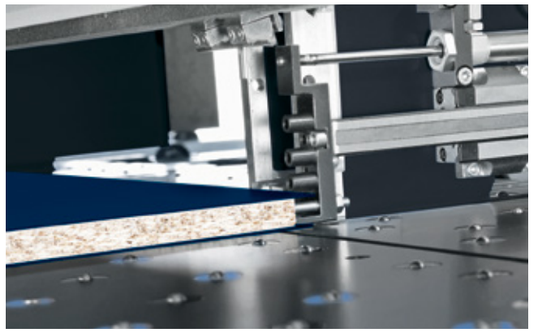
Compact, practical and quiet: a robust disk chipper connected to a waste container is at the heart of the automatic waste removal system. The system is completely enclosed and housed in a sound insulating booth.

- Waste cuttings fall through a waste flap onto a conveyor belt and are transported to the chipper
- The chipper pulls the waste in and shreds it
- The shredded waste is automatically catapulted upward by the mechanical action and lands in the waste container

Can only be used in robot mode.

Now with integrated direct suction in the waste disposal area (optional)

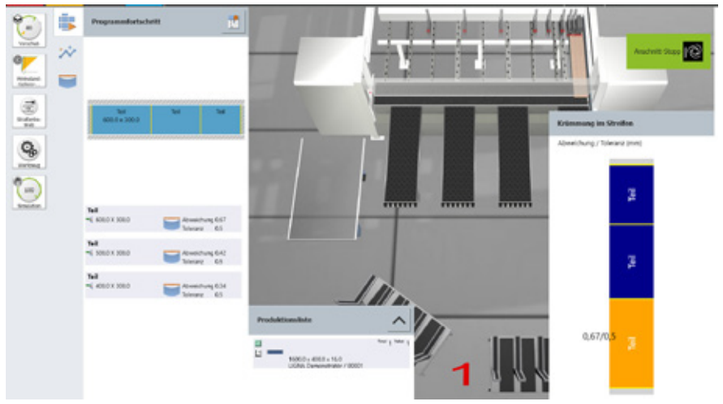
Benefits: the fully automatic waste handling also saves time for the machine operator and frees up their capacity for value-adding activities. In robot operation, intervention by the operator is no longer required. The waste disposal runs fully autonomously, provided the waste material can be burned directly. This means less machine idle time and more output!



Pneumatically operated trim stops

The trim stops are attached to the clamps and are activated as needed by the CADmatic machine control unit.

- Robust
- Adjustable to common panel thicknesses
- Gentle handling of sensitive materials with overhanging covering layers
- Precise positioning



NEW: Integrated toleranceCheck tolerance measurement for high-precision cutting

With the innovative toleranceCheck, you can continuously ensure the individual dimensional and angular accuracy you require — even for stress-prone material. In addition, it reliably detects insertion inaccuracies and informs the operator of these. This creates unprecedented transparency over the panel quality. In addition, the process reliability of the subsequent processing steps is increased by integrated quality assurance.
The integrated tolerance measurement thus increases quality and productivity. Good to know: Combining toleranceCheck with stress elimination cut creates an attractive quality package.

Can be used in operator mode. Only measure strips in automatic mode — warning message and recording of measurements.

Processing panel materials more than 3200 mm long

Thanks to a newly developed processing program, the saw can even process large panel sizes of > 3200 mm to 4200 mm fully automatically in robot mode.

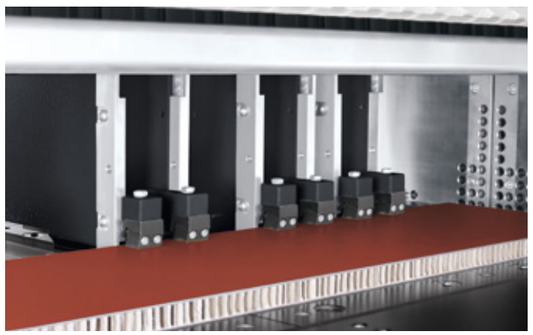
How it works:

- After infeed via the rear machine table, a compulsory headcut is executed to reach the maximum panel length of 3200 mm
- The remaining panel is then pulled to the rear and parked in the storage shaft for later processing
- This also increases efficiency and flexibility in robot mode

Automatic angle cut device

This technology completes angle cuts fully automatically, after you have entered the respective data in the CADmatic control system.

Can only be used in operator operation.

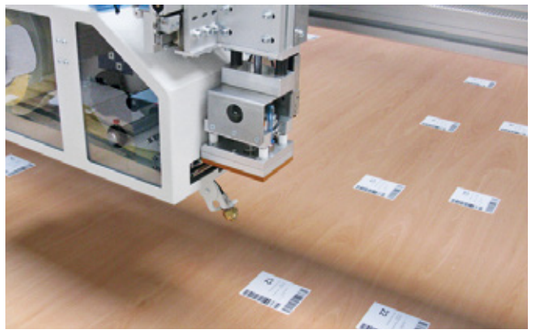


Soft Touch for pressure-sensitive material

As the diversity of materials increases, so do the requirements: pressure-sensitive lightweight boards, composite boards and plastic sheets are steadily gaining in importance. HOMAG has a range of solutions in its portfolio designed to meet these requirements. Simply ask your customer advisor.

Can only be used in operator operation.

Optional features



Panel labeling system

The innovation for saws with automatic storage control connection: the HOMAG panel labeling system labels the unprocessed panel before it is cut — independently of the saw, in non-productive time that previously went unused. It can also be combined with the feed-stacking table with integrated feed.

- Smallest part size 170 x 170 mm
- Up to 10 labels/min, optionally up to 15 labels/min
- Labeling independent of cutting process
- Saves time, because non-productive time is used productively
- Optimizes handling during destacking because all the parts are already labeled
- Simplifies and speeds up production processes
- Automated parts tracking
- Can be retrofitted
- For smooth processes

Can only be used in operator operation.

Turning device for headcuts

- Process integrated perfectly into the machine cycle
- Labor-saving device for operators
- With automatic alignment function
- Less time required for preparation
- Easy to use
- Significant increase in output

Can only be used in operator operation.

Power Concept Premium

- Additional clamp that operates independently
- Clamps on the program fence that can be raised out of the overlapping work area as needed
- Simultaneous processing of two strips of different lengths
- Precision cutting — even of very narrow strips
- An algorithm adapted to the Power Concept Premium sorts the strips directly at the saw. This is based on existing optimization data for the shortest machining times

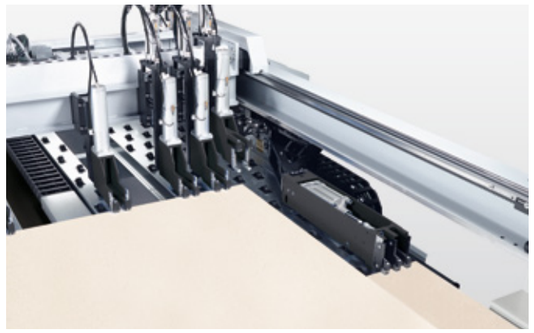
Can only be used in operator operation.

NEW: Speed packages

With our two speed packages (1) with Power Concept and (2) without Power Concept, you can now produce even more quickly and avoid waiting times. The only prerequisite is feeding directly from the HOMAG storage.

(1) The Power Concept cuts the last strip, while the program fence is already positioning the next panel as far as it will go. In addition, the alignment without an alignment device (on the fly) shortens cycle times even further.

(2) Faster movement of the program fence over 25 m/min and alignment without an alignment device (on the fly) shortens cycle times.



Power Concept Advanced (for saws without lifting table)

This is the cost-effective version of the successful Power Concept Premium — designed for panel dividing saws with feed from the front and for saws with simple storage control connection without integrated feed-stacking table. Power Concept Advanced can do everything
that constitutes Power Concept, but can be integrated far more easily and consequently more economically.

Can only be used in operator operation.

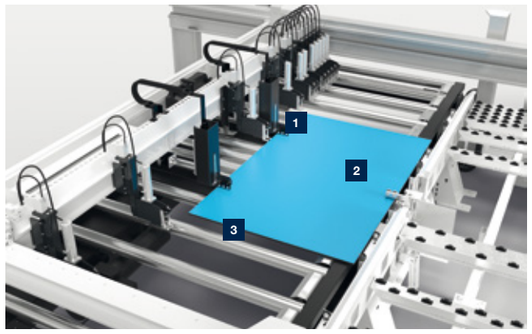
Feed-stacking table with integrated feed

When linked to a simple storage control connection, the saw has to stop working briefly when a new panel is fed. The feed-stacking table ensures smooth, faster cycles: while one panel is still being cut, the storage system already positions the next panel(s) on the feed-stacking table with integrated feed.

- Ideal in combination with the HOMAG panel labeling system
- Can be retrofitted
- Plug & Play: easy add-on
- Without alignment
- Perfectly matched to the saw (height, width, roller rails)
- Virtually no more idle time

Illustrations may show the technical principle but not the precise machine variant described. Optional features, for example, may be shown.

Optional features



1 Micro feed for thin panels (for lifting-table saws only)

The micro feed option allows thin panels from 6 mm upward to be pushed onto the
rear machine table (provided that their properties meet HOMAG specifications). The book height is measured
by a non-contact, electromagnetic measuring system which is maintenance-free.

2 Hold-back device for thin panels (for lifting-table saws only)

For thin panels from a thickness of 3 mm.

Can only be used in operator operation.

3 Extra impetus for feeding (for lifting-table saws only)

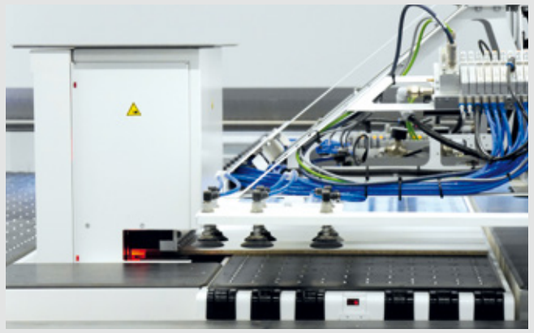
The automatically driven roller conveyor integrated into the lifting table and additional roller conveyors on the side ensure fast stack changeover.

NEW: measuring system cutting quality (MSQ)

- Cutting quality is monitored automatically through regular checks on edge breaks
- Material-specific warning and limit values are observed

Lots of potential for your production:

- Objective and regular evaluation: more frequent quality management and unique results interpretation with reduced operator interventions
- Demand-based saw blade change: use of maximum saw blade service life and increased availability
- Avoid reject parts: less post-production effort since specified, material-specific limit values are observed
- Increased process reliability and potential for further process and cost optimizations

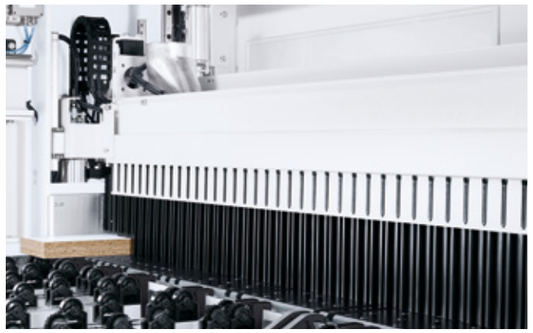


Label printer for superb results

The label printer is simply integrated in the robot pedestal. With it, you can create custom labels for manual part labeling directly at the saw and design them as required with a barcode, text or even graphics. If you also use our Cut Rite optimization software, the material goes directly to the next process step with printed instructions. In this way, you can integrate the saw perfectly into your production flow.

Can only be used in operator operation.

Illustration shows the label printer of the S-200



Dust-trap curtain

- Attached to the rear of the pressure beam
- Protects operators from dust
- Improves dust extraction

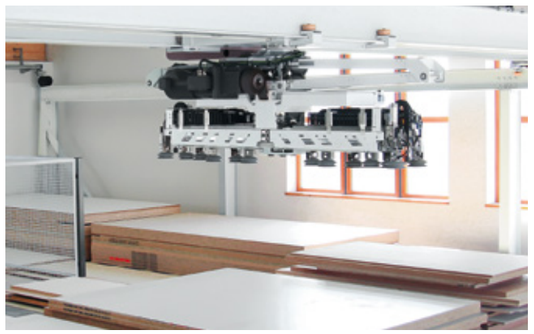
Cutting gap closers

Open and close automatically during the machine cycle, preventing narrow strips or trimmings from getting caught in the cutting line.

Illustrations may show the technical principle but not the precise machine variant described. Optional features, for example, may be shown.

Growing together.
The all-in-one solution for your storage system.

Whether it's a large range of parts, high speeds or minimal space requirements, the HOMAG STORETEQ portfolio combines the strengths of automation with intelligent logistics – from a single-axis feeder, to storage systems, second-level storage systems, double-level storage systems right through to storage systems with two bridges. This results in noticeable optimization effects in reliable panel handling, intuitive operation and higher material utilization while simultaneously improving sustainability – all thanks to the consistent use of the **woodStore 8 storage software.**



HOMAG offers two suction traverses (ST61 and ST71) for storage systems as standard. Both suction traverses are self-learning and generate the data required for panel handling independently. They are also equipped with integrated weight control, panel correction and efficient vacuum generation, ensuring precise, safe and efficient material handling and an accurate, high-quality production process.

- **Efficient material flow:** Safe panel transport without unnecessary travel paths and gentle handling without searching for panels save time and space — even when handling a wide range of materials.
- **Fast delivery times:** Timely material procurement, provision and optimized processes increase efficiency.
- **Sustainable material management:** Offcuts are organized and automatically managed via the offcuts storage or are returned to the storage system.
- **Gentle panel handling:** Reliable panel separation and safe handling using a vacuum on the suction traverse.
- **Intuitive operation:** Intelligent operating and analysis functions and proactive support thanks to setting recommendations.
- **Simple integration of one or more processing machines:** Standardized interfaces and uniform data integration and processing.

Wide range of materials

Whether plastic, plexiglass or laminate, coated or uncoated panels, the STORETEQ P-300/P-500 is also a true all-rounder when it comes to handling panels.

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

STORETEQ P-510/P-520 — flexibility and range of materials combined into one storage system

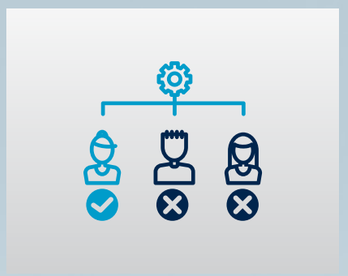
The STORETEQ P-500 allows even greater flexibility in length and width.

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

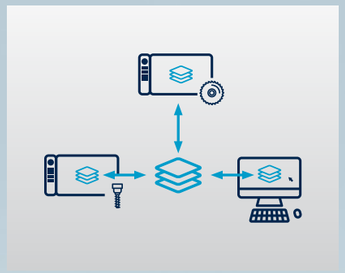
woodStore 8

Smart storage software. Intelligent panel management.

What makes woodStore a leading storage control system?

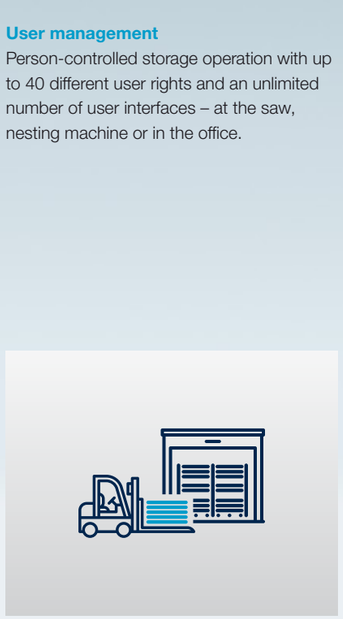


User management
Person-controlled storage operation with up to 40 different user rights and an unlimited number of user interfaces – at the saw, nesting machine or in the office.

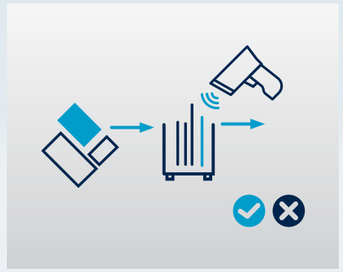


Multiterminal interface
An unlimited number of user interfaces creates full transparency and optimal work processes. Whether on the saw, the nesting machine or in the office, the storage interface is completely accessible at all times and can be used in parallel depending on the access rights.

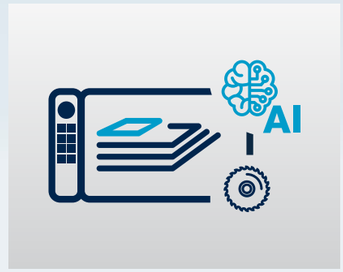
quickTip
Proactive setting recommendations, centrally in one place in woodStore, lead to optimal storage management and smooth processes.



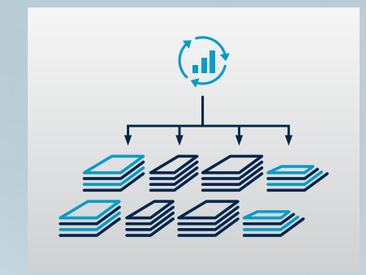
Management of external storage
Central management of cantilever racks (block storage, external storage) in realistic 3D view including forklift operator management.



Scrap management
Automatic storage of offcuts from the saw and/or nesting with integrated measurement of the panels during the material intake process and management of manual offcuts in an external offcuts storage.



IntelliStore AI – offcuts
Automatic storage of offcuts on defined stacks of panels distributed across the storage system optimizes the use of space and reduces storage movements by up to 40%.

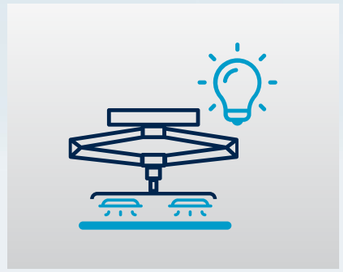


Flexible storage organization
Flexible and customer-specific assignment and division of panels and storage positions into meaningful groups, including selection of the storage strategy. This means that the storage system adapts optimally to individual requirements while making maximum use of the storage capacity.

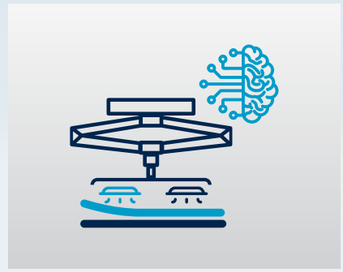
intelliStore
Permanent monitoring of all storage movements and automatic adaptation to current production conditions.

woodStore Analyzer
In a period that can be specifically defined, the main functions of the storage system are examined and analyzed according to the customer's requirements in order to determine whether the storage system is being used optimally and efficiently.

FlexSortPlus pre-sorting
Advance removal from storage everywhere in the storage system, e.g. at storage return positions and storage positions that are not required, and automatic generation of advance removal from storage orders from ongoing production or the program sequence of the processing machine improve the storage organization and efficiency.



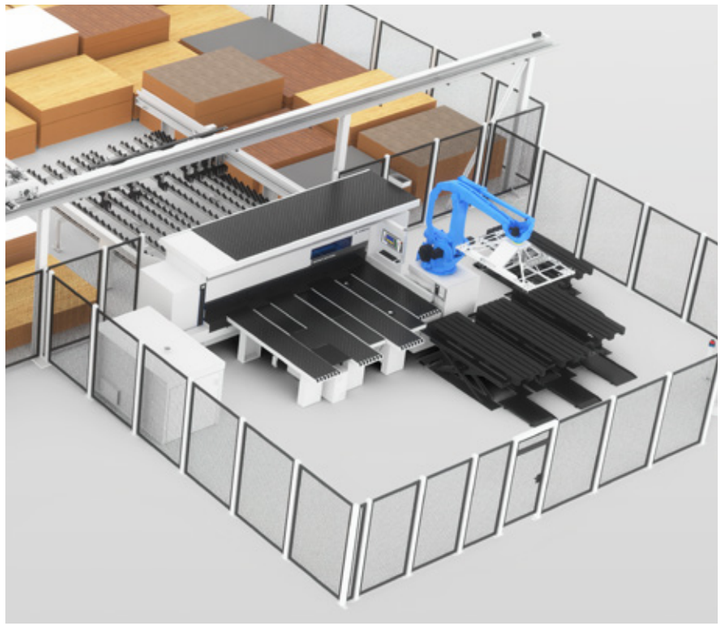
Intelligent vacuum management
The cross rail measures the parts in three axes with every movement and generates the data required for panel handling by defining only two panel properties (surface and rigidity) – this ensures dependable process reliability.



Smart Separation Learning
Fully automatic panel separation that requires only two panel handling settings.

Feed variants

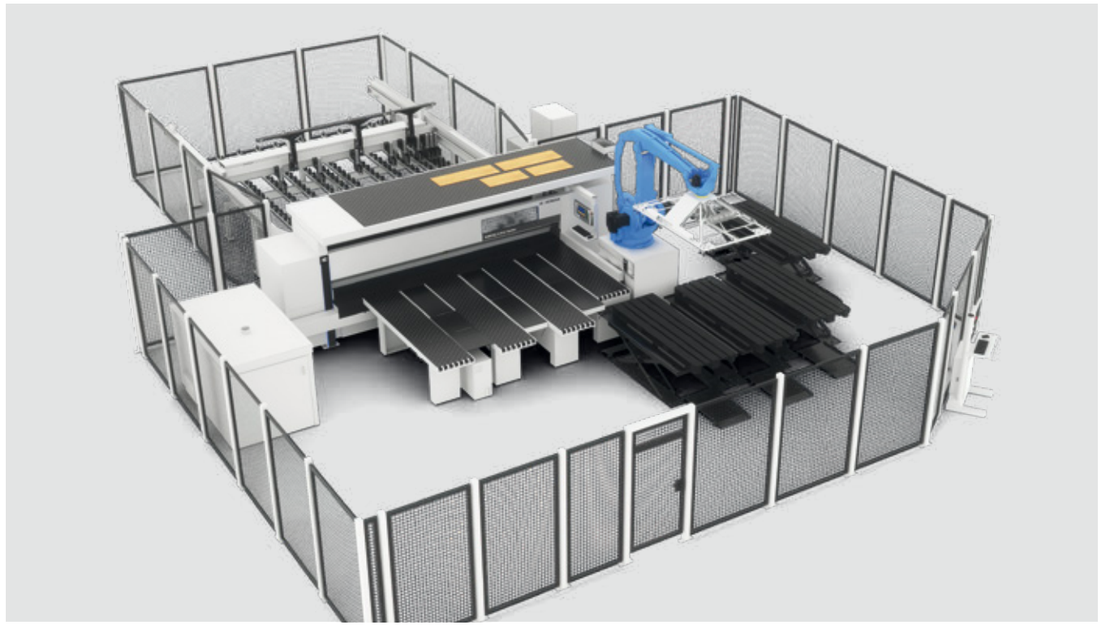
The versatility of flexTec robot saws starts with the feeding. Which variant is your favorite?



Feeding via storage system

For customers with very demanding automation requirements, HOMAG offers tailored horizontal storage systems — ranging from small systems for woodworking shops to large industrial solutions. These systems allow you to noticeably speed up your processes and reduce your costs per part.

- Small footprint
- Attractive price
- Movable in x and y directions
- Saw and storage system compatible with each other
- Perfect handling — even with just one machine operator
- Easy, ergonomic operation
- Storage system controls the saw
- Single storage control connection with the S-200 flexTec
- Complex storage control connection with feed-stacking table from the S-300 flexTec



Feeding via lifting table

- In the case of lifting-table saws, panels are fed via an electro-hydraulic four-column lifting table
- Automatic determination of book height
- Equipped as standard with longitudinal profiles and sensing device
- Also suitable for thin materials with a thickness from 9.5 mm. Suitable for materials with a thickness from 3 mm upward in operator mode if equipped with the optional micro feed and hold-back device (page 30)
- Maintenance-free and no lubrication required
- In order to ensure precise cuts, the backing wall is not attached to the machine bed

Feeding via STORETEQ F-100 single-axis feeder
(for single saws without lifting table only)

The new HOMAG STORETEQ F-100 single-axis feeder promises automation in the smallest of spaces. It fetches the next panel from the stacking station next to or behind the saw, turns it if required and places it in the saw. Fully automatic and gentle in saw cycle.

- A choice of various layouts to suit specific requirements and available space
- With traveling lifting device and suction traverse
- Turning device for up to 90 degree rotation
- With automatic weight determination
- For especially ergonomic handling
- Stack height: 1800 mm
- Panel weight up to max. 250 kg
- Can be extended to up to eight function positions as standard
  - Max. 3 machines
  - Max. 4 storage return positions

Intelligent destacking

Hardware and software in perfect harmony – The destacking software with intelligent algorithm developed in-house ensures that flexTec saws operate unmanned over long periods. The robot and the self-lowering lifting tables in the system work without operator intervention until the stacks are full.

The benefit: Operators are not required for long periods

Equipped with lifting tables in the robot's field of action, the saws can work unmanned over long periods, depending on the destacking variant chosen.

The operating principle: clever and highly automated

The finished parts exit the saw in the order in which they are cut.

The robot systematically forms stable stacks. It also makes use of the part buffer during the destacking process. This means that the lifting tables are used more intelligently than ever to form perfect stacks.

The cutting cell is equipped with a surface scanner. It measures the height of the part stacks on the lifting tables in real time to ensure that the lifting tables are positioned at the ideal height.

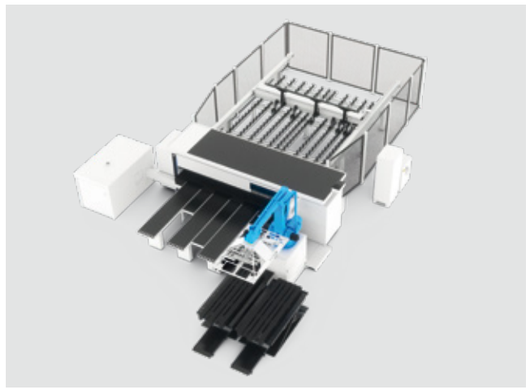
Raising the destacking lifting tables prevents collisions when destacking parts and enables significantly tighter positioning. This means that up to four large destacking lifting tables can be positioned within access of the robot.

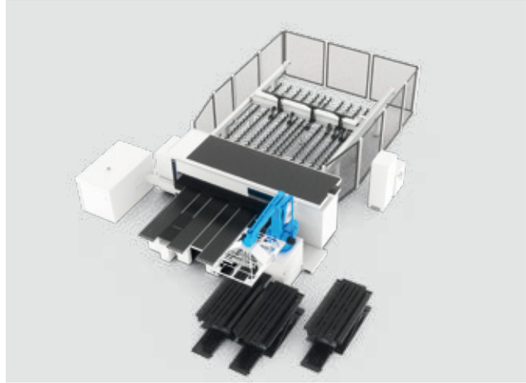
The result: Complete efficiency

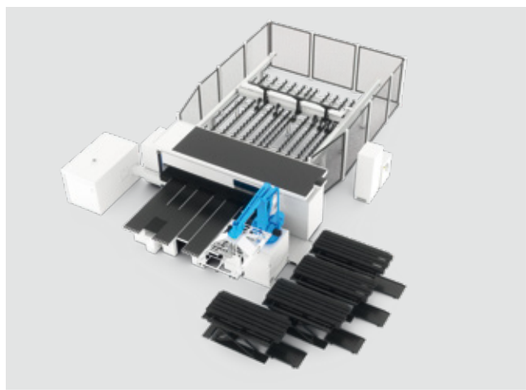
- The robot can destack parts according to an optimization strategy based on either the destacking location or downstream processes
- The robot always tries to utilize the maximum stack height
- It forms absolutely stable and, at the same time, fewer stacks than is normal when manually destacking
- Actions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

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

- Decide for yourself: single-type or chaotic destacking







Lifting table variants for every requirement

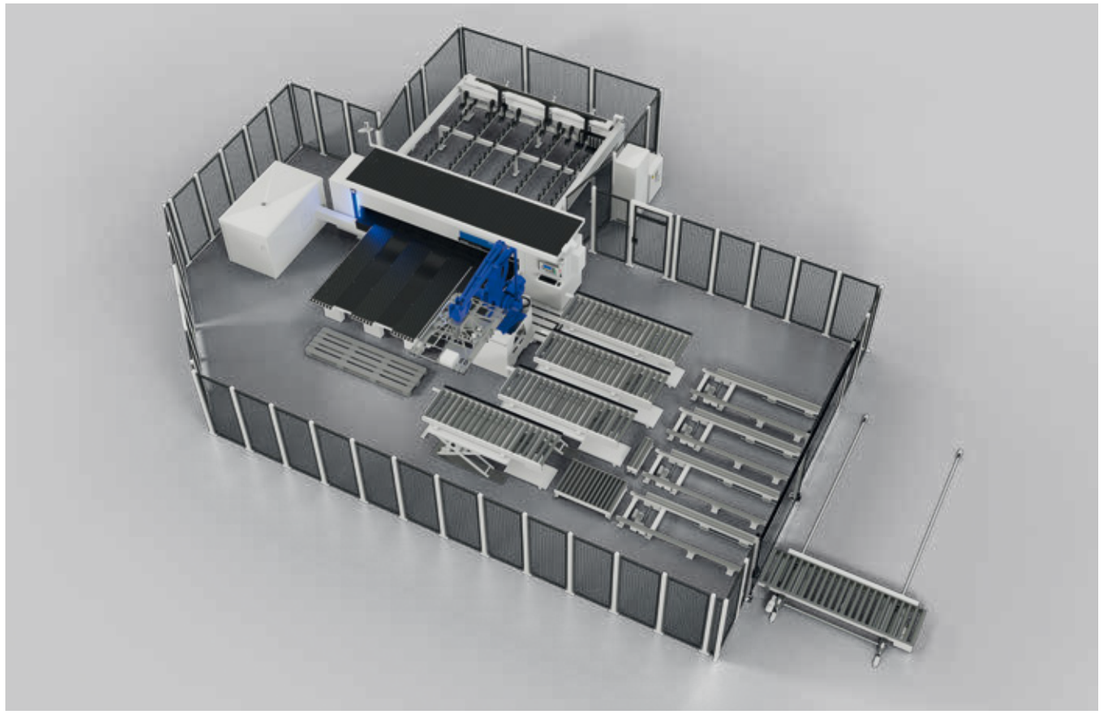
Diversity of materials, picking destinations, number of orders processed in parallel: there are many parameters that decide the best number, size and positioning of the lifting tables in each individual case. Requirements can vary greatly. That's why the HOMAG panel dividing experts work together with you to develop the best possible lifting table layout for your production facility.

- As a minimum, a large and small lifting table are required
- The maximum number that can be combined with each other is three large and two small lifting tables

Good to know:
Experience in recent years has shown that the configuration with four large destacking lifting tables typically enables the greatest flexibility and the best destacking result.

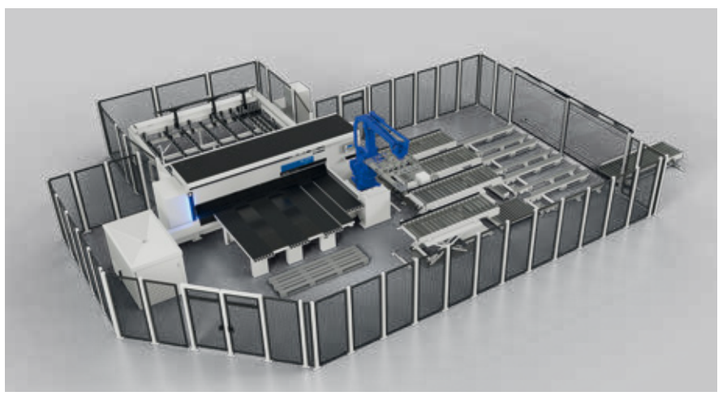
Intelligent destacking

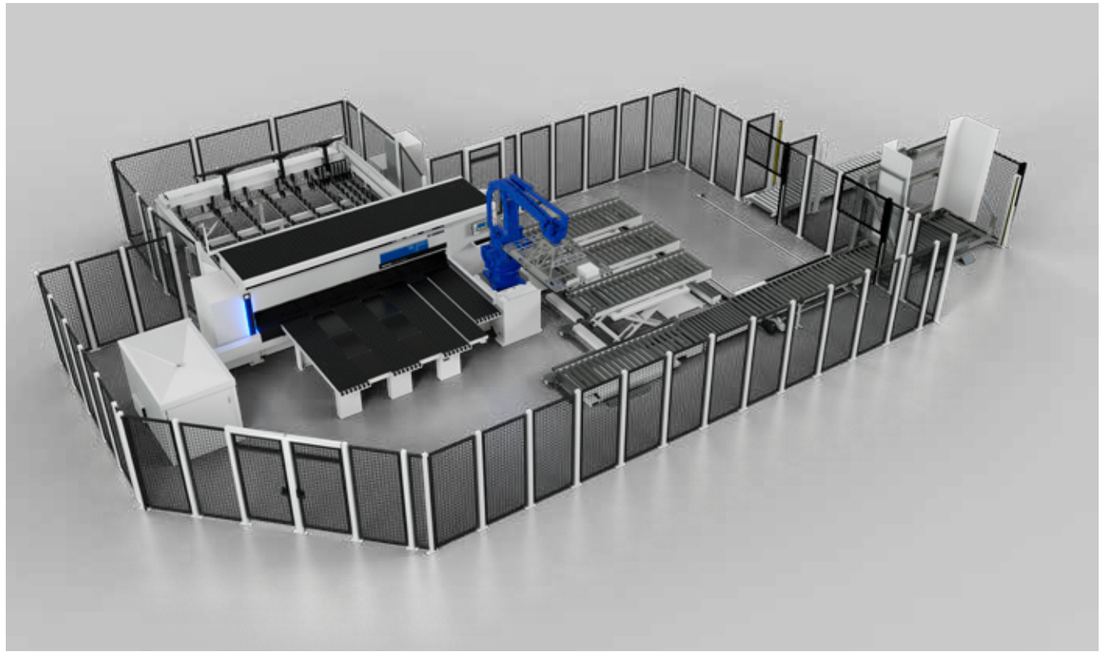
Semi-automatic and fully automatic stack outfeed has been developed to further reduce operator intervention — right through to complete automation. In line with the intelligent destacking software, the parts are not only destacked, but the finished pallets are also transported out of the system. Operator intervention is reduced to a minimum.



Semi-automatic stack outfeed:

- flexTec can work even longer without operator intervention
- Stacks are automatically moved out of the storage area of the robot
- The number of stacks that can be produced doubles until the next stack change





Protection board infeed

Protection boards are transported into the system just-in-time using a mechanical chain conveyor

- The feed runs parallel to the ongoing production on the other destacking positions
- No operator intervention required
- Can also be used with pallets

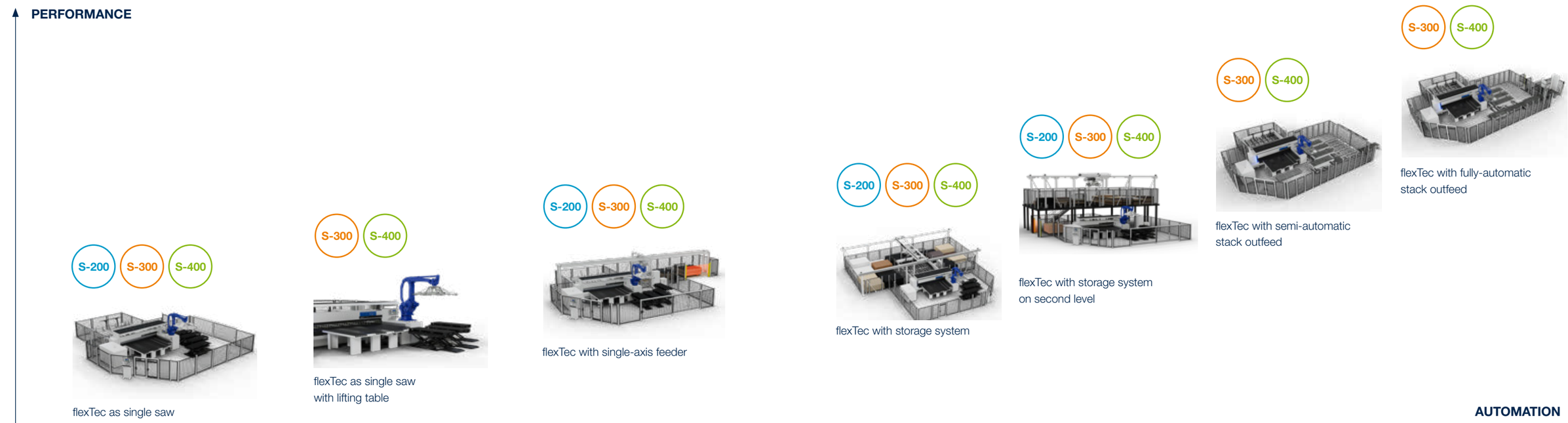
Automatic alignment

The protection boards or pallets are aligned fully automatically during infeed into the system to ensure optimum stack formation later.

Fully automatic stack outfeed:

- Produced parts are destacked onto pallets or protection boards. These are transported out of the danger zone via roller conveyors.
- No operator intervention required.

Performance and level of automation tailored to your needs



TECHNICAL DATA*	S-200 FLEXTEC	S-300 FLEXTEC
Saw blade projection (mm)	65 (optional: 80)	80 (optional: 95)
Cutting length (mm)	4300	3800/4300
Lifting table width (mm)	-	-
Program fence speed (m/min)	up to 80	up to 90**
Saw carriage speed (m/min)	up to 80 (optional: 120)	up to 150 (optional 170)
Main saw motor (kW)	50 Hz: 7.5 (optional: 11 or 18) 60 Hz: 7.5 (optional: 11 or 21)	50 Hz: 11 (optional 18 or 24) 60 Hz: 11 (optional 21 or 28)
Scoring saw motor (kW)	1.5	1.5 (optional 2.2)
Average total air requirement (NL/min)	400	400
Required compressed air supply (bar)	6	6
Max. panel size (mm)	3200 x 2100 (optional up to 4200 x 2100)	3200 x 2100 (optional up to 4200 x 2100)
Max. part size (mm)	2800 x 1200	2800 x 1200
Min. part size (mm)	190 x 80	190 x 80
Max. panel thickness (mm) in automatic mode	30	60
Min. panel thickness (mm) in automatic mode	8	8
Max. panel weight (kg)	125	125
Min. recut width (mm)	490	< 25 mm panel thickness: 120 > 25 mm panel thickness: 805

S-310 FLEXTEC WITH LIFTING TABLE	S-400 FLEXTEC	S-410 FLEXTEC WITH LIFTING TABLE
80 (optional: 95)	110 (optional: 125)	110 (optional: 125)
3800/4300	3800/4300	3800/4300
2200	-	2200
up to 90**	up to 90**	up to 90**
up to 150 (optional 170)	up to 150 (optional 170)	up to 150 (optional 170)
50 Hz: 11 (optional 18 or 24) 60 Hz: 11 (voptional 21 or 28)	50 Hz: 18 (optional 24) 60 Hz: 21 (optional 28)	50 Hz: 18 (optional 24) 60 Hz: 21 (optional 28)
1.5 (optional 2.2)	2.2	2.2
470	420	490
6	6	6
3200 x 2100	3200 x 2100 (optional up to 4200 x 2100)	3200 x 2100
2800 x 1200	2800 x 1200	2800 x 1200
190 x 80	190 x 80	190 x 80
60	60	60
8	8	8
125	125	125
< 25 mm panel thickness: 120 > 25 mm panel thickness: 805	< 25 mm panel thickness: 120 > 25 mm panel thickness: 805	< 25 mm panel thickness: 120 > 25 mm panel thickness: 805

* Values relate to the standard features
** Forward 25 m/min

Differences at a glance

A WIDE VARIETY OF OPTIONS

FUNCTION / OPTION	S-200 FLEXTEC	S-300 / 310 FLEXTEC	S-400 / 410 FLEXTEC
Main saw frequency converter	×	yes (optional)	yes (optional)
Cutting line control for main saw	×	yes (optional)	yes (optional)
Scoring saw stroke	pneumatic	pneumatic, motorized	pneumatic, motorized
Slide rails for thin panels	yes (optional)	yes (optional)	yes (optional)
Cutting gap closers	×	yes (optional)	yes (optional)
Dust-trap curtain	×	yes (optional)	yes (optional)
Automatic angle cut	×	yes (optional)	yes (optional)
Soft Touch	×	yes (optional)	yes (optional)
Pressure adjustment	Manual	manual, automatic	manual, automatic
Spring-pressured running wheels	×	yes	yes
toleranceCheck	×	yes (optional)	yes (optional)
MSQ	×	yes (optional)	yes (optional)
Plastic/plaster package	×	×	×

FEEDING AND FLEXTEC-SPECIFIC VARIANTS

FUNCTION / OPTION	S-200 FLEXTEC	S-300 / 310 FLEXTEC	S-400 / 410 FLEXTEC
Type of machine	HPP	HPP, HPL	HPP, HPL
Feed-stacking table / VIE	×	yes (optional)	yes (optional)
Turning device	×	yes (optional)	yes (optional)
Data link to storage systems	On the	Simple, complex	Simple, complex
Collet chucks can be raised fully (lifting elements)	×	yes	yes
Power Concept (manual mode)	×	Premium (optional)	Premium (optional)
Panel labeling system connection (manual mode)	×	yes (optional)	yes (optional)
Semi-automatic stack outfeed	×	yes (optional)	yes (optional)
Fully automatic stack outfeed	×	yes (optional)	yes (optional)
Labeling system on the pressure beam	Advanced	Advanced, Premium	Advanced, Premium
Manual labeling	Classic, Advanced	Premium	Premium

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