HE | HOMAG

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

Performance tailored to your needs. Our panel dividing saw

TAX STATEMENT

E HOMAG

YOUR SOLUTION



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 SAWTEQ S-300 / 400 flexTec and SAWTEQ S-310 / 410 flexTec saws, you can perform cutting for batch size 1 production without any personnel. You also benefit from the processing diversity of the classic HOMAG saw, for example, for cutting books.

YOUR SOLUTION

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SAWTEQ S-300 / 310 flexTec and SAWTEQ S-400 / S410 flexTec

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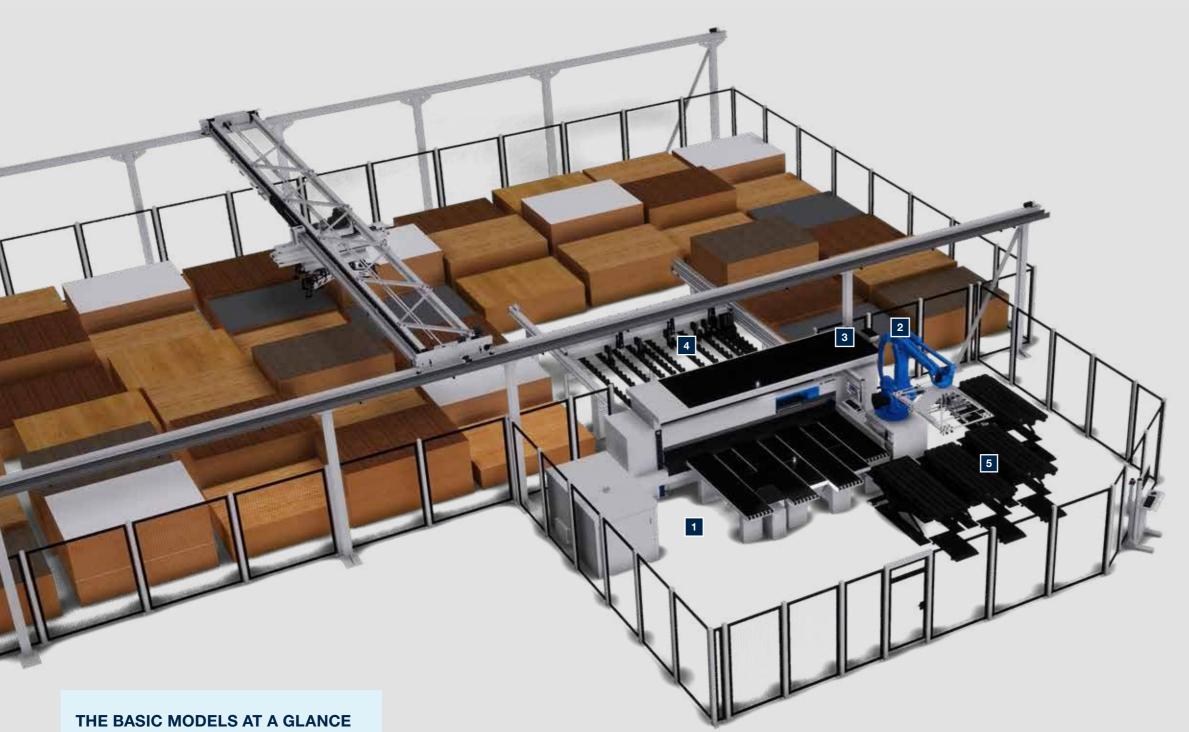
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Proven technology in new combinations
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SAWTEQ S-300 flexTec as single saw

- 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

HOW YOU BENEFIT

In robot operation:

- Highly efficient batch size 1 production with up to 1000 parts per shift
- Low unit costs per part
- Unmanned operation until stack change
- Extremely low error rates
- Ghost shift saw continues to work after work has ended

In operator operation:

- Complete operating freedom in the cutting process
- Maximum flexibility
- Package cutting is also possible

¹ Saw design

Essentially, the two basic models correspond in both design and features to the SAWTEQ S-300 / 310 and the SAWTEQ S-400 / 410.

2 Robot technology

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

³ Wide variety of features

SAWTEQ S-300 / S-310 flexTec and SAWTEQ S-400 / S-410 flexTec robot saws can be extensively customized to match different requirements and manufacturing environments. A wealth of optional technical features make sure of this in the same way as they do for panel dividing saws without robot.

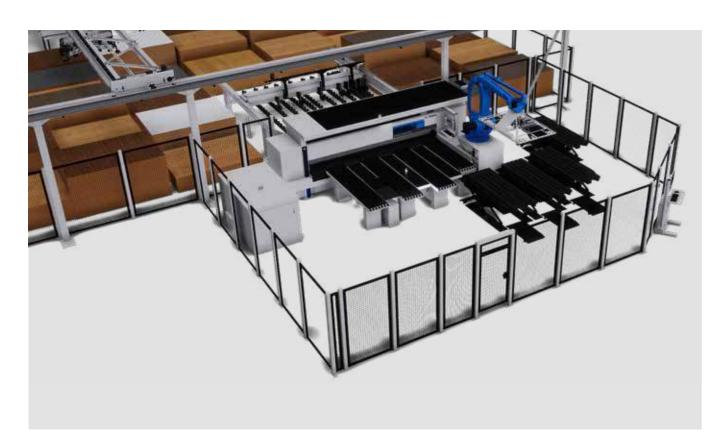
4 Feed options

Whether by hand, via a storage control connection or an integrated lifting table: There are many technologies for feeding panels to choose from. Find out more from page 26 onwards.

5 Intelligent destacking

Highly intelligent stack formation when destacking onto pallets and lifting tables is the key to unmanned production. This is achieved using software that has already proven successful in the SAWTEQ S-320 flexTec. When it comes to destacking hardware, the SAWTEQ S-300 / S-310 flexTec and the SAWTEQ S-400 / S-410 flexTec can be individually customized to meet your requirements. Find out more from page 28 onwards.

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 1000 parts per shift in robot operation

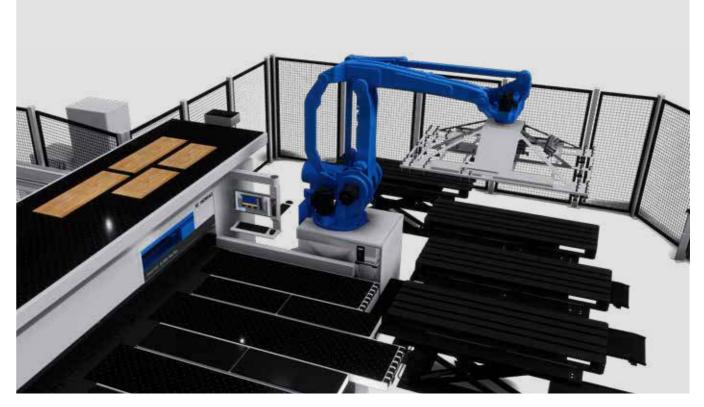
Perfect handling

- · 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/smallerthan-average panels in the usual way. The robot itself can move panels up to 3200 mm in length and optionally, panels up to 4200 mm.



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



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 with the proven industrial robot (almost 100% availability)
- No special robotics or programming knowledge is required
- Extremely low error rate in robot operation

No special robotics or programming knowledge is required!

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 sections, and therefore main parts of any length, are possible

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
- The fold-down air cushion tables are raised during automatic mode

Apps and digital assistants. Quick and easy support in the machine environment.

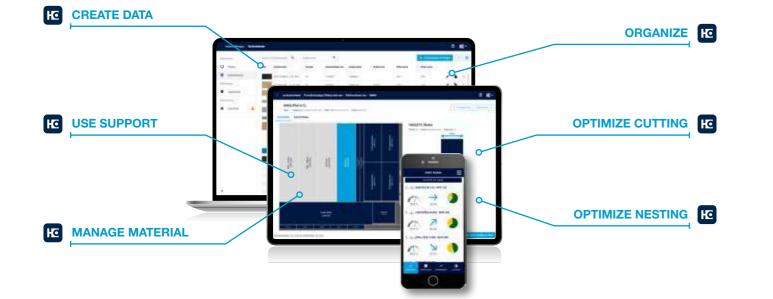
Some people still use pen and paper to create their cutting patterns. But they look at their smartphone if they want to know what the weather is like — instead of looking out of the window. We asked ourselves: why not combine the best of both? Our apps and digital solutions make your everyday work easier: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



More information at digital.homag.com

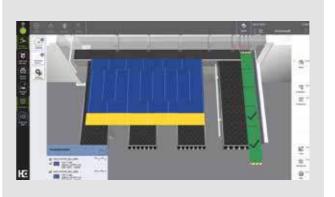
WE HAVE DEVELOPED POWERFUL AND SMART SOLUTIONS FOR YOU:

- ✓ Always low investment
- ✓ Always up to date (no updates necessary)
- \checkmark 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.

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DESTACKING

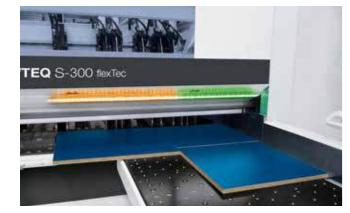
The HOMAG destacking algorithm

The control center for intelligent destacking via robot is an algorithm that has been developed in-house and now further improved (for more information, see page 26).

The new functional highlights:

- Single-type or individually defined stack layouts
 For even more flexibility and significantly easier handling
- Graphically formatted stack preview
- The software determines the number of stacks that will be created in advance
- 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

NEW: intelliGuide Classic as a standard 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
- Simple activation of the assistance system via function+ with your tapio account.



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 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
- Cutting pattern optimization takes only a few seconds
- Simple handling: clearly structured, easy to operate and graphics display the 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.

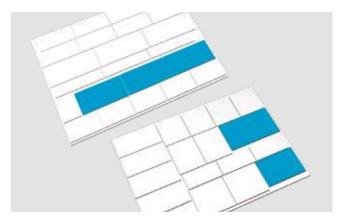
Applications are varied and are geared toward both woodworking shops and industry.



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



OPTIMIZATION

intelliOptimizer Stacking (optional feature)

This software-based additional function allows you to get maximum performance from your robot saw.

- Significantly more saw output per day
- Intelligent resorting of the cutting patterns previously created by an optimization software and specially tailored to the saw concept enables even better stacks and therefore fewer stacks overall (more parts per stack)
- The process thus reduces the number of stack changes required by up to 20%
- The improved and higher stack enables the ghost shift to be extended and therefore greater output
- Transparency and flexibility
- intelliOptimizer stacking suggests alternative handling options for your production. You select the option that suits you. This also allows you to decide on the ideal utilization of the machine concept: maximum output through processing series jobs in package cutting or maximum time for fully automatic operation

Can only be used in robot mode.

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.



Robot with suction traverse

At the heart of these saws is an industrial robot with a specially developed suction traverse. The robot is responsible for all the handling of the panels, strips and parts. Fully automatic, highly flexible and error-free.

This is also ensured by additional sensors that check the position and alignment of the parts.



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 aligning suction cups on the cross rail. Dust deposits on the suction cups are regularly blown off.

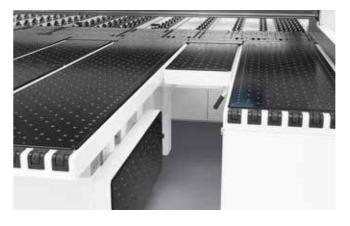


Fully automatic labeling

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 automatically - even when several strips are processed simultaneously side by side (Power Concept).

Good to know: the labeler is located near the pressure beam, i.e. in your field of vision. Furthermore, whether panels are fed from the side, front or rear is irrelevant for the labeling process. The position of the label can be individually controlled if desired - even right up next to the right-angled fence.

- 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



Fold-down air cushion tables

- The lanes between the air cushion tables are each equipped with two folding tables
- The additional tables in the first gap are 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



Patented: 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



Automatic ejector fence

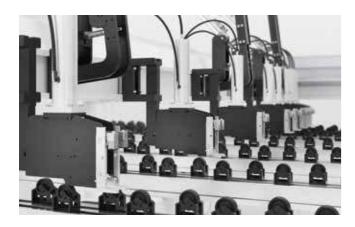
• Pushes panel remnants from the rear machine table to the front



Surface scanner

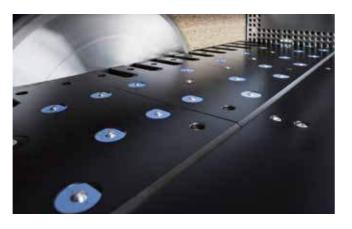
- Automatic lowering of the destacking lifting tables for optimum stack construction.
- For the robot to deposit the part, the level of the surface scanner must pass through the highest point of the lifting table or stack to avoid collisions with adjacent stacks

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



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.



One saw carriage, numerous benefits

- NEW: Improved chip guide reduces the suction power by up to 12%
- 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



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.



Clamp activation

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



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



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 an easy, central and ergonomic access

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)

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!



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

Mounted directly on the pressure beam printer, the control

Ideal for quality assurance in automatic production

whether parts are labeled and barcodes are legible

• If labels are missing or illegible, they are reproduced

scanner checks just in time whether the parts cut are correctly

Minimizes sources of error: the system checks independently

- Simplifies and speeds up production processes
- Automated parts tracking
- Can be retrofitted
- For smooth processes

Control scanner

automatically

labeled.

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.



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



Power Concept Premium

At the heart of this technology is a clamp that can be moved separately. Using this clamp, several strips with different cross cut divisions can be cut to length together. Even very narrow strips are precisely cut. Like this, Power Concept professional accelerates overall production and significantly increases material throughput.

Power Concept works with:

- An additional clamp that operates independently
- Clamps on the program fence that can be raised out of the overlapping work area as needed
- Re-sorting the strips directly at the saw so that they are specifically matched to the Power Concept Premium. This is based on existing optimization data for the shortest machining times

Can only be used in operator operation.





Power Concept Advanced (for saws without lifting table)

This is the low-cost version of the successful Power Concept professional. Power Concept practive can be used on saws without lifting table with the following feeding variants:

- · Feeding via a feeding station in front of the saw
- · Feeding via a simple storage control connection
- Feeding via feed gantry

Advantage: 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.

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.

Optional features



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. Stress elimination cut can be used in operator and robot operation.



NEW: Integrated toleranceCheck tolerance measurement for high-precision cutting

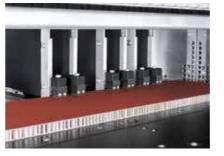
With the innovative toleranceCheck, you can continuously ensure the individual dimensional and angular accuracy you require - even for stress-prone material. In addition, it reliably detects insertion inaccuracies and informs the operator of these. This creates unprecedented transparency over the panel 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: toleranceCheck together with the stress elimination cut becomes an attractive quality package. Can only be used in operator operation.

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



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.



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.



Pneumatically operated trim stops

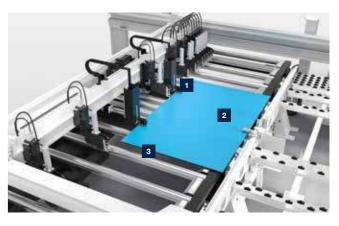
The trim stops are attached to the clamps and are activated as needed by the CADmatic machine control unit.

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



Cutting gap closers

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



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.

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.

Optional features



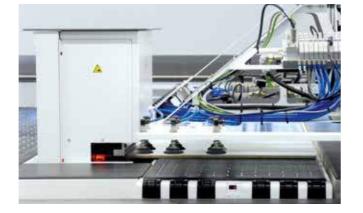


Scissor lift pallet truck "HuGo"

The scissor lift pallet truck "HuGo" is equipped with automatic height control and facilitates ergonomic and intelligent destacking processes. A light barrier controls the automatic raising and lowering of the pallet truck, allowing you to reach all the parts on the pallet at an ideal processing height — at an edge banding machine, for example.

Can only be used in operator operation.





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



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!

Dust-trap curtain

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



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.

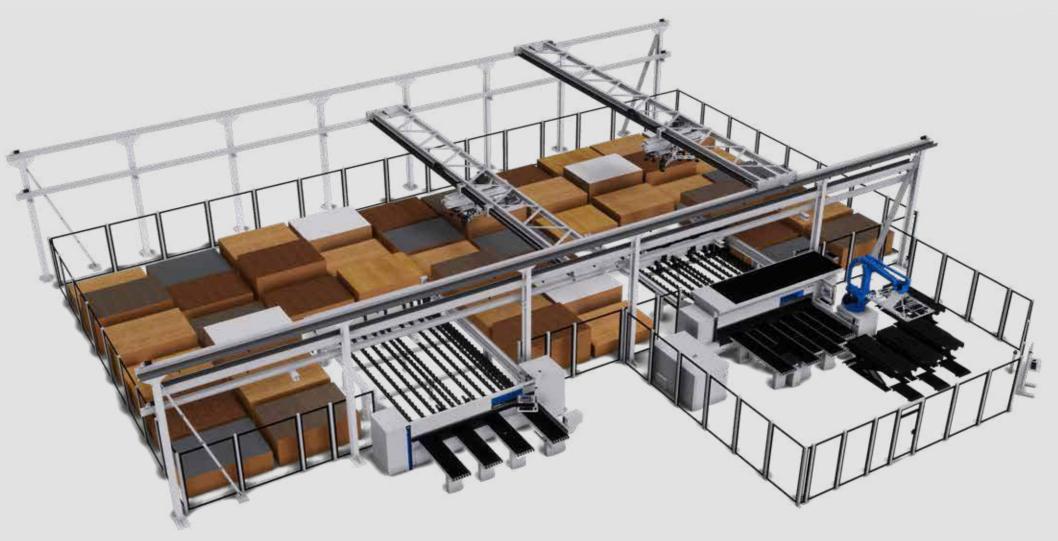


Additional start-stop key

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

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

Whether it's a wide range of parts, high speeds or full equipment: the new storage range combines the strengths of automation with intelligent logistics. To provide an optimum storage control connection, we have expanded the design of the storage platform for the STORETEQ P-300 and P-500 storage to include a second-level STORETEQ P-310 and P-510 storage system and a STORETEQ P-320 and P-520 double-level storage system. The storage systems represent intelligent logistics with noticeable optimization effects - above all in the greater reliability, availability and standardized data integration and processing. This is achieved through the consistent use of the leading woodStore storage software.





The ST71 suction cross rail in X geometry is the ideal optional feature for the panel storage. 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 HOMAG storage systems optimize your storage area and save valuable production space

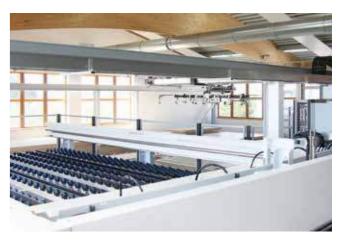
- One software, all options: the woodStore storage software grows with your requirements
- No compromise: configure the solution that best suits you
- Intelligent standby the machine only uses energy when it is actually moving
- · Optimal material consumption right down to offcuts thanks to wellthought out material management
- Handling without any extra costs coated panels from a thickness of 3 mm thanks to the ST 61 suction traverse, which is already included in the standard version
- Perfectly coordinated: ideal use of the given space without expensive hall extensions
- Complete solution from a single source including saw, nesting machine, storage platform and software



Great variety of materials

Whether it's handling plastic, plexiglass or laminate, coated or uncoated panels, the storage 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 of even textured surfaces
- High double scissor stability for precise panel handling
- Handling of plastic panels



STORETEQ P-500/P-510/P-520 - flexibility and variety of materials combined in one storage system

The sturdy construction of the STORETEQ P-500/P-510/P-520 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
- Controlled, low-vibration movements even in the largest version



woodStore 8. Portable, networked, user-friendly.



Mobile operation Various functions can be controlled via mobile end devices connected within the machine's WIFI network.



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.



) Term

④ 対因問題

Personnel-controlled storage operation with

a functional range of up to 40 different user

User management

rights.

Integrated image database Easy selection and assignment of panel finishes for realistic representation of the panels available in the storage.



Smart Connected System

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



Scrap 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.

system

- 4. intelliStore: flexible storage organization that automatically adjusts to production conditions
- cutting
- 8. scenarios



Email notification

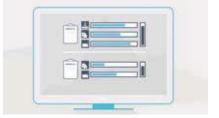
In the event of any malfunctions in the operation of the storage system, the system sends an email to the email account specified.

A .	

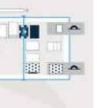
woodStore Analyzer In a period that can be selected individually, the main functions of the storage system are examined and analyzed according to the customer's requirements in order to determine whether the customer is using the storage system optimally.

Ten important reasons to opt for the woodStore storage control

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



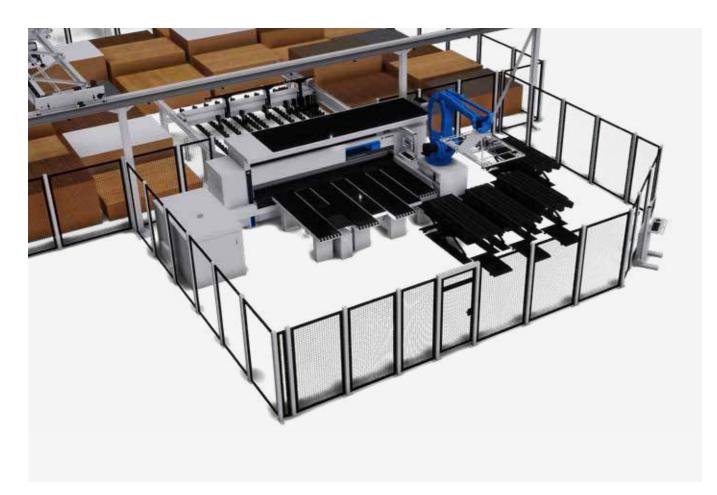
Database access analysis Customer database is measured for performance and logged to identify digital bottlenecks.





Feed variants

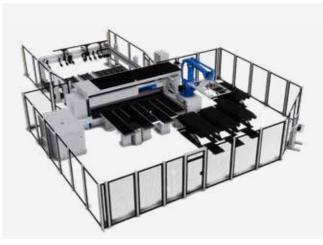
With SAWTEQ S-300 / S-310 / S-400 / S-410 flexTec robot saws, flexibility starts right at the feeding stage. Which variant is your favorite?



Feeding via storage system

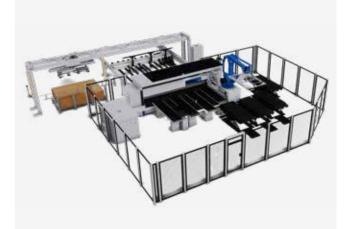
For customers with very demanding automation requirements, HOMAG offers tailored horizontal storage systems - ranging from small systems for woodworking shops to large industrial solutions. These systems allow you to noticeably speed up your processes and reduce your costs per part.

- 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



Feeding via lifting table

- In the case of lifting-table saws, panels are fed via an electrohydraulic 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 holdback device (page 19)
- Maintenance-free and no lubrication required
- In order to ensure precise cuts, the backing wall is not attached to the machine bed



NEW: 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. 200 kg
- Can be extended to up to 8 deposit positions
- 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 the SAWTEQ S-300 / S-310 / S-400 / S-410 flexTec operates 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 advantage: operators are not required over 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.

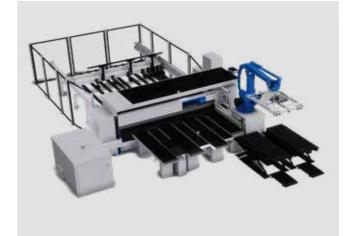
The cutting cell is equipped with a surface scanner. It measures the height of the part stacks on the lifting tables in real time to ensure that the lifting tables are positioned at the ideal height.

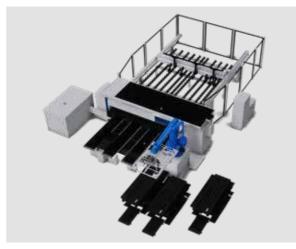
The result: all-round efficiency

- 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 for long periods of time

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







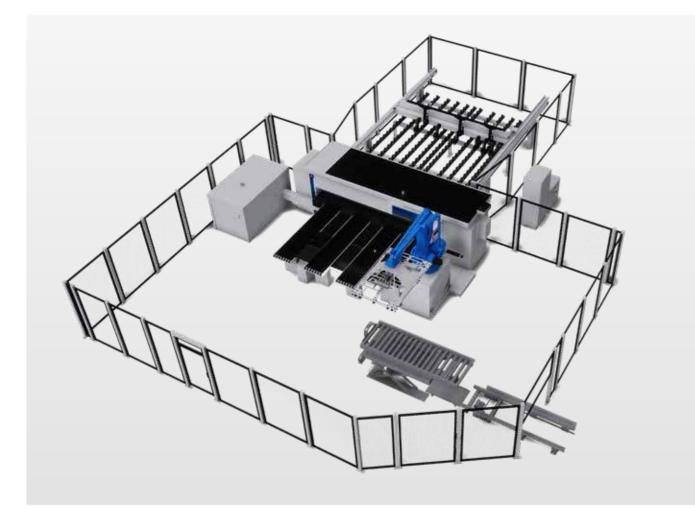
Lifting table variants for every requirement

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

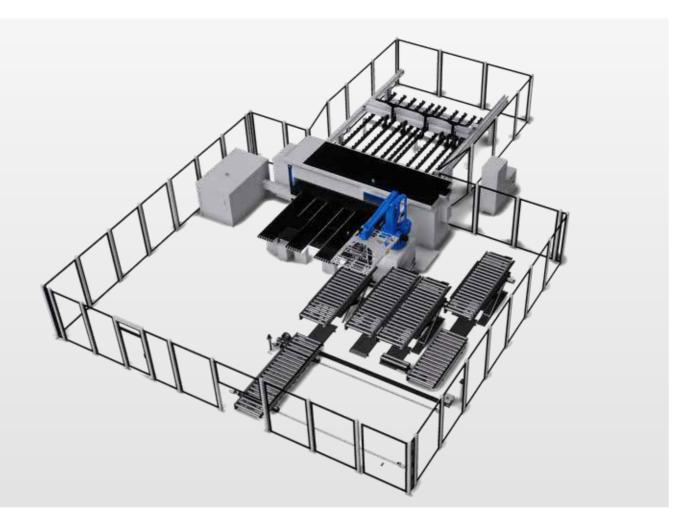
Intelligent destacking

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



Fully automatic stack outfeed:

- Produced parts are destacked on pallets, which are transported out of the safety area via roller conveyors.
- No operator intervention required.









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



Automatic alignment

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

Performance and level of automation tailored to your needs

▲ PERFORMANCE





SAWTEQ S-300 / S-400 as single saw + storage system

SAWTEQ S-300 / S-400 as single saw



SAWTEQ S-300 / S-400 flexTec as single saw



SAWTEQ S-310 / S-410 flexTec as single saw with lifting table feed





SAWTEQ S-300 / S-400 flexTec as single saw + STORETEQ F-100 feed unit

SAWTEQ S-300 / S-400 flexTec as single saw + storage system

TECHNICAL DATA*	S-300 FLEXTEC	S-310 FLEXTEC WITH LIFTING TABLE	TECHNICAL DATA*	S-400 FLEXTEC	S-410 FLEXTEC WITH LIFTING TABLE
Saw blade projection (mm)	80 (optional: 95)	80 (optional: 95)	Saw blade projection (mm)	110 (optional: 125)	110 (optional: 125)
Cutting length (mm)	3800 / 4300	3800 / 4300	Cutting length (mm)	3800 / 4300	3800 / 4300
Lifting table width (mm)	-	2200	Lifting table width (mm)	-	2200
Program fence speed (m/min)	up to 90**	up to 90**	Program fence speed (m/min)	up to 90**	up to 90**
Saw carriage speed (m/min)	up to 150 (optional 170)	up to 150 (optional 170)	Saw carriage speed (m/min)	up to 150 (optional 170)	up to 150 (optional 170)
Main saw motor (kW)	50 Hz: 11 (optional 18 or 24) 60 Hz: 11 (optional 21 or 28)	50 Hz: 11 (optional 18 or 24) 60 Hz: 11 (optional 21 or 28)	Main saw motor (kW)	50 Hz: 18 (optional 24) 60 Hz: 21 (optional 28)	50 Hz: 18 (optional 24) 60 Hz: 21 (optional 28)
Scoring saw motor (kW)	1.5 (optional 2.2)	1.5 (optional 2.2)	Scoring saw motor (kW)	2.2	2.2
Average total air requirement (NL/min)	400	470	Average total air requirement (NL/min)	420	490
Required compressed air supply (bar)	6	6	Required compressed air supply (bar)	6	6
Max. panel size (mm)	3200 x 2100 (optional 4200 x 2100)	3200 × 2100	Max. panel size (mm)	3200 x 2100 (optional 4200 x 2100)	3200 x 2100
Max. part size (mm)	2800 x 1200	2800 x 1200	Max. part size (mm)	2800 x 1200	2800 x 1200
Min. part size (mm)	190 x 80	190 x 80	Min. part size (mm)	190 x 80	190 x 80
Max. panel thickness (mm)	60	60	Max. panel thickness (mm)	60	60
Ain. panel thickness (mm)	8	8	Min. panel thickness (mm)	8	8
Max. panel weight (kg)	125	125	Max. panel weight (kg)	125	125

** Forward 25 m/min





SAWTEQ S-320 flexTec + storage system + automatic destacking

SAWTEQ S-320 flexTec + storage system + manual destacking

AUTOMATION





Our Mission, Your Performance.

LIFE CYCLE SERVICES

Improved performance, more efficient processes, faster help, assurance of availability and smarter working

TEAM & COVERAGE

Largest global service network in the industry with over 1,350 personnel.

INSTALLATION & COMMISSIONING

For a smooth start, we only let proven experts manage your setup.

OPERATION & CONTROL

After teaching your personnel the intuitive control system, our clever apps help to make the operator's life much easier.

MAINTENANCE & SERVICING

To keep things running, we're happy to take a preventative approach. You decide how often and how intensively you want the support to be. As we all know, prevention is better than the cure.

eSHOP & ONLINE ADVANTAGE

A few clicks and it's fixed. Receive exclusive advantages by ordering spare parts online, depending on market availability. shop.homag.com

HOTLINE & READINESS

When there's an emergency, we're here. Direct by phone, digitally via app or video, or with on-site support. We are close to you with over 90 regional service organizations worldwide. With more than 35,000 spare parts immediately available, we can deliver 85% of your orders fast.

TRAINING & EDUCATION

With classroom, live online or eLearning training, we offer flexible options to help you get knowledge. We conduct over 4,000 customer training courses every year, and we even have our own training centers in 19 countries

MODERNIZATION & IMPROVEMENT

Our modernization program is tailored to your machines and processes. We can evaluate your data and situation and advise you on the next step.

ANALYSIS & SUSTAINABILITY

On request, we analyze all your processes with proven tools and procedures (LeanSixSigma). We have a large, certified team of experts for this purpose.

FINANCING & CONSULTING

We offer you tailor-made financing concepts worldwide. With more than 60 years of experience and a close partner network of prominent banks and insurance companies to help us to find the right solution for you, we're always transparent and reliable in processing.

Fast support: 94% resolution rate via our hotline

Close to you: 1,350 service experts worldwide

We get things moving: Over 1,000 worldwide spare parts shipments each day

No one else has that: Electronic documentation on over 150,000 machines, available in 28 languages





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YOUR SOLUTION