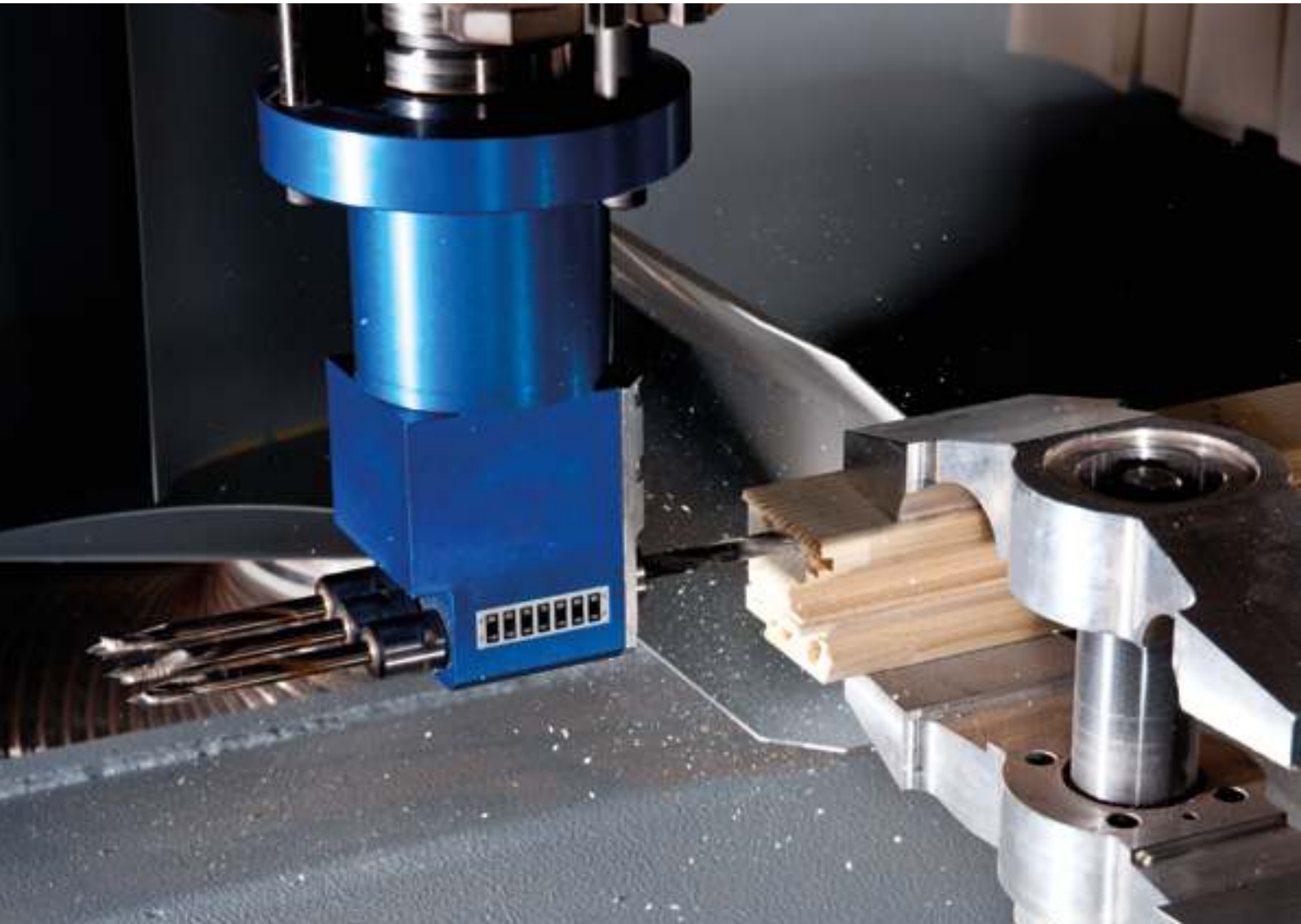
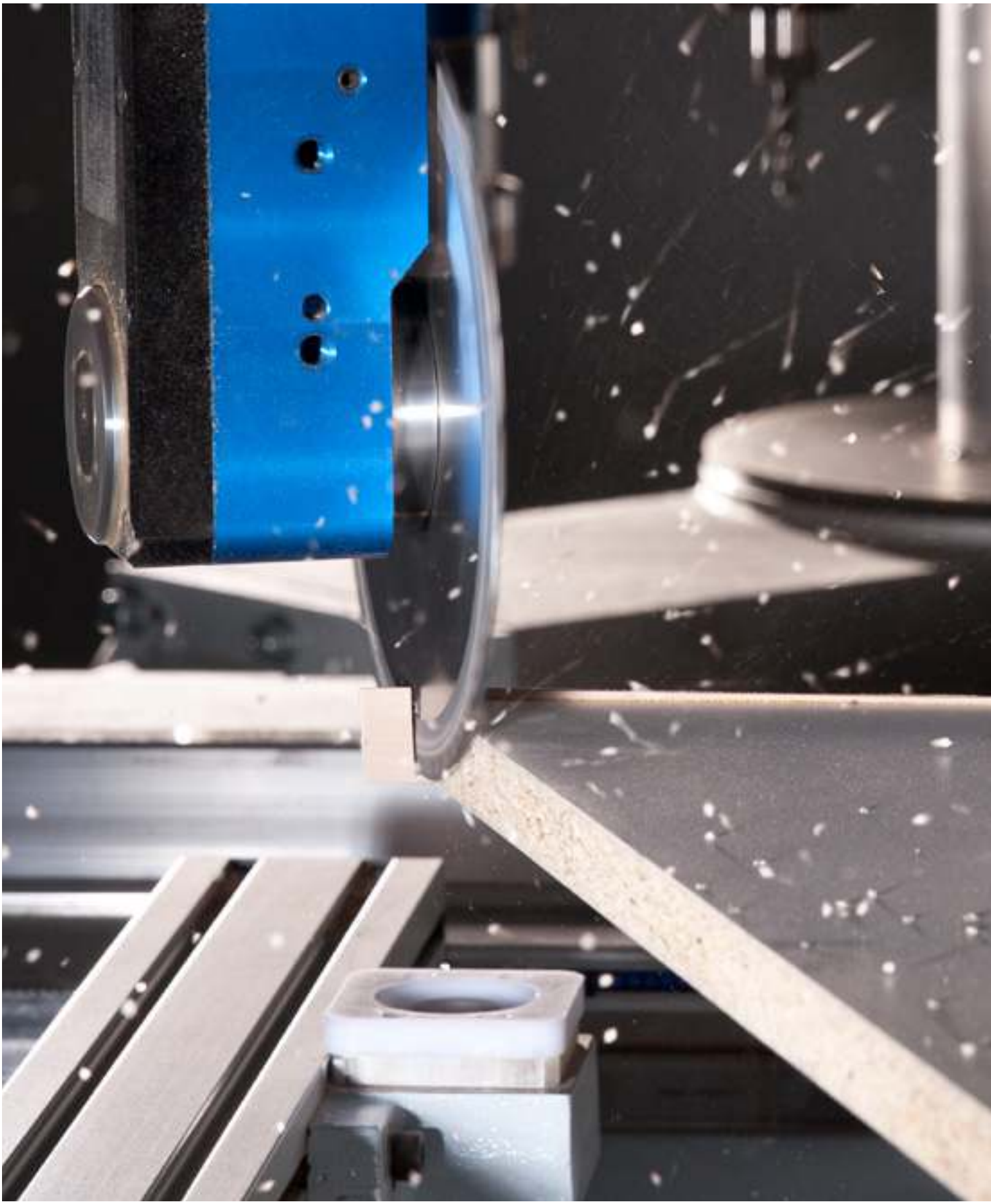
The flexible modular system to meet all your needs.

HOMAG

Unit and Clamping Element Catalogue
Sawing | Drilling | Trimming,
Cutting | Mortising | Sanding

YOUR SOLUTION





High-precision units with patented technologies for the most demanding requirements.

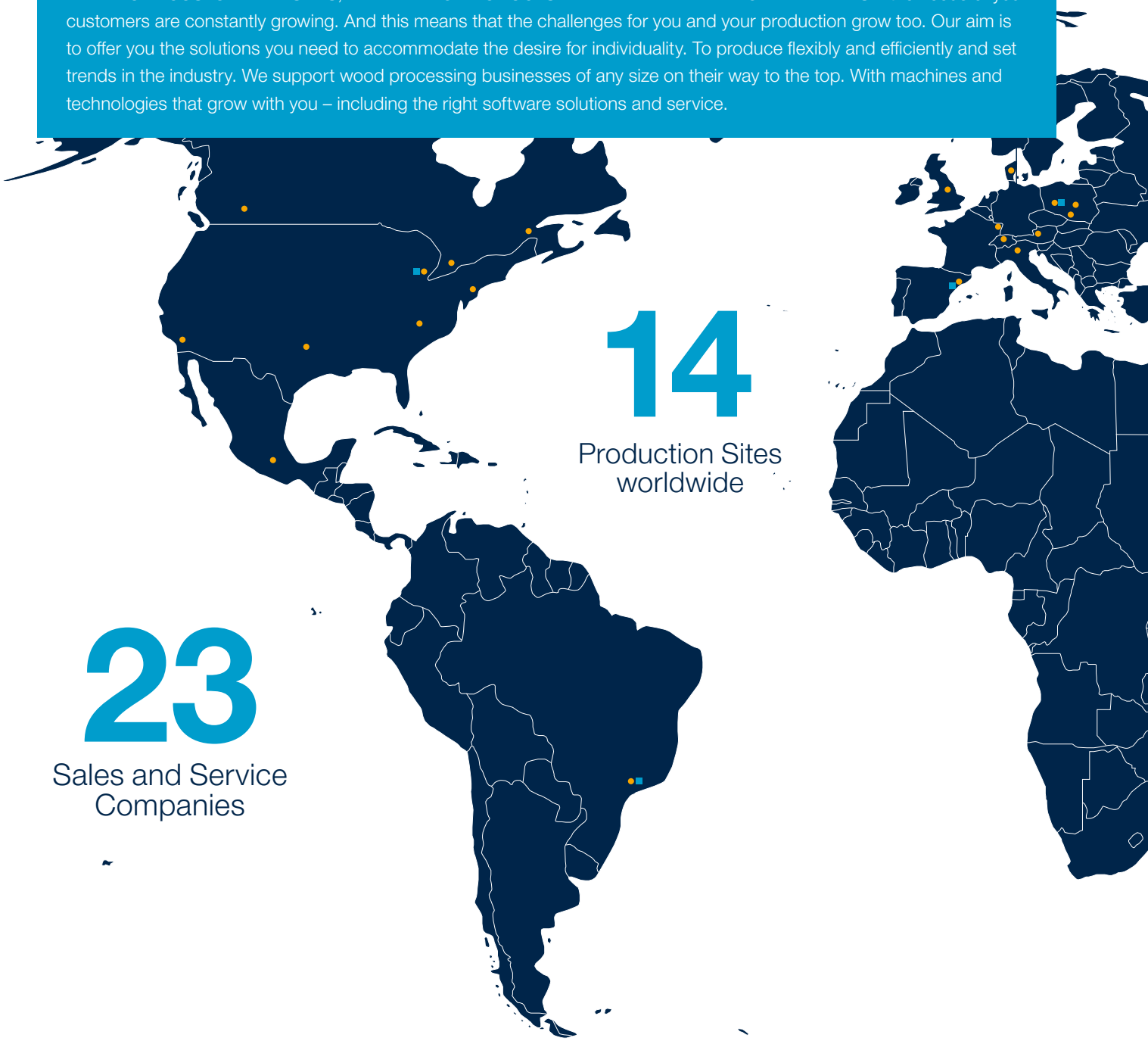
As a leading technology specialist, our ever-expanding range of units is constantly being updated. Upgrade your machines individually and keep your production flexible.

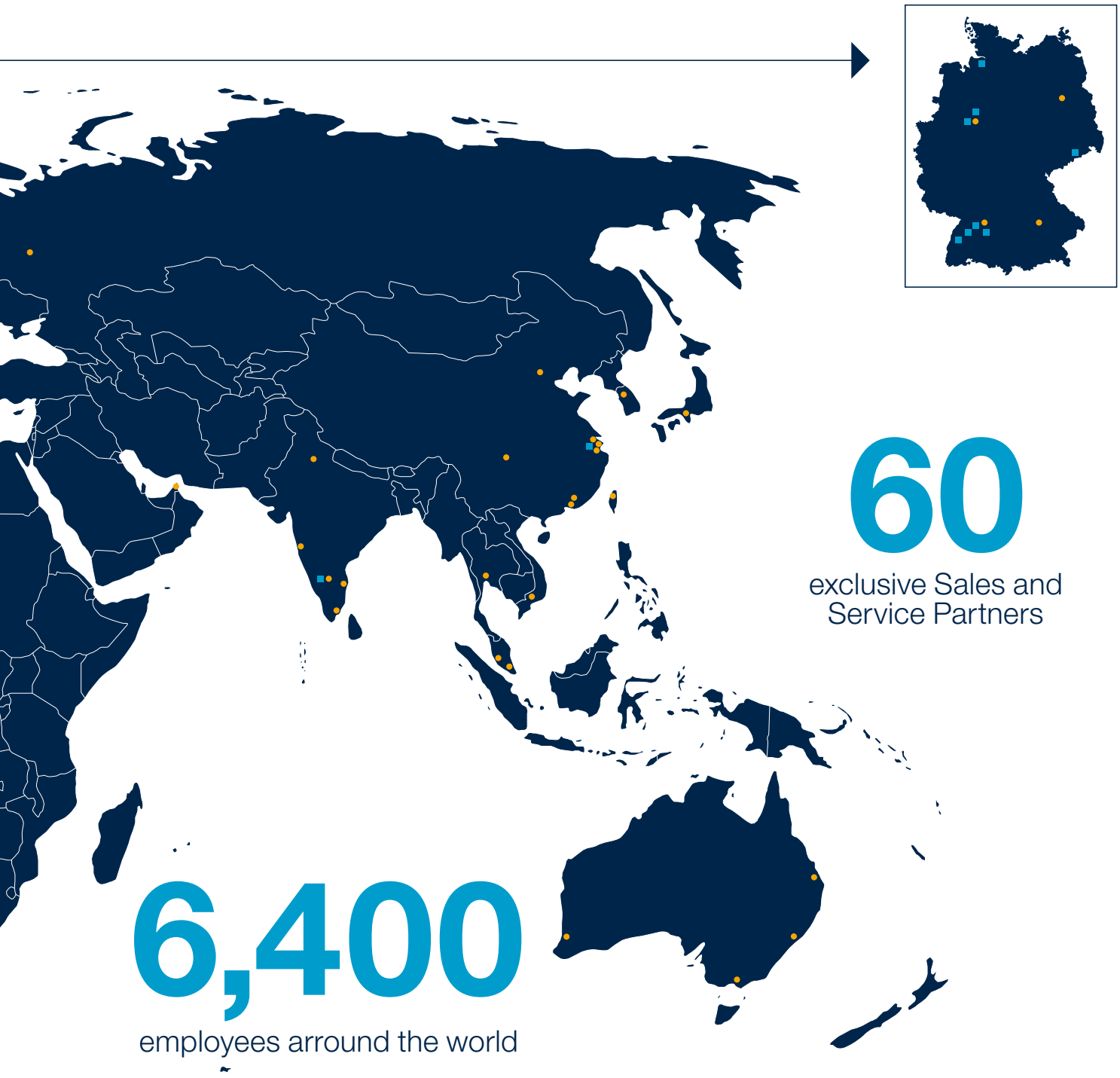
YOUR SOLUTION

CONTENT

Networked worldwide – HOMAG is always at your side

INDIVIDUAL CUSTOMER WISHES, DEMANDING PRODUCTS AND A WIDE VARIETY OF MATERIALS – the needs of your customers are constantly growing. And this means that the challenges for you and your production grow too. Our aim is to offer you the solutions you need to accommodate the desire for individuality. To produce flexibly and efficiently and set trends in the industry. We support wood processing businesses of any size on their way to the top. With machines and technologies that grow with you – including the right software solutions and service.





60

exclusive Sales and Service Partners

6,400

employees arround the world

HOMAG SALES & SERVICE COMPANY

Connections fit for the future

The unit interfaces used by the HOMAG are ahead of their time. They feature patented technologies which allow the operating spectrum of your plant or machine to be upgraded as and when it suits you. In conjunction with the HOMAG unit technology, they open up practically unlimited production scope.

TORQUE SUPPORT

C-AXIS

C-AXIS WITH FLEX5 INTERFACE

1 **AC motor, short neck, air-cooled**

2 **Torque support**

3 **C-axis**

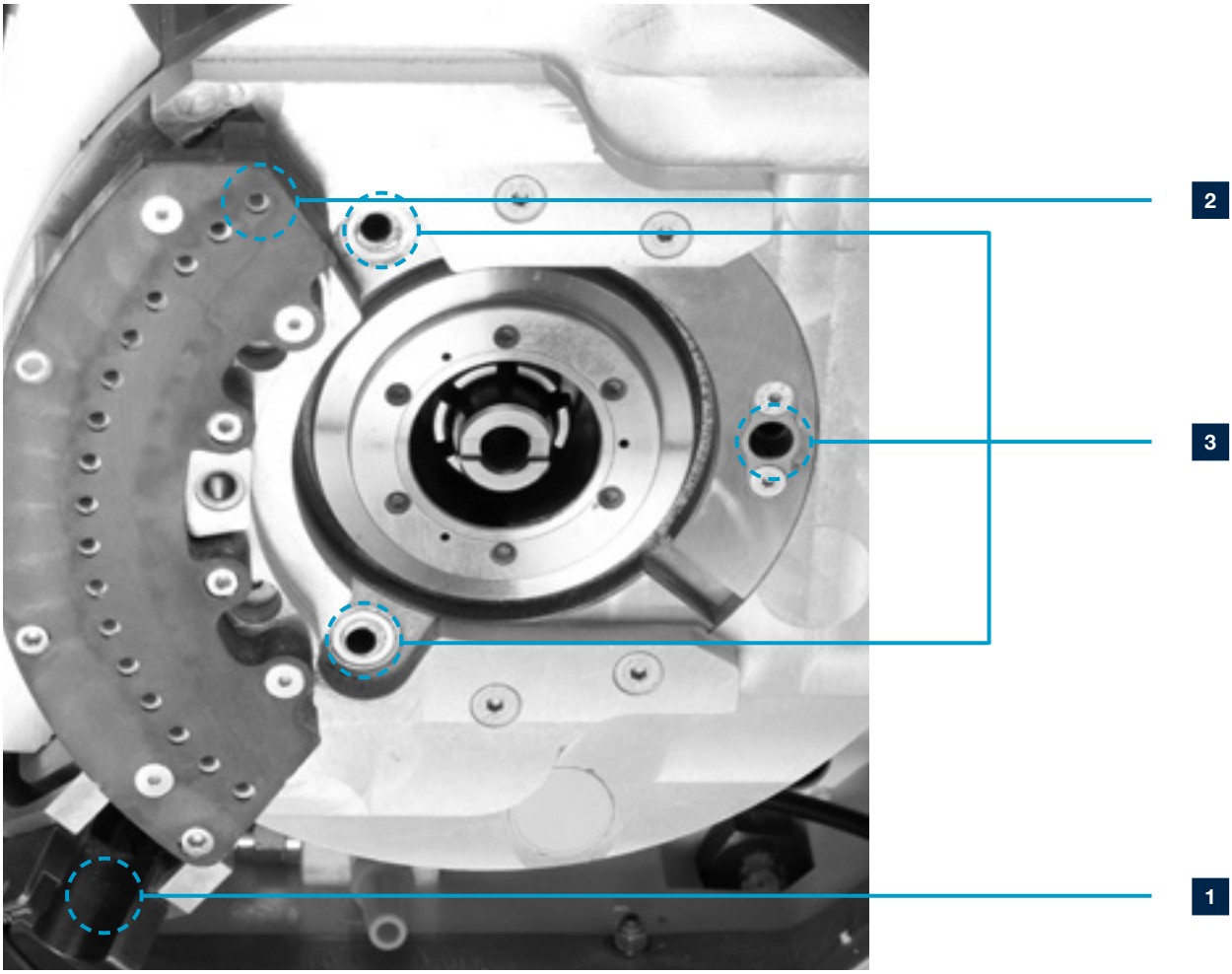
4 **AC motor, long neck, water-cooled**

5 **FLEX5+ interface**

Range of modular units for flexible working

The units needed for the relevant processing step are exchanged fully automatically by the tool changer system into the machine's working spindle. They can be swivelled from 0 to 360° degrees over the C axis and - depending on their application - fitted with pneumatic or electronic connections.

The HOMAG range of operating units is being continuously extended and updated. It contains a whole series of additional units not listed in the catalogue. We are able to offer you the optimum solution for your specific application every time. Talk to us!



1 **The FLEX5 / FLEX5+ interface permits automatic adjustment of the unit's angle of incline by means of the C axis, allowing operations such as precise shift cuts (see page 16).**

2 **Patented technologies such as the electronic interface permit the application spectrum of your processing centre to be extended - for example to include the use of edge banding units (see page 38) This entails the transmission of control signals and energy into the unit, for instance for melting the glue.**

3 **The retainer for the 3 bolts of the highly rigid 3-point unit support also permits transmission of compressed air and fluids into the units. This is the requirement for allowing the use of, for instance, pneumatically traced units (see page 17) or the supply of fluids into units for minimum quantity lubrication when processing aluminium.**

Innovation. Precision. Passion

Over 20 years of experience in the development of units are reflected in the advanced stage of today's unit engineering.

The HOMAG units are distinguished by their extreme rigidity, outstanding precision and stability.

Angular gear with cylindrical pinion in involute gear teeth

3-POINT INTERFACE IN MONOBLOCK DESIGN

3 highly rigid bolts linked directly to the unit housing without additional interface. This guarantees optimum transmission of forces and reduces vibrations which could impact negatively on the workpiece quality and life of the units.

PATENTED GEAR TECHNOLOGY

This angular gearing arrangement with a cylindrical pinion in involute gear teeth permits:

- **Greater effective diameter of the gears for transmission of higher torque levels**
- **Fewer interfaces due to lower number of components (gears) result in more compact units and fewer wearing parts**
- **Higher speeds (peripheral speeds up to 62 m/s) reduce processing times / increase the application spectrum and offer greater performance reserves**

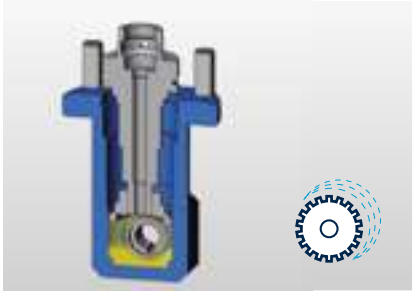
1 **Air jet cleaning during processing**

2 **Lowering and lifting upper tools, Impetus for oil mist lubrication**

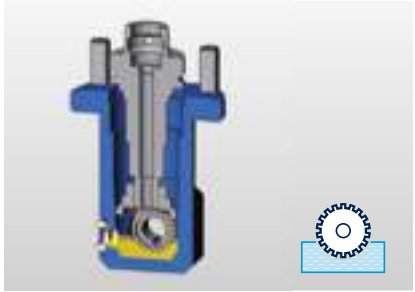
3 **Air jet cleaning during lock case trimming**

The optimum for every application

The design of the individual units can be individually adjusted to the specific production assignment and different utilization conditions. For instance to achieve improved power transmission and a higher standard of processing quality in the end product. Or in order to withstand extreme loads in multiple-shift series production.



Lifetime grease lubrication: Lifetime grease lubrication is ideal for units in cyclical application (processing duration generally less than 1 minute). It offers an ideal cost-to-performance ratio. During processing, the grease is spun away in some cases from the tooth flanks due to centrifugal force produced by the rotating gears. During breaks in use, it flows back into the gears and ensures optimum lubrication. Due to the optimum viscosity of a high-performance grease, a long service life is achieved without the need to top up.

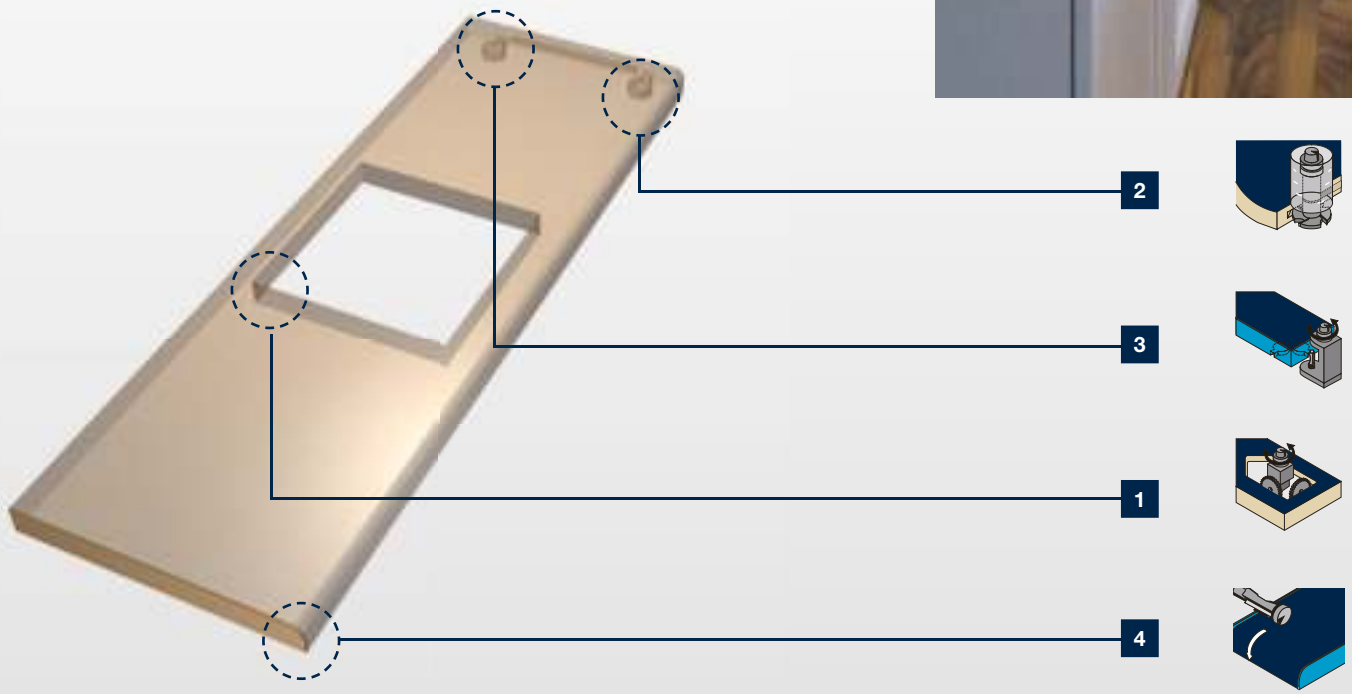


Oil bath lubrication: In series production using processing units with long utilization periods, oil bath lubrication is advisable. A section of the gears passes through an oil bath, and rotation then distributes the oil throughout the whole of the unit. A “window” at the side indicates whether the oil level is sufficient.

Oil mist lubrication: For units exposed to high loads and periods of use in series production, a patented oil mist lubrication has been developed. Selective distribution of the oil within the unit is achieved by means of a lubrication pulse, with compressed air transmission through the unit interface. The use of compressed air ensures that a defined oil quantity is conveyed to the unit and atomized. This innovative technology means doubling the service life and ensures enormous load reserves.

Sawing, drilling, trimming – to the utmost degree of perfection

Anyone who manufactures doors, windows and furnishing elements must be able to produce quickly and be flexible in their order scheduling. With the HOMAG, both these conditions apply. HOMAG innovative processing centres and routers with their versatile processing units offer the whole spectrum of possibilities. And there are no compromises made when it comes to quality.

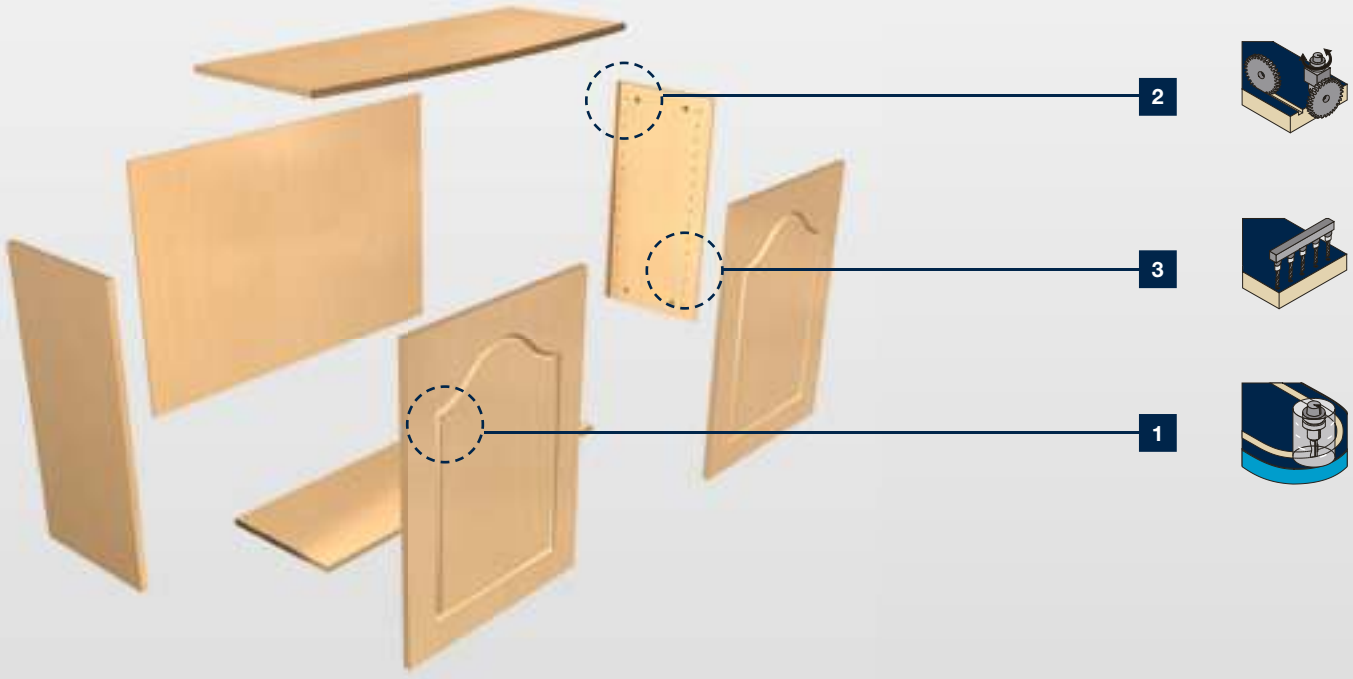


1 **Corner notching**

2 **Trimming groove for connecting tongue**

3 **Cutting recesses for connecting hardware**

4 **Rounding edges**



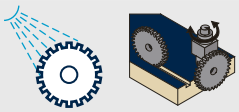
1 Decorative groove trimming

2 Sawing groove for rear panel

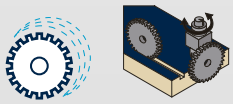
3 Drilling hole series for shelves

Sawing, drilling, trimming - to the utmost degree of perfection

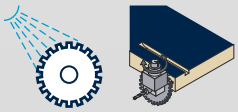
High performance sawing unit: In conjunction with the C axis, sizing, grooving, snipping and separating cuts can be executed at any optional angle, and recesses or notches can also be sawn. The maximum cutting depth is 75 mm or 110 mm depending on the model.



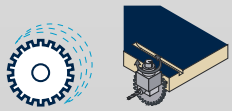
Sawing and snipping unit: The position of the saw blade in the centre of the C axis permits special high-precision snipping cuts to be performed during edge banding. All other sawing operations can naturally be performed up to a cutting depth of 65 mm.

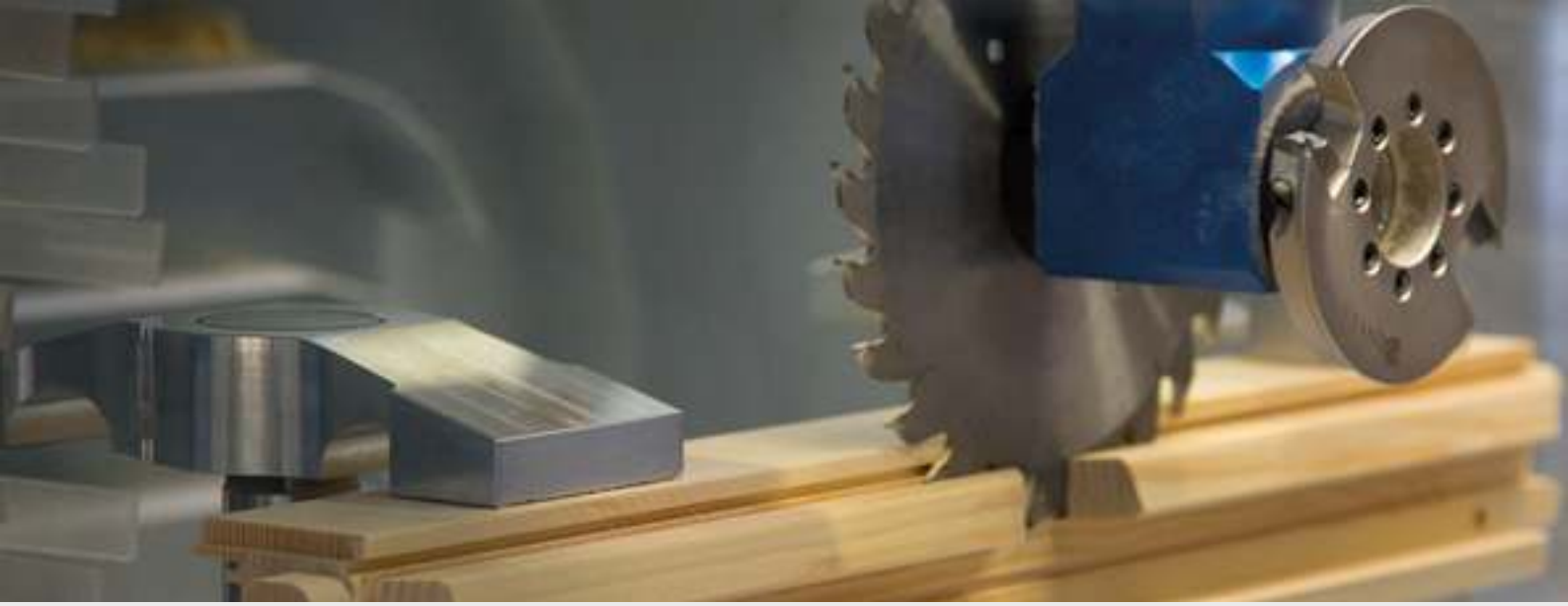


High Performance sawing/drilling and trimming unit: This High Performance design combination unit offers higher performance reserve and is also suitable for the continuous use of two tools for drilling, trimming and sawing. The maximum cutting depth is 80 mm or 75 mm. The maximum useful tool length for trimming and drilling is 85 mm or 70 mm.



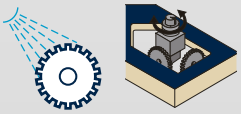
Sawing/drilling and trimming unit: Combination unit for the use of two tools for drilling, trimming and sawing without tool change. The durable, compact design even permits trimming operations at a close angle to the workpiece and cutting depth of up to 80 mm, 75 mm or 55 mm. The maximum useful tool length for trimming and drilling is 85 mm, 70 mm or 50 mm.





4-spindle drilling/ trimming unit: The 4-sided spindle outlet makes available four different drilling and trimming tools without tool change. Continuous shaft for greater rigidity and processing without change of direction when using clockwise and counterclockwise rotating tools, e.g. when trimming out recesses for door hinges.

High Performance swiveling sawing/drilling and trimming unit: For sawing cuts at an angle of 0° to 90° and drilling/trimming operations at an angle of 0° (vertical) to 100° (horizontal). This permits precisefitting shift cuts, drilling and trimming operations. The High Performance version offers sufficient stability even for light trimming work. Depending on the unit design, the cutting depth with vertical saw blade is 50 mm / 70 mm. With a 45° incline of the saw blade, a cutting depth of 43 mm / 63 mm is achievable.

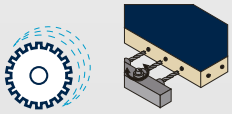


Swiveling sawing/drilling unit: The standard unit for shift cuts and drilling operations at different angles. The swivel range for sawing is between 0° and 90° and for drilling between 0° and 100°. With a vertical saw blade, a cutting depth of 50 mm is reached, and with a 45° angle, a depth of 43 mm.

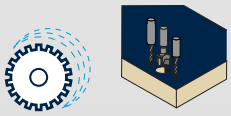
Swiveling sawing/drilling unit with digital angle display: The standard unit for miter cuts and bore holes at various angles. The unit can swivel between 0° and 90° when sawing and between 0° and 100° when drilling. The angle is easy and convenient to adjust thanks to a digital display

Sawing, drilling, trimming - to the utmost degree of perfection

Drilling unit 3+1 spindles: The dowelled corner connection has become an ever more established technique in the window production sector. Alongside sash bar and transom boreholes, this unit can also be used for the efficient production of corner connections with different drilling patterns using three boreholes in a single cycle (spacing pattern 20 mm or 32 mm). The additional drill at the back offers greater flexibility, e.g. for sash bar dowelling with minimal diameters. Drill bit useful lengths of 50 mm are standard, lengths as great as 80 mm are possible in the version with 20 mm spacing pattern.



3-spindle hardware drilling head: Drilling unit for pot hinges during front production. As the spindle spacing is coordinated to the hardware being mounted, all 3 boreholes can be produced in a single step.



Drilling head, 7 spindles in a 25 mm spacing pattern: Specifically for the office furniture sector, 7 holes can be drilled simultaneously at any angle. As an addition to the drilling head with popular 32 mm spacing pattern, a high degree of flexibility is achieved with minimal production times. Versions with 30 and 32 mm spacing pattern are also available.

Flat table drilling unit with 3 spindles: A compact drilling unit with a short downward spindle distance. Thus on processing centers with a flat table, components placed directly on the table can also be drilled horizontally.

Traced flush trimming of edge overhang on postforming profiles.

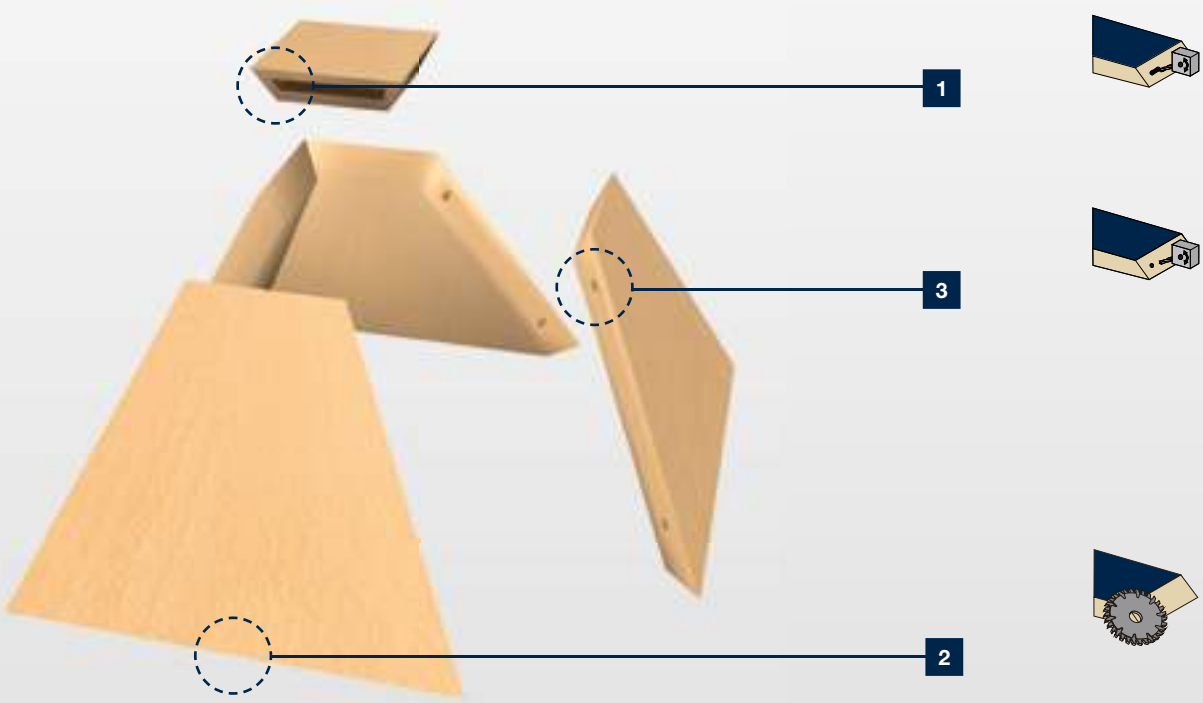
Swiveling drilling/trimming unit in cranked execution: The cranked execution of the unit permits the use of drill bits and trimming tools with a greater useful length, e.g. for hardware hole drilling and when trimming the hinge recesses in internal doors. The maximum tool useful length is between 78 mm and 85 mm depending on the unit design.

Elepart angle drilling unit: Compact drilling unit. This allows horizontal drilling holes to be manufactured in connecting elements for door frame production

Corner notching unit: For the production of right-angled, splinter-free, sharp-edged recesses, for example for efficient processing of door glazing cutouts, sink cutouts in kitchen worktops.

Efficiency gain through innovation – FLEX5+

HOMAG units permit more productive, more economical execution of production operations in furniture construction. An example: The FLEX5+ unit with automatic angle adjustment and automatic tool change. This allows several differently shaped workpieces to be completely processed without manual intervention.



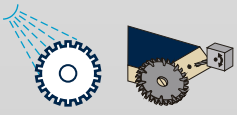
1 **Trimming operations at any optional angle**

2 **Sawing cuts at any optional angle**

3 **Drilling fixing holes at any optional angle**

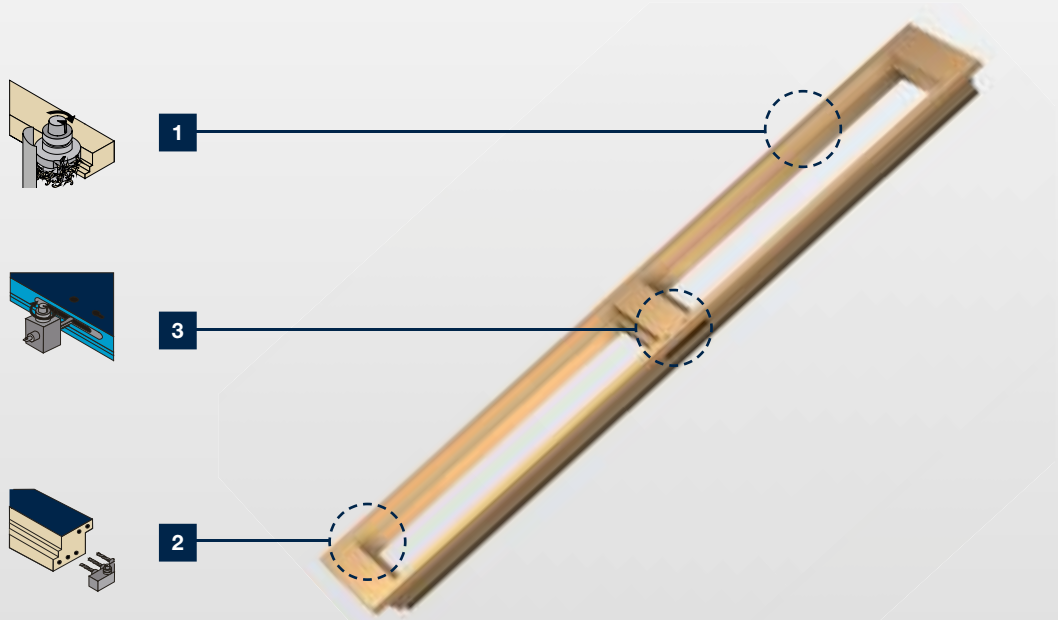
FLEX5 sawing, trimming and drilling unit with automatic angle adjustment: Precise execution of shift cuts or boreholes and any optional angle without manual settings results in considerable productivity improvement by eliminating the need for test cuts, as well as improved quality. Depending on angle adjustment of the A axis, cutting depths of up to 70 mm are possible, as well as boreholes with a useful tool length of 65 mm.

FLEX5+ sawing, trimming and drilling unit with automatic angle setting and automatic tool change: Sawing, trimming and drilling at any optional angle with automatic tool change. This enables complete processing of a wide selection of workpieces, e.g. pyramids, without manual intervention. Depending on angle adjustment of the A axis, cutting depths of up to 60 mm are possible, as well as boreholes with a useful tool length of 60 mm.



Built for high hogging output

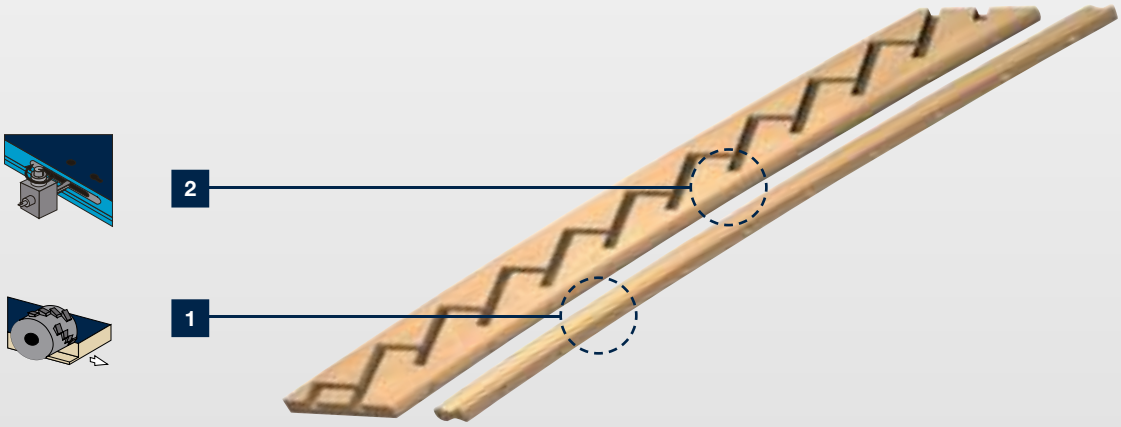
Excellent processing quality and top marks in terms of speed. HOMAG units for the manufacture of windows and doors make available a wide selection of innovative technologies. They can be combined and precisely coordinated to your specific application situation. Even special tasks are worked out safely and efficiently.



1 **Profile trimming with chip deflecting plate**

2 **Dowel hole drilling**

3 **Lock case routing**



1 Handrail profile trimming

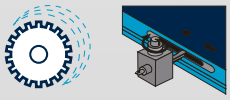
2 Hole drilling for handrail fixture

Built for high hogging output

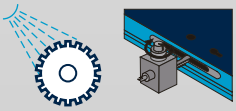
Horizontal planing unit: The toolholder with counterbearing guarantees outstanding processing quality and allows the unit to be exposed to high loads. Whether for planing, grooving or heavy-duty profiling work. The maximum tool length is 120 mm with a diameter of max. 150 mm.

Horizontal trimming unit: Highly rigid tool bearing permits smoothing for furniture production, sliding dovetail joints for facade construction or handrail profiling for staircase production. The maximum tool length varies depending on the tool diameter (max. 200 mm) and the workpiece processing method and material.

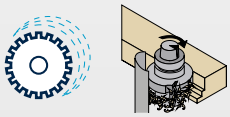
Lock case trimming unit with 2 toolholders: For trimming operation such as lock cases and lock face plates in doors, with integrated air jet for optimum chip discharge. The unit has a two-sided spindle outlet for two tools with a maximum useful length of 135 mm / 35 mm.



High Performance lock case trimming unit with 2 toolholders: For heavy-duty trimming work with high feed rates in hard wood, for instance for front door production or paling hole trimming in staircase construction. Chip discharge is supported by the integrated air jet nozzle. The two tools with a maximum useful length of 130 mm and 50 mm respectively permit efficient production without the need for a tool change.



Chip guidance unit: Trimming tool holder with chip deflecting plate for optimized chip disposal with high levels of stock removal at the outside contour of workpieces. The chip deflecting plate is controlled and adjusted to the contour at the C axis.



Chip deflection unit: Tool chuck with a chip deflector to optimize chip removal. Using the manual clamping of the HSK63F interface, tools can be fully clamped with the chuck. Tools with a shaft and drilling hole can be inserted and the whole tool can be removed with the chuck for sharpening.

Underfloor routing unit: For routing and drilling workpieces from the underside, such as notches for kitchen worktop connectors or drilling hinges around workpiece edges without having to turn the workpieces. The distance to the workpiece edge is maximum 110 mm and the tool interval is maximum 30 mm, as well as 125 mm distance and 35 mm interval. Hydraulic tool chuck with a chip deflector to optimize chip removal. Using the manual clamping of the HSK63F interface, tools can be fully clamped with the chuck. Tools with a shaft and drilling hole can be inserted and the whole tool can be removed with the chuck for sharpening.

Swiveling underfloor routing unit: For diagonal routing and drilling workpieces from the underside, such as for window and block frame processing.

Built for high hogging output

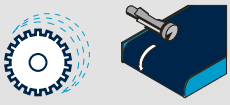
Trimming tool holder with jet for compressed air and fluids: For trimming operations combined with compressed air feed, for example for tool cooling when processing plastics or to improve chip disposal when trimming deep grooves (nesting). For aluminium processing, minimum quantity lubrication ensures processing in line with the properties of the material. The maximum tool diameter is 120 mm with a tool projection of max. 80 mm.

Trimming tool holder with 4 slot blowing nozzle: For trimming operations with compressed air feed in order to stirring up the chips according to the trimming contour direction. This improves the disposal and suction of the chips, e.g. when trimming deep grooves (Nesting)

Aerotech toolholder: Toolholder with ultra-precise hydraulic extension chuck and turbine for improved tool cooling and chip disposal. Waste piece separator (patented) to prevent waste pieces becoming stuck in the blades, so averting any associated risk of spindle damage due to imbalance.

Vertically traced trimming unit: Using a tracing ring with a diameter of 70 mm or 130 mm, or using a tracing pad, processes such as precise-fitting connecting grooves or tapering profiles without overlap can be executed independently of workpiece thickness tolerances.

Horizontally traced trimming unit: By means of a tracing roller, horizontal trimming operations are performed precisely relative to the workpiece surface, e.g. during flush trimming of overhanging edges on the postforming profiles of a kitchen worktop. The diameter of the tracing roller and trimming tool are coordinated, generally to 20 mm.



Vertically traced routing unit: Compact tracing unit for speeds of up to n=24,000 rpm allowing optimal use of small tools. Fast and precise calibration using a grid ring allows diagonal routing and drilling workpieces from the underside, such as for window and block frame processing.

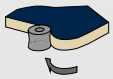
Vertically traced grooving and routing unit with tracing shoe: With a tracing shoe, grooves or profiles that are fed out with no transition can be completed regardless of the thickness tolerances of the workpiece. Compact tracing unit for speeds of up to n=24,000 rpm, allowing optimal use of small tools. Fast and precise calibration using a grid ring allows diagonal routing and drilling workpieces from the underside, such as for window and block frame processing.

From the machine to the multitalent

Cutting, mortising, sanding – innovative processing units expand the scope of CNC processing centers. Wherever processing operations could be realized not at all or only manually, these solutions permit complete processing to a mechanical standard of precision and quality.

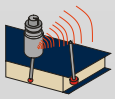
Belt sanding unit: For sanding the edges and outside contours of furniture parts, staircases, doors. Width of the sanding belt 100 mm and integrated air jet nozzles. The unit can be oscillated at the Z height automatically using the woodWOP program. This ensures an optimum sanding pattern, prevents the formation of track marks and results in low consumption costs.

Sanding unit with air jet nozzle: For sanding solid wood or MDF panels. The sanding bodies are retained by a collet chuck and continuously cleaned with compressed air by an air jet nozzle. This increases the life of the abrasive and improves the workpiece surface quality.



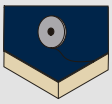
Eccentric sanding unit: Sanding unit for leveling and sanding moldings and edges. Ideally suited for use in 5-axis processing centers. Using customarily available components with a diameter of 125 mm, the abrasive grain and pliability of the plate can be simply adapted to the application.

Measurement probe: Measurement probe to determine and transfer the relevant actual dimension in X, Y and Z. The data can be computed in the processing program using stored formulas. Adapted versions for workpieces with and without coating ply overhang.

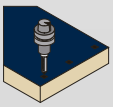


Mortise hinge unit / swing chisel mortising unit: Units with swing chisel for producing narrow rectangular slots and pockets. This allows mortises to be simply, rapidly and precisely produced, e.g. for mortise hinges used in windows for listed buildings (the unit is available with vertical and horizontal work direction).

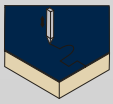
Foil cutting unit: Foils, textiles and leather can be precisely and neatly cut to individual size using a cutting wheel.



Drilling unit with mortising tool: For drilling / mortising square holes, for example for finger jointing in the furniture construction sector or in the case of mortised stair treads without tread rounding (the unit is available with vertical and horizontal work direction).

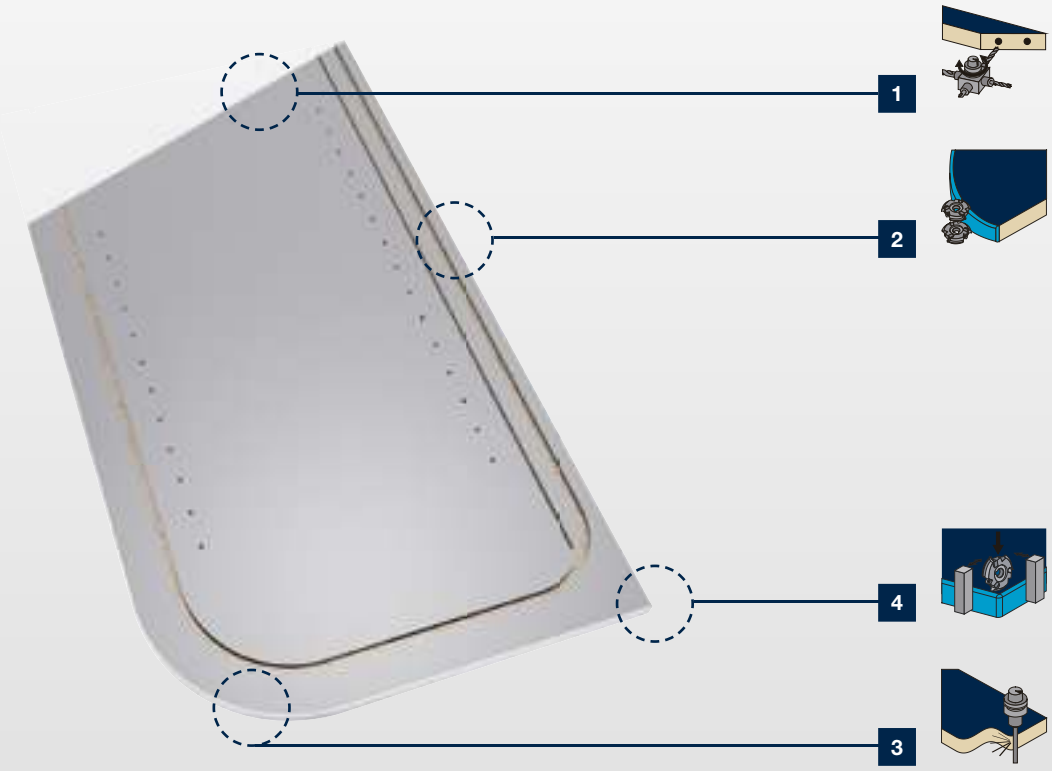


Cutting unit: An oscillating cutting edge permits contour cutting of carpet, solid wood veneer, linoleum and other coverings and cuttable materials.



From workpiece to masterpiece

To secure a high standard of production quality coupled with more economical manufacture, a continuous process of innovation is vital. The HOMAG develops ultra-modern units, for instance, which are capable of pneumatically tracing workpiece tolerances and automatically compensating for them during the processing operation. Combination units collate several work steps into one, so increasing the processing speed.



1 **Dowel hole drilling**

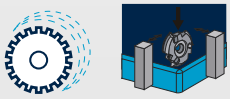
2 **Flush trimming of edges**

3 **Air jet cleaning of edges**

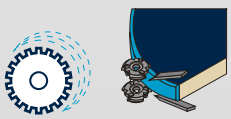
4 **Snipping and rounding corners**

Perfect edge finish with traced combination flush trimming/scraping unit – efficient without changing tools.

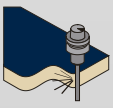
Combined snipping and corner rounding unit: Already edged rectangular workpieces are often finish processed on a processing centre, for instance to produce bevels or rounded contours. For finish processing, this patented unit provides, alongside traced cross-cutting of overhanging edges, also precise corner rounding of edges up to a thickness of 3 mm at a 90° workpiece corner.



Combined flush trimming - scraper blade unit: Combination unit for flush trimming of the overhanging edge and for scraper blade finish processing. The precise arrangement of profile cutter in the trimming spindle axis extension (patented) guarantees prevention of crazing and shoulder formation, particularly in smaller workpiece radii. Three-sided unit tracing compensates for workpiece and edge tolerances and guarantees a high standard of processing quality. The unit is available for workpiece thicknesses of 60 mm and 100 mm and as a profile or surface scraper blade. Executions with rolling lateral tracing for sensitive surfaces or extended tracing pads for acuted workpieces are available on demand.



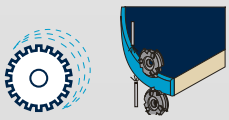
Air jet nozzle: For cleaning the trimmed edges of dust and chips, ensuring optimum quality of the glue joint when edge banding.



Perfection for corners and edges

HOMAG units are capable of performing wide-ranging tasks in production, and deliver excellent results every time. The processed workpieces fulfil the highest quality aspirations and possess precisely the required characteristics. And if the whole process has to be speeded up? We have the solution!

Flush trimming unit with separating agent: Separating agent application during flush trimming reduces the amount of glue residues on the workpiece and often eliminates the need for scraping the glue joint with a glue joint scraper blade unit (depending on the glue and edging type and on the quality expectations). (Two versions are available for workpiece thicknesses 60 mm and 100 mm.)



Profile scraper blade device with chip shredder: The application of separating agent reduces the occurrence of glue residues on the workpiece surface. An integrated chip shredder (patented) reduces the size of the long chips from the profile scraper blade and prevents faults occurring due to tangled chips (knotting)

Flush trimming unit: The traced flush trimming unit compensates for tolerances at the workpiece and edge. Alongside flush trimming of edges, workpiece edge profiling operations such as rounding of stair treads, can also be performed. Simultaneous traced processing above and below reduces processing times and increases workpiece quality.

Scraping on inclined edges.

Profile scraper blade unit / glue joint scraper blade unit: Knife marks and other impressions are removed by means of a traced profile scraper blade. The precise arrangement of profile cutter in the trimming spindle axis extension (patented) guarantees prevention of crazing and shoulder formation, particularly in smaller workpiece radii.
The variant with glue joint scraper blade eliminates glue residues from the surface of the workpiece specifically in production cells with automatic workpiece handling where manual cleaning is not possible or not wanted.

Flush trimming unit for inclined edges: Profile trimming and profile scraper blade for finish processing of inclined edges from below. Lateral tracing is adapted to the incline of the edge. Supplementary versions are available for processing from above.

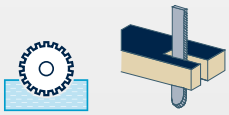
Combined profile and glue joint scraper blade unit: Perfect scrape-free workpiece quality due to scraping of the edge profile and the glue joint at the workpiece surface transition. The combination of these two functions cuts down on unit changeover times.

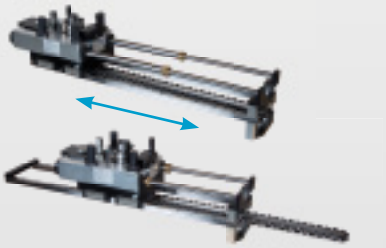
Flush trimming unit: Unit with adjusted tracing and small tools for processing tight internal radii of up to 20 mm.

Innovative technologies for your ideas

The units of the HOMAG can be used for a large number of tasks – complex and versatile processing operations are quickly and efficiently performed. This enables every conceivable requirement in the field of solid wood construction to be fulfilled with ease.

Chain sawing unit 200: For processing soft materials such as SIP materials and other sandwich elements for timber house construction. The saw sword is designed to pierce the elements. This opens up a very wide field of application, including for instance window and door cutouts as well as shift cuts. The cutting depth is 200 mm.





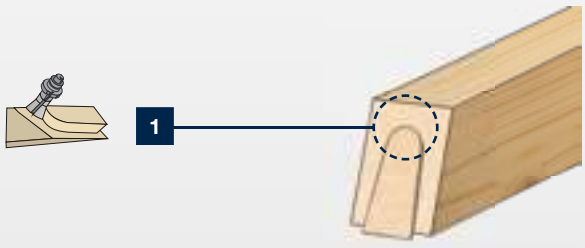
Chain mortising unit: The chain mortiser performs tenon processing operations on the face and longitudinal side, for instance to produce tenons for steel connectors used in timber engineering. The cutting depth is 600 mm.

Horizontal chain sawing unit 400: This chain sawing unit offers the same performance scope as the chain sawing unit 200. However, in conjunction with a 5-axis unit (WMP series 2), it allows horizontal cutting depths of up to 400 mm.

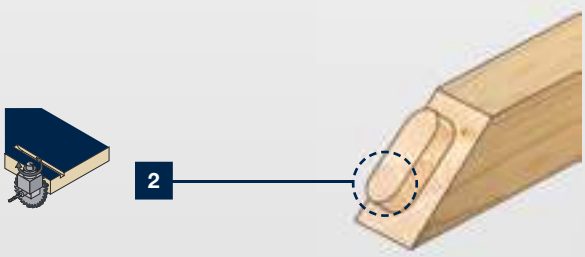
Underside unit: The underside unit is used to manufacture connections on the underside of the element without the need for flipping the component. Possible processing operations here include for instance countersinking for shim washers and screw heads/ nuts, different boring and trimming operations. Blocking grooves and dovetail pockets can also be produced on the underside of the component without flipping.

Versatility for maximum flexibility

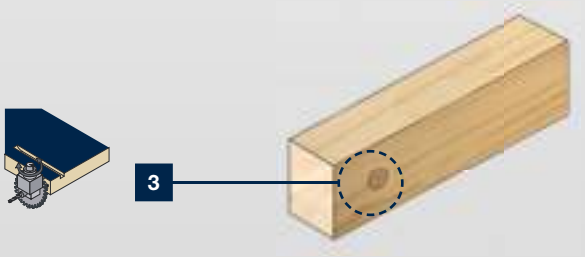
We have what you need: Versatile units for high-precision processing operations – individually coordinated to carpentry and panel requirements.



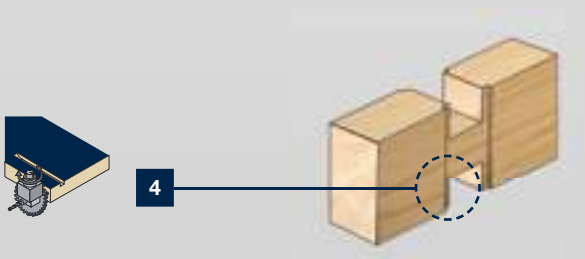
1 **Trimming dovetail tenons**



2 **Trimming tenons**



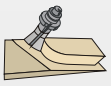
3 **Trimming out holes for socket bolts**



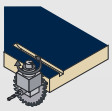
4 **Trimming out overlap joints**

Flex5-sawing unit: For the production of windows and door openings as well as the formatting of the element. It can be used for cuttings with an angle of 0-60°.

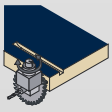
Flex5 trimming unit with dovetail router: The 5-axis processing unit is used to produce dovetail tenons on inclined cuts such as shift cuts. Angular adjustment takes place fully automatically.



Horizontal drilling and trimming unit: For wall connecting holes, transport holes, as well as pockets and other trimmed recesses in a horizontal position. The unit has a one-sided spindle outlet for two tools with a maximum useful length of 210 mm.



Angular unit with disk router: The angular unit is the basic unit used for carpentry processes. Together with the disk router, lap joints and grooves can be produced. Tenons are also produced rapidly to a high standard of quality. The reverse side drill is used to produce holes for rafter nails.



Ball point technology marker: The marker allows reference lines and other markings to be transferred to the element. Spring power guarantees a constant pressing force against the element. The marker is suitable for marking: Wood-based material panels, Solid wood, Plasterboard panels, Hardboard panels. The marking unit is mounted in an HSK 63 F holder.

Innovative edge banding technology for all

HOMAG processing centres are ideally prepared for the use of ultra-modern edge banding technologies. The edge banding units are offered in a variety of performance categories and can be ideally coordinated to address your individual production requirements. Their patented electronic interface makes them easy to operate and ensures optimum control precision.

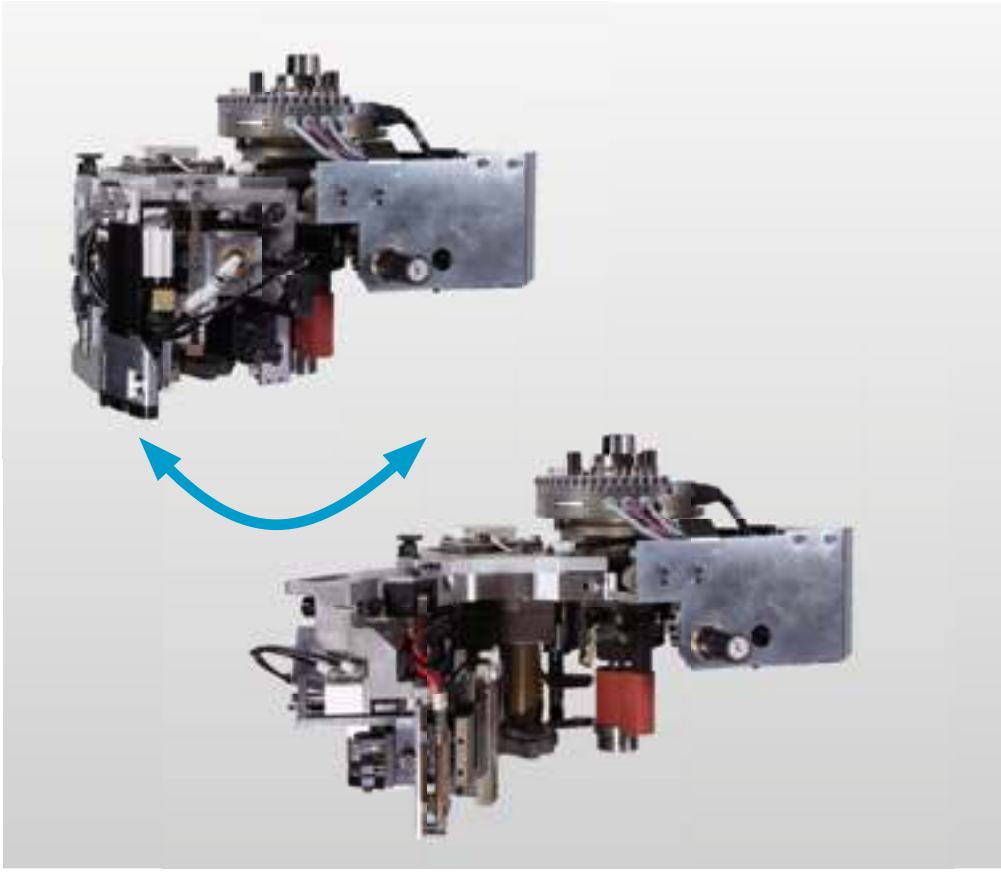
powerEdge edge banding unit: The powerEdge edge banding unit is the culmination of experience gathered from over 2,000 processing centres for edge banding and forms the basis for a complete family of edge banding units to cover a wide variety of applications. In conjunction with pre-snipping stations with direct access to as many as 12 different edging types, economical, top quality edge banding of workpieces in batch sizes of just one is guaranteed. Using the electronic interface, additional energy is transmitted for heating, as well as control signals for high-precision, automatic butt joint edge banding. The interface offers the unique flexibility needed to use even different edge banding units on a single processing centre, or to use the processing centre for other tasks during maintenance of the edge banding unit.

POWER EDGE

powerEdge workpiece thickness

100 mm: Edge banding on moldings up to a workpiece thickness of 100 mm.

powerEdge with PU-melting unit: Edge banding with small glue joints and high moisture resistance



Quick Service function: The Quick Service function allows fast, efficient maintenance or cleaning of the edge banding unit by means of simple “unhinging”.

Full productivity from batch size 1

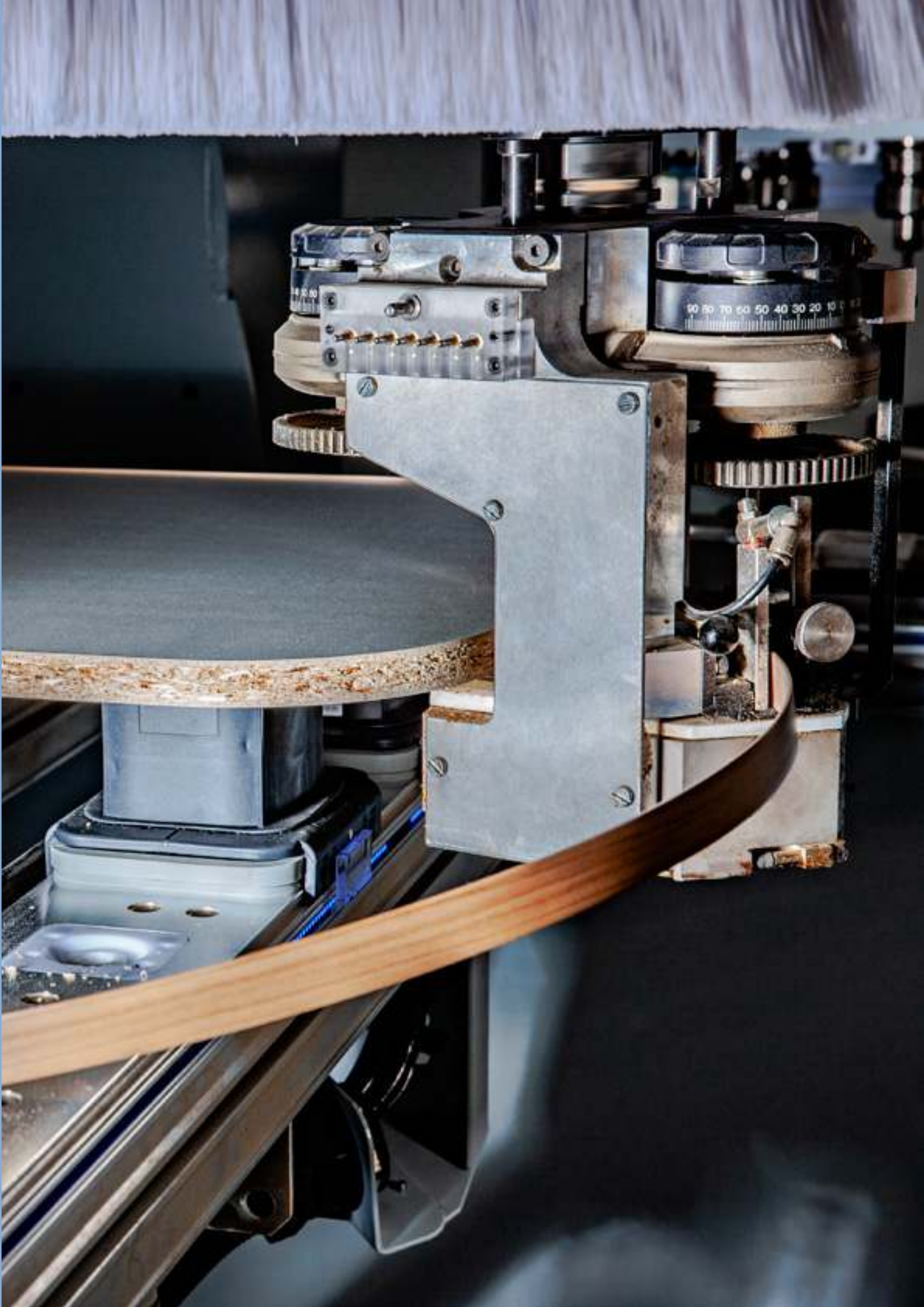
The HOMAG broad technological expertise basis and many years of experience provide the assurance that your processing centre will remain efficient and economical despite rapidly changing market demands. For instance through easy resetting for perfect processing of wide-ranging different edging materials, or scope for the economical processing of minimal batch sizes.

laserTec edge banding unit: Edge banding to a previously unattainable standard of quality: HOMAG laserTec – the quantum leap for furniture production. Under patent law in Germany only usable with Rehau edge.

easyEdge edge banding unit: The world's smallest edge banding machine - affordable, simple, efficient. The universal solution for edging small workpiece quantities with veneer edges, ABS edges, PP edges, melamine edges and thin PVC edges. In conjunction with a manual snipping unit, it is even possible to perform 360° butt joint edge banding in craftsmanship quality.

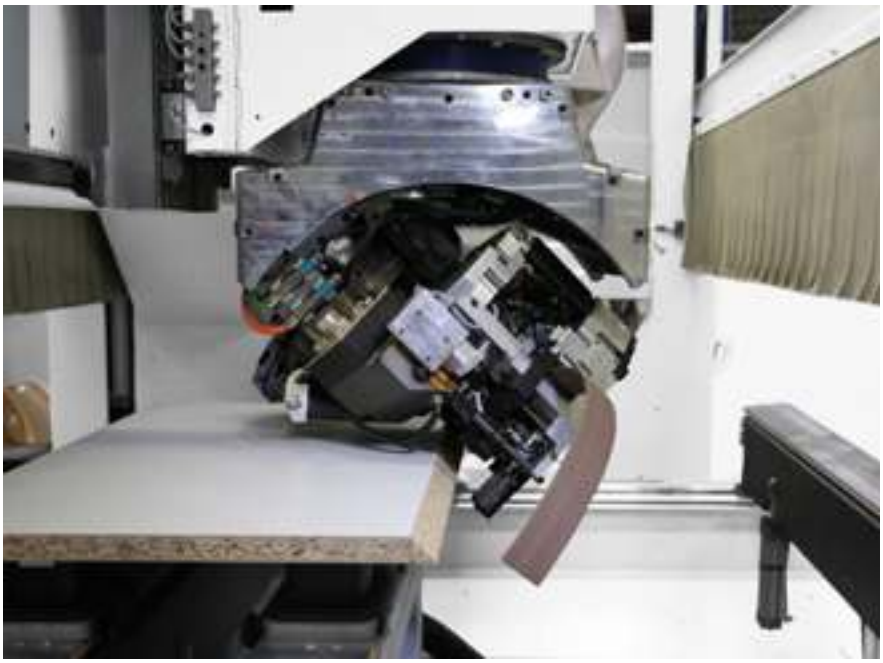
External heating at the pickup slot eliminates waiting times. Gluing can then start immediately the unit is in position.

For use on all HOMAG CNC routers with 4-axis spindle, no special preparations required for the working spindle such as electronic interface and vector control.



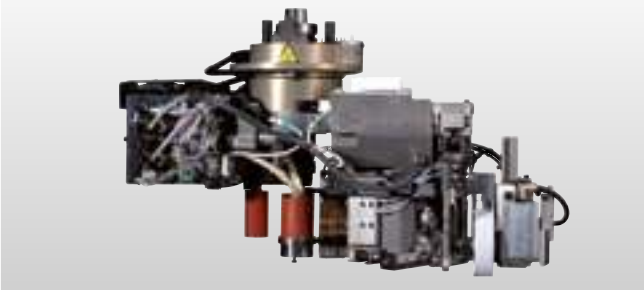
Innovative technology for economical solutions

The development process continues: The processing of new edging materials, rising design aspirations, new production techniques in order to save material and resources. As market leader, the HOMAG offers innovative custom-tailored solutions to your production assignments - put us to the test!

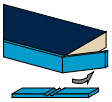


powerEdge for inclined edge gluing: Gluing at any optional incline from +45° to -7°. The automatic unit adjustment facility allows both shaped edges and inclined edges to be applied to the same workpiece in any optional direction.

powerEdge Softforming: Banding a real wood edge with quarter round profile. Post-pressure zone with profile pressure pad.



powerEdge edge banding unit with the supplementary edgeFolding package: edgeFolding permits the edging of rectangular workpieces in a single work process and opens up scope for improved workpiece edge appearance with only a single butt joint.



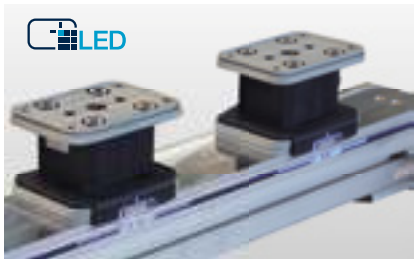
powerEdge rebate edging: Complete processing of internal doors with the powerEdge edge banding unit with post-pressure zone for rebate edges.

powerEdge Internal corner edge banding: Banding of rectangular internal corners using the internal corner edge banding unit.

Clean and fast: the console table

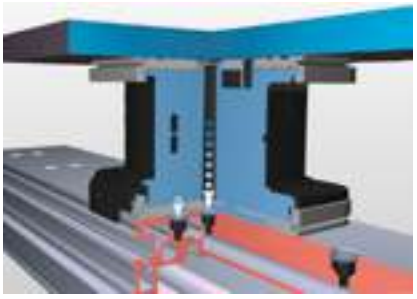
The classic with the dual-circuit vacuum system. The vacuum clamps are steplessly positioned and offer clearance for the use of tools and for dropping waste pieces. The rapid, precise and especially easy positioning of the suction unit is enabled by the LED or laser positioning aid. Wooden staves, moldings, arch components, narrow or frame components – HOMAG clamping systems will ensure reliable fixture of even the most unusual workpieces.

Suction cups are displayed using a laser beam (cross hairs). The workpiece contour can be “traveled” as a positioning aid for freeform parts.

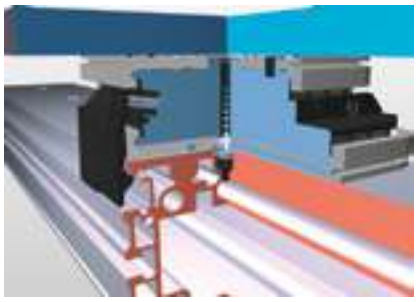


LED system – both the fastest and safest positioning system for consoles and clamping elements (patented).

Laser projection of the clamps and the workpiece contour for optimum utilization and simple positioning of raw parts which cannot be aligned at the stops.



We offer a single and a dual circuit vacuum system: The dual-circuit vacuum system fixes the vacuum clamp steplessly on the console with the first circuit. Workpieces can be positioned without risk of the suction cup slipping. By activating the second circuit, the workpieces are fixed and held securely in place. The lip technology of the rubber-coated surfaces on the vacuum clamps guarantees maximum force distribution. The patented double lip technology on the underside of the vacuum clamp allows stepless positioning on the consoles.



In the single-circuit vacuum system, in contrast to the dual-circuit vacuum system, flatter vacuum clamps are used with a height of 50 mm. The vacuum clamps the workpiece and clamp simultaneously.

Which of these systems holds your workpieces depends on which processing centre you chose. Both systems guarantee maximum vacuum power and provide the basis for optimum processing quality.

Clamping equipment for K-table: Single-circuit system with a height of 50 mm

Vacuum clamp 140 x 115 mm

- Vacuum clamp for stepless positioning on the console
- Exchangeable rubber lining
- Add-on height 50 mm

Vacuum clamp 75 x 125 mm

- Vacuum clamp for stepless positioning on the console
- Exchangeable rubber lining
- Add-on height 50 mm

Vacuum clamp 30 x 130 mm

- Vacuum clamp for stepless positioning on the console
- Exchangeable rubber lining
- Add-on height 50 mm
- Also available in 50 x 120 mm

Vacuum clamp 75 x 125 mm longitudinally

- Vacuum clamp for stepless positioning on the console
- Exchangeable rubber lining
- Add-on height 50 mm
- Lengthwise squaring
- Also available in 30 x 130 mm

Vacuum clamp 75 x 125 mm, 360°

- Vacuum clamp for stepless positioning on the console
- Exchangeable rubber lining
- Add-on height 50 mm
- Rotatable by 360 degrees
- Also available in 50 x 120 mm

Clamping equipment for K-table: Single-circuit system with a height of 100 mm

Vacuum clamp 114 x 160 mm

- Vacuum clamp for stepless positioning on the console
- Exchangeable rubber lining
- Add-on height 100 mm

Vacuum clamp 75 x 125 mm

- Vacuum clamp for stepless positioning on the console
- Exchangeable rubber lining
- Add-on height 100 mm

Vacuum clamp 125 x 75 mm, height 125

- Vacuum clamp for stepless positioning on the console
- Exchangeable rubber lining
- Installation height of 125 mm allows more free space for processing (e.g. Centateq S)

Vacuum clamp 75 x 125 mm longitudinally

- Vacuum clamp for stepless positioning on the console
- Exchangeable rubber lining
- Add-on height 100 mm
- Lengthwise squaring
- Also available in 50 x 120 mm and 30 x 130 mm

Vacuum clamp 75 x 125 mm, 360°

- Vacuum clamp for stepless positioning on the console
- Exchangeable rubber lining
- Add-on height 100 mm
- Rotatable by 360 degrees
- Also available in 50 x 120 mm and 30 x 130 mm

Clamping equipment for K-table: Dual-circuit system with a height of 100 mm

THE CLASSIC, DUAL-CIRCUIT VACUUM SYSTEM. The vacuum clamps are infinitely positionable and offer a free space for the use of tools as well as for the falling offcuts. The rapid, precise and especially easy positioning of the suction unit is enabled by the LED or laser positioning aid.

Vacuum clamp 160 x 115 x 100 mm

- Vacuum clamp for stepless positioning on the console
- Exchangeable rubber lining
- Add-on height 100 mm

Vacuum clamp 75 x 125 x 100 mm

- Vacuum clamp for stepless positioning on the console
- Exchangeable rubber lining
- Add-on height 100 mm

Vakuumspanner mit Hubeinrichtung 115 x 160 x 100 mm

- Vacuum clamp for stepless positioning on the console
- Exchangeable rubber lining
- Add-on height 100 mm
- With integrated lift device

Aluminum vacuum clamp H 100 mm with emery cloth

- Vacuum clamp in aluminium with additional mechanical clamping operation at the console for engaging solid wood parts. The suction plate can be rotated and also exchanged
- Lined with emery cloth
- Dimensions 160 x 120 mm and 125 x 75 mm

Aluminum vacuum clamp H 100 mm with rubber friction coating

- Vacuum clamp in aluminium with additional mechanical clamping operation at the console for engaging solid wood parts. The suction plate can be rotated and also exchanged
- Rubber friction coating
- Dimensions 160 x 120 mm and 125 x 75 mm

Vacuum clamps for templates

- Vacuum clamp for stepless positioning on the console
- Exchangeable rubber lining
- Add-on height 75 mm, for templates with 25 mm thickness
- With the dual circuit system the vacuum for clamping and releasing the workpieces is transfered tubeless to the template, the template remains clamped.

Vacuum clamp 75 x 125 x 100 mm (0/90°)

- Vacuum clamp for stepless positioning on the console
- Exchangeable rubber lining
- Add-on height 100 mm
- Manual 0/90° swivel action

Vacuum clamp 50 x 120 x 100 mm (0/90°)

- Vacuum clamp for stepless positioning on the console
- Exchangeable rubber lining
- Add-on height 100 mm
- Manual 0/90° swivel action

Vacuum clamp 30 x 130 x 100 mm (0/90°)

- Vacuum clamp for stepless positioning on the console
- Exchangeable rubber lining
- Add-on height 100 mm
- Manual 0/90° swivel action

Vacuum clamp 75 x 125 x 100 mm (360°)

- Vacuum clamp for stepless positioning on the console
- Exchangeable rubber lining
- Add-on height 100 mm
- Rotatable by 360 degrees

Vacuum clamp 50 x 125 x 100 mm (360°)

- Vacuum clamp for stepless positioning on the console
- Exchangeable rubber lining
- Add-on height 100 mm
- Rotatable by 360 degrees

Vacuum clamp 30 x 130 x 100 mm (360°)

- Vacuum clamp for stepless positioning on the console
- Exchangeable rubber lining
- Add-on height 100 mm
- Rotatable by 360 degrees

Multiclamp / powerClamp / 3-step clamp

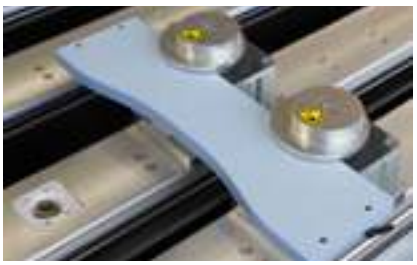
Whether wooden staves, mouldings, arches, narrow or frame components etc. – the clamping systems used in the HOMAG are also able to hold unusual workpieces / workpiece shapes in position.

powerClamp „Basic“ (8 - 78mm) for K-tables 100 mm

- Mechanical/pneumatic clamping element for clamping wooden staves, narrow parts, mouldings and panel stacks
- Arrangement on the clamping console with manual clamping
- Base plate can be recessed to expose the clamping elements for arch production
- Strong retaining force for high-powered hogging operations
- Inclusive of locking mechanism accessory
- Only for use in conjunction with the pneumatic supply unit

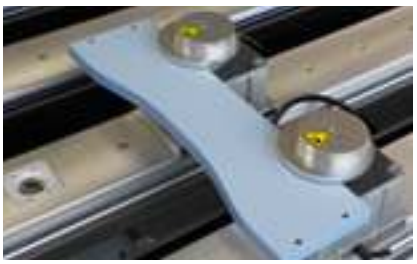
powerClamp-clamping element (58 - 120mm) for K-tables 100 mm

- Mechanical/pneumatic clamping element for clamping wooden staves, arch components or panel stacks
- Arrangement on the clamping console with pneumatic clamping
- Base plate can be recessed to expose the clamping elements for arch production
- Inclusive of distance ring for variation of the clamping depth
- Only for use in conjunction with the pneumatic supply unit. Note: For machines with a workpiece height of 125 mm.



Multi-clamp for dual-circuit systems
Vacuum-actuated clamping element for clamping strips and scantling.

- Height: 100 mm
- Clamping range: 10 – 100mm
- Grid adjustment of the upper clamping plate for quick adjustment of the clamping area
- Incl. clamping levers for attaching to consoles



Multi-clamp for single-circuit systems
Vacuum-actuated clamping element for clamping strips and scantling.

- Height: 100 mm
- Clamping range: 10 – 100mm
- Grid adjustment of the upper clamping plate for quick adjustment of the clamping area
- Incl. clamping levers for attaching to consoles

3-step clamp: Highly rigid 3-step clamps for precise complete processing of window and front door components without subsequent rebating on glued window sashes. The clamping range is 0 - 120 mm (optionally 150 mm). For precise clamping of wide staves, insertion aids are optionally available.

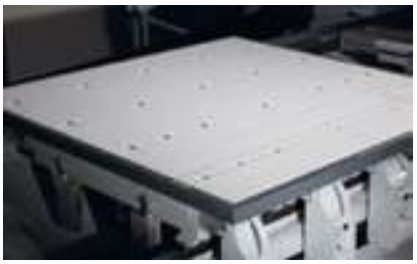
Sash bar insertion aid: Special inserts for sash bar clamping simultaneously act as insertion aids.

Supplementary equipment – “Nothing is impossible”

We offer suitable clamps to address wide-ranging different application requirements. For fast, efficient handling in every situation.

Stop for parts with coating ply overhang: Simple, safe alignment of parts with veneer or coating ply overhang for sizing. Can be configured as a plug-on sleeve, manual snipping stop or automatically with lift-and-turn fixture.

Lift-off rails: As an addition to the standard design in HPL, lift-off rails with exchangeable plastic slideway coating for gentle handling or all-round rollers for simple alignment of heavy components are available.



MATRIX adapter plate for the K table 1.550/2.100/3.050 x 1.550/1.220 mm:
Gridded plastic adapter plate for mounting on the K table, for example when using nesting applications.

- Includes vacuum fastening elements for clamping the adapter plate
- Includes additional, 2-step monitoring for wearing plate calibration and processing mode
- Add-on height 100 mm as for standard vacuum clamp
- Groove width 4 mm / groove depth 5 mm, (for sealing cord 4 x 6 mm) incl. 20 m rubber sealing cord
- Workpiece clamping on the adapter plate takes place by means of hand lever valve
- Depending on the processing operation, an additional vacuum pump is required

Clamping fixture for newel posts and staves: Mechanical/pneumatic clamping element with adjustable clamping jaws for reliable clamping of newel posts, beams, wooden staves etc.. As a result of horizontal clamping, workpieces can be ideally processed from above and from the side.

Vacuum clamp lowerable for waste pieces: Vacuum clamp for holding and pneumatically lowering waste pieces from working height to console height. The waste pieces are lowered out of the processing area and remain fixed in order not to create any obstruction during continued processing. The clamping unit is mounted laterally at the console and controlled by means of an M command integrated in the CNC program.

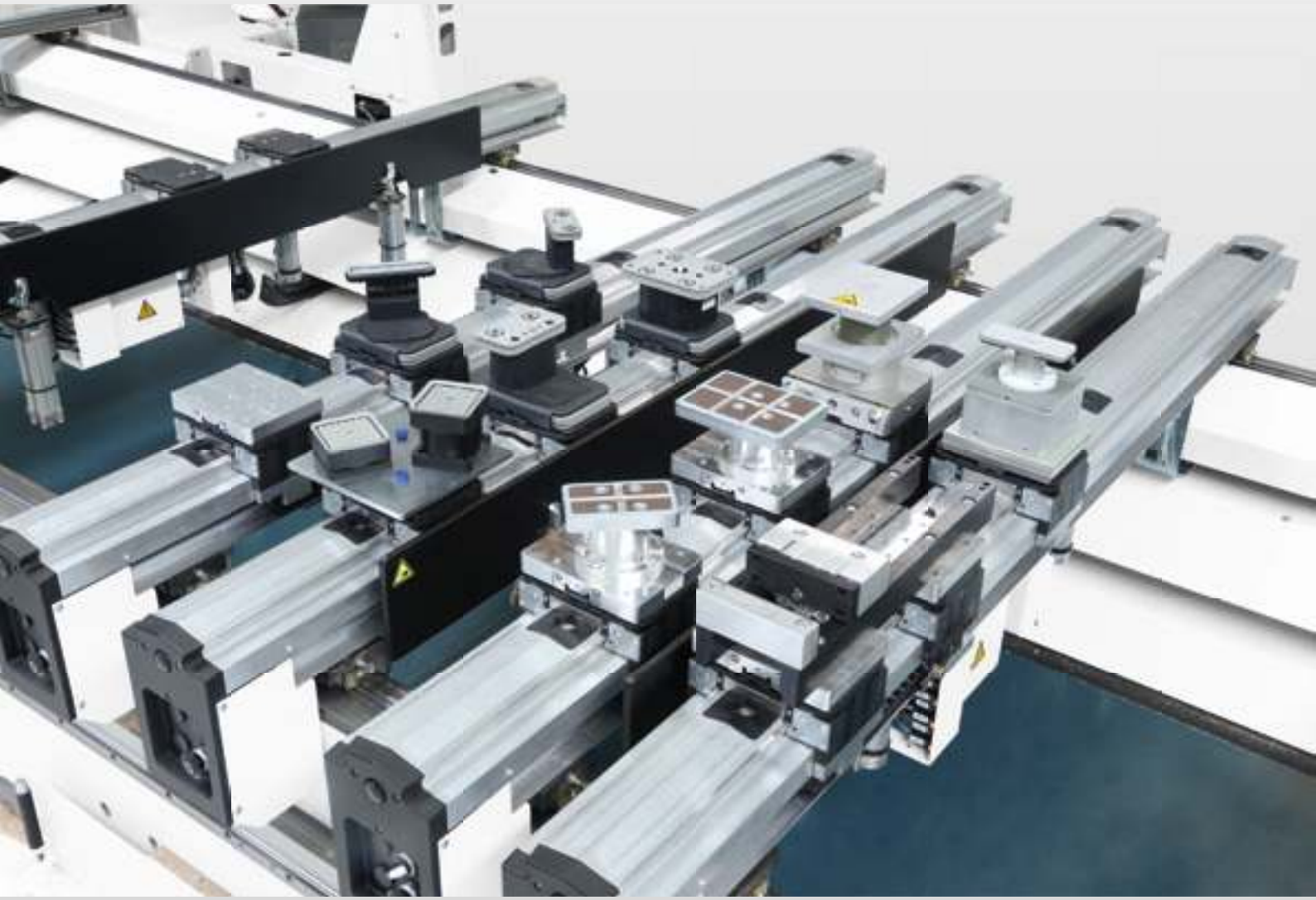
Vacuum clamp base plate: Base plate module for mounting on the consoles as the basis for special clamping fixtures.

Vacuum clamp H150 mm: Vacuum clamp in round design for clamping stair stringboards or stair treads in conjunction with clamping fixture for stair treads

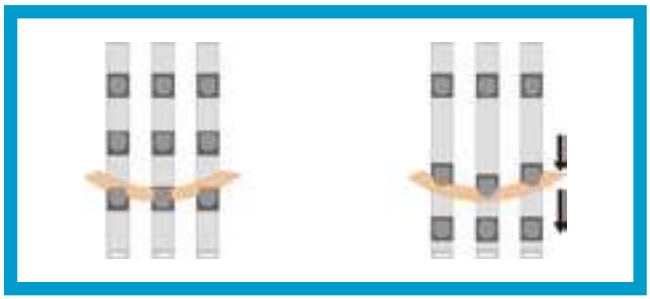
- Height 150 mm
- Diameter 100/150/200 mm
- The maximum workpiece thickness reduces in accordance with the vacuum clamp height

Saves time and enhances flexibility – the A table

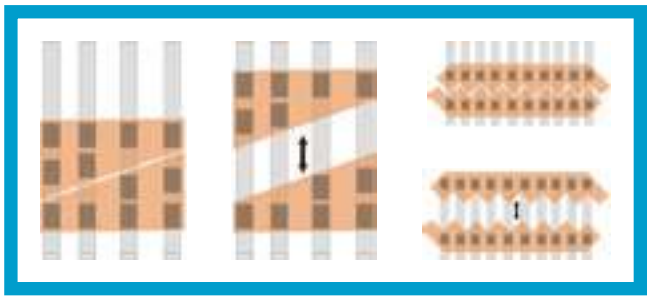
The A-table is the key to greater convenience and automation. The program-controlled positioning of consoles and clamping elements allows batch size 1 operation without manual intervention and allows workpieces to be moved apart after the execution of a dividing cut.



As the proven dual-circuit vacuum system from the K table is used for the clamping element platforms in the AP system, this opens up scope for utilization of the comprehensive range of different K table clamping elements.



Automatic reclamping of individual parts for double-sided processing



In staircase production, for instance, stair treads can be traversed after being divided for complete processing. In the field of window construction, 5-sided processing can be formed without manual intervention by means of manual reclamping.

The integrated pneumatic transmission into the clamping elements permits the clamping panels and workpiece surfaces to be cleaned by air jets prior to reclamping. This patented function prevents chip residues from being pressed into the workpiece surface.

The stop bolts in the consoles guarantee accurate positioning of the clamping elements to ensure highly precise individual component production of window profiles without outside moulding and profiling of the frame. In addition, the stop bolts are used as an insertion aid for wide staves. This patented principle guarantees precise transverse profiling independently of the part width.

Vacuum clamp 160 x 115 mm, AP table

- Vacuum clamp with double sealing lip for infinitely adjustable positioning on the console
- With push-button valve
- Add-on height 100 mm

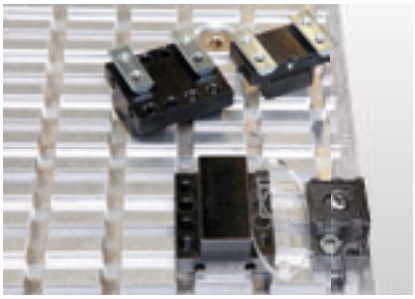
*** Additional platform for vacuum clamp**

- Increase of the clamping element level by 25 mm
- Stacking capability up to 2x
- Also for use on K tables
- Higher degree of freedom below the under surface of the workpiece

Versatile application: the matrix table

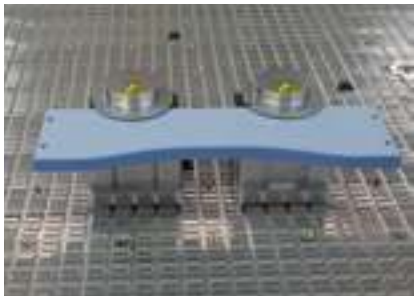
The grooved aluminium matrix table permits the positive locking of clamping elements and consequently reliable workpiece fixture even where high hogging forces are involved. The transmission of vacuum through the table construction optimizes distribution of the vacuum, reduces leaks and transmission losses and does away with the need for complex installations. The grid table is also suitable for aggregates due to different clamping elements with variable mounting heights.

T-nuts, T-slot nut oder slot nut: Slot nuts with thread for positive locking of clamping fixtures in the dovetail guide.

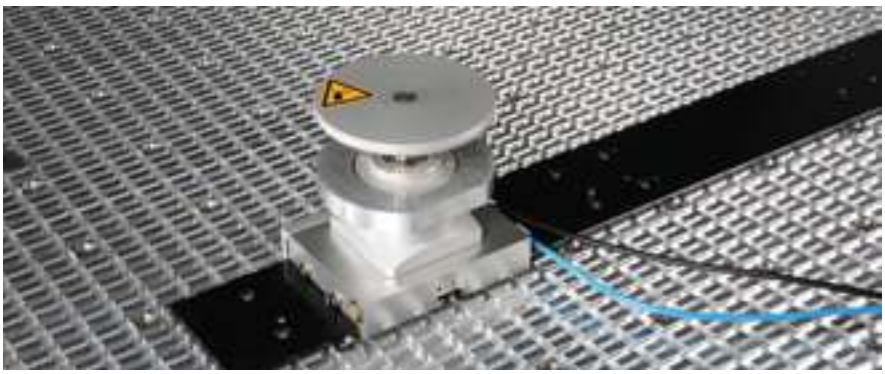


Aluminium grid table with trapeze shaped grooves for interlocking and flexible fixing of all kinds of clamping aids

1" vacuum connections with quick-open function by means of switch cabinet key, vacuum openings with precision thread for fixing clamps



Hollow screws: Hollow screws for positive locking fixture of templates or dummy panels in the existing vacuum openings. In the version for template fixture, the vacuum can be routed via the borehole in the screw into the template.



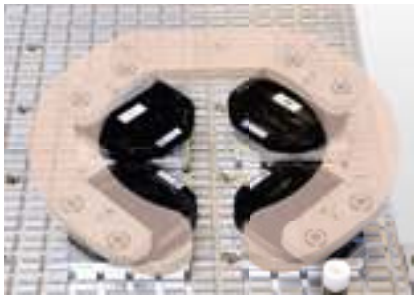
Rail for powerClamp clamping elements: Rail for fixture of the powerClamp clamping elements from the K table range for pneumatic clamping of wooden staves, arch parts or stacks of panels. Mechanical fixture of the rail in the system groove is possible in both directions on the table. Alignment of the clamping elements with stop pins.

The grid table – for Nesting and many other applications

Basic structure of the vacuum clamps for the grid table: Adapter ring for fast and simple positioning in the grid of the table. The adaptive vacuum clamps can be adjusted in steps of 15 degree.

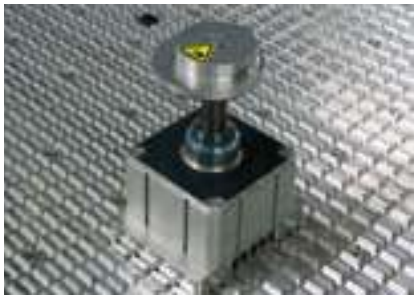
Vacuum clamp for grid table: Vacuum clamping elements that can be inserted into the grooves of the grid table (including base plate). Available with a total height of 45 mm and 90 mm and with dimensions 140 mm/130 mm, 125 mm/75 mm, 120 mm/50 mm and 130 mm/30 mm.

With diverse types of vacuum blocks it is also possible to carry out simple and quick horizontal processing on grid tables



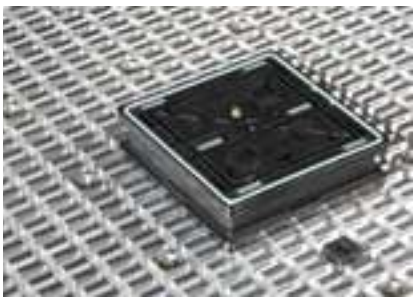
The aluminium grid table is applicable for diverse applications and materials

Vacuum grid table with air cushion function: The vacuum is integrated into the design of the aluminum grid table. Thanks to the air cushion function, it is easy to handle large, pallet-shaped workpieces.

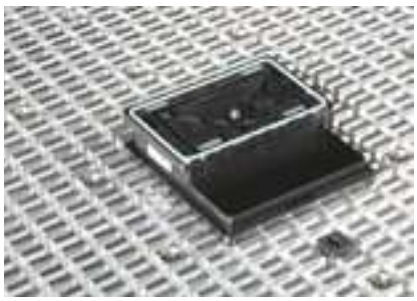


Multi-clamp for grid table Vacuum-actuated clamping element for clamping strips and scantling.

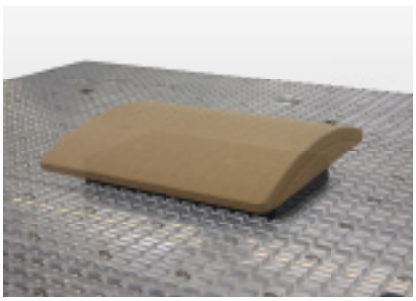
- Height 100 mm
- Clamping area of 10–100 mm
- Grid adjustment of the upper clamping plate for quick adjustment of the clamping area



Vacuum clamp for grid table 160 x 160 x 45 mm: Vacuum clamping element for insertion in the grooves of the grid table.



Vacuum clamp for grid table 160 x 96 x 45 mm: Vacuum clamping elements for insertion in the grooves of the grid table.

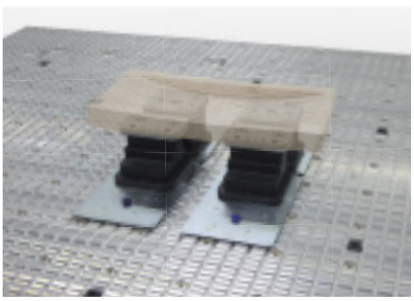


Vacuum clamp: Vacuum clamping elements for insertion in the grooves of the grid table.

Maxi-flex system height 102 mm vacuum clamp: Vacuum clamp with magnetic base plate.

- Vacuum clamp Maxi-FLEX 120 x 120 x 102 mm
- Vacuum clamp Maxi-FLEX 125 x 75 x 102 mm asymmetrical

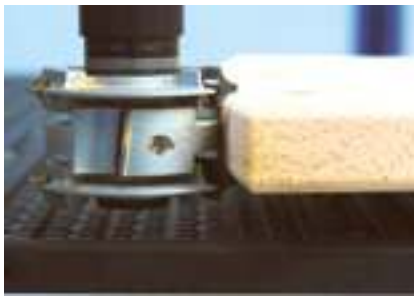
Maxi-flex system height 102 mm baseplate: Modular system for freely positionable vacuum clamp in the base plate. This permits simple adjustment to the workpiece geometry. Base plate 253 x 163 mm, system height including vacuum clamp 102 mm.



Maxi-FLEX-system: Freely equippable system base plate for vacuum clamp.

The MATRIX table

Ideal for nesting assignments, the well-established MATRIX table also provides outstanding flexibility. By providing efficient vacuum availability, its operation makes maximum use of resources. Various vaccum clamp variants and sizes are optionally available, allowing you to keep your options open and remain flexible during production processes (e.g. using the QuickPod system).



MATRIX

Nothing is impossible

Whether plastic or aluminium processing operations, special drilling units with 35 spindles or clamping systems for shaped components, clamping foam panels or filigree cutting of foils. We offer an impressive track record when it comes to solving individual customer requirements. This fund of expertise can benefit you. Ask us. We will be pleased to help. No matter whether you are looking for clamping systems, fixing techniques or processing unit solutions: We are the partner you are looking for!

Clamping fixture for block frames: Precise clamping relative to the reference edge for a pair of block frames.

Clamping fixture for rail, panel and stave-shaped workpieces: Fast and reliable clamping of narrow and long workpieces for architraves and panels.

Block clamp: Adapted block clamping fixture for round timber elements.

Clamping fixture for facings: Vacuum clamping fixture for a pair comprising rebate and ornamental facings according to customer design. Mounted on a base plate module.

Aluminium thread tapping

Special clamping elements for aluminium processing

Clamping fixture for round pipes: Clamping fixture for 5-axis processing of round plastic pipes.

35-spindle drilling unit: Simultaneous drilling of 35 holes, for example when producing acoustic panels. The unit can be fitted into the working spindle from the pickup slot.

Drilling unit 144 spindles: Simultaneous drilling of 144 holes, for example when producing acoustic panels. Collet chucks for holding different shank diameters. Unit permanently mounted on the unit carrier.

HOMAG Life Cycle Services

The sale of our machines comes with all-in optimum service backup and individual advice. We support you with service innovations and products which are especially tailored to your requirements. With short response times and fast customer solutions, we guarantee consistently high availability and economical production – over the entire life cycle of your machine.

Remote Service

- Hotline support via remote diagnosis regarding control, mechanics and process technology. Thus the on-site service can be reduced by 90 %!
- Mobile applications such as ServiceBoard reduce costs by providing fast assistance in the event of malfunctions via mobile live video diagnostics, online service messages and eParts, the online spare parts shop

Spare Parts Service

- Identify, request and order spare parts 24/7 via www.eParts.de
- Parts available locally worldwide through sales and service companies, as well as sales and service partners
- Reduction of downtime through defined spare parts and wear parts kits

Modernization

- Keep your machinery up-to-date and increase your productivity as well as your product quality This is how you can meet tomorrow's requirements today!
- We provide support through upgrades, modernizations, and individual consultations and development

HOMAG Finance – precisely the right financing

- We offer you tailored financing proposals for your machinery or plants. Our financial advice goes hand in hand with our expertise relating to technical questions. Your personal contact person will take care of the whole process.
- The benefit for you: The ability to invest without delay in new technologies and remain financially flexible.

1,200
service employees worldwide

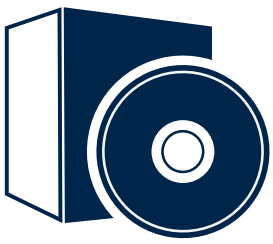
5,000
customer training sessions per / year

>90%
less on-site-services through successful remote diagnosis

>150,000
machines, all electronically documented in 28 different languages – in eParts

Training

- Thanks to training that is precisely tailored to your needs, your machine operators can operate and maintain HOMAG machines as efficiently as possible
- The training courses also include customer-specific training documents with practice-proven exercises



Software

- Telephone support and advice from Software Support
- Digitization of your sample parts using 3D scanning saves time and money in comparison with reprogramming
- Retrospective networking of your machine fleet with intelligent software solutions from design through to production

Field Service

- Increased machine availability and product quality thanks to certified service personnel
- Regular checks through maintanance / inspection guarantee the highest quality of your products
- Minimized downtimes in the event of unforeseeable malfunctions due to the high availability of our technicians

HOMAG Group AG
info@homag.com
www.homag.com

YOUR SOLUTION