### HE HOMAG

# Units and clamping equipment

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The flexible modular system to meet all your needs. Sawing | Drilling | Trimming | Cutting | Chiseling | Sanding

www.homag.com

#### **YOUR SOLUTION**



SHOP.HOMAG.COM You can find our units and spare parts conveniently in our online shop



# 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

#### MORE ON SHOP.HOMAG.COM



HOMAG eShop

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### **Connections to the future**

The unit interfaces at HOMAG are ahead of their time. They contain patented technologies that can be used to expand the range of tasks of your system at any time. In conjunction with the HOMAG unit technology, this opens up almost unlimited production possibilities for you.



### **Unit toolbox** for flexible working

The units required for the respective processing step are moved from a tool change system to the main spindle on the machine fully automatically. They can be rotated across the C axis from 0 to 360° and can-depending on the intended purpose-be equipped with pneumatic or electronic connections. The range of units from HOMAG is constantly being expanded and updated. It contains a number of additional units that are not listed in the catalog. We always offer the optimal solution for your specific tasks. Don't hesitate to get in touch!



Flex5(+) interface

The Flex5+ interface allows automatic adjustment of the tilt angle of the unit by means of the C axis in order, for example, to be able to perform exact shift cuts (see page 14).



All HOMAG tool change spindles have an HSK-F 63 interface. The optimum rotational properties ensure the best processing results and long tool life.

#### C axis with three-way pneumatic interface

The holder for the three bolts of the high-rigidity three-point support of the units enables compressed air and liquids to be transferred into the units. This is the prerequisite for using pneumatically traced units, for example, or for transferring liquids to the units for minimum quantity lubrication during aluminum processing.

### Innovation, precision, passion

MORE THAN 20 YEARS OF EXPERIENCE IN THE DEVELOPMENT OF UNITS IS REFLECTED IN THE CURRENT STATE OF DEVELOPMENT. HOMAG UNITS ARE CHARACTERIZED BY EXTREME RIGIDITY, HIGH PRECISION AND HIGH STABILITY.

#### THREE-POINT INTERFACE IN MONOBLOCK DESIGN

Three high-rigidity bolts are connected directly to the unit housing without any additional interface. This guarantees optimum power transmission and reduces vibrations, which have a negative effect on the workpiece quality and the service life of the units. Angular gears with patented gear technology angular gears and a cylindrical pinion in involute toothing enable:

- Larger effective diameter of the toothed gears for transmission of higher torques
- Fewer interfaces due to fewer components (toothed gears) results in more compact units and fewer parts subject to wear
- Higher speeds (circumferential speeds up to 62 m/s) reduce processing times and increase the range of applications and offer greater power reserves



Blow off during processing

- 2 Lower and raise upper tools, oil mist lubrication impulse
- 3 Blow out when trimming the lock casing





### The optimum for every application

One solution for (almost) all cases: version with permanent grease lubrication for cyclical use or high-performance version with oil bath/oil mist lubrication for a long service life, short design for reduced space or long design for larger tool dimensions and easier assignment of adjacent slots in the tool changer.









#### Permanent grease lubrication:

Permanent grease lubrication is ideal for units in cyclical use (processing time usually < 1 min.). It offers an optimum priceperformance ratio. During processing, the grease is partially ejected away from the tooth flanks due to the centrifugal forces of the rotating toothed gears. During the breaks in use, the grease flows back into the teeth and ensures optimum lubrication. With the optimum viscosity of a high-performance grease, a long service life is achieved without the need to refill the grease.



**Oil bath lubrication:** 

In series production for units with a long

service life, the use of oil bath lubrication

is recommended. The toothed gears run

through an oil bath in one part; as a result of

the rotation, the oil is distributed throughout

the unit. A side "window" indicates whether

there is a sufficient level of oil.

## AVEN CARE





#### **Oil mist lubrication:**

The patented oil mist lubrication system was developed for units that are subject to a high stress and have a long service life in series production. The oil is distributed within the unit in a targeted way via a lubrication pulse by means of compressed air transmission through the unit interface. The compressed air transports a defined quantity of oil into the unit and disperses it there. This innovative technology doubles the service life and offers enormous stress reserves.

### Sawing, drilling, trimming | At the highest level of perfection

Anyone who manufactures doors, windows and furniture elements must be able to produce quickly and schedule flexibly. With HOMAG, both are possible. HOMAG's innovative processing centers and top trimmers with their versatile units offer you all the options you need. They also make no compromises in terms of quality.









### Sawing, drilling, trimming | At the highest level of perfection



#### Drilling/trimming unit, four spindles

Four different drilling and trimming tools are available without a tool change via the four-sided spindle outlet. Continuous shaft for increased rigidity and processing without changing the direction of rotation when using left-rotating and right-rotating tools, e.g. for cut-outs for door hinges. Available in two lengths.

#### Saw/drilling and trimming unit as standard or high performance

Combination unit for using two tools for drilling, trimming and sawing without a tool change. The robust and compact design also enables trimming at a tight angle to the workpiece and a cutting depth of up to 80 mm, 75 mm or 55 mm. The maximum usable tool length for trimming and drilling is 85 mm, 70 mm or 50 mm. Available in two lengths.

#### High-performance sawing/drilling and trimming unit

This combination unit in high-performance design offers greater power reserves 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 usable tool length for trimming and drilling is 85 mm or 70 mm. Available in two lengths.



#### High-performance sawing unit

In conjunction with the C axis, sizing cuts, groove cuts, snipping cuts and separating cuts can be executed at any angle, as well as cut-outs or notches. The maximum cutting depth is 75 mm or 110 mm, depending on the version.

#### High-performance snipping and sawing unit

Thanks to additional blowing nozzles compared to the standard unit, chips and offcuts can be disposed of in a targeted direction by a compressed air pulse.

#### Sawing and snipping unit

The position of the saw blade in the center of the C axis allows snipping cuts in particular to be executed with a high level of precision during edge banding. Of course, all other sawing up to a cutting depth of 65 mm can also be done.

#### Swiveling sawing/drilling and trimming unit as standard or high-performance version

For saw cuts at an angle of 0° to 90° and bore holes or trimming at an angle of 0° (vertical) to 100° (horizontal). This enables custom-fit shift cuts, bore holes and trimming. The high-performance version offers sufficient stability even for light trimming work. Depending on the unit design, the cutting depth for a vertical saw blade is 50 mm or 70 mm. At a saw blade position of  $45^{\circ}$ , there is a cutting depth of 43 mm or 63 mm.

#### Swiveling sawing/drilling unit with digital angle display

The standard unit for shift cuts and bore holes at different angles. The unit can swivel between 0° and 90° when sawing and between 0° and 100° when drilling. A digital display allows you to adjust the angle easily and conveniently.



### Sawing, drilling, trimming | At the highest level of perfection





#### **Corner notching unit**

For the production of right-angled, tear-free and sharp-edged recesses, e.g. for door light cutouts or sink cut-outs for kitchen worktops.



#### Elepart angled drilling unit

Drilling unit in compact design. This allows horizontal bore holes to be manufactured in connecting elements for door frame production.



#### Drilling unit with seven spindles in a 25-mm grid

Especially for the office furniture area, seven holes can be drilled simultaneously at any angle. As a supplement to the drill head with the frequently used 32-mm grid, this results in a high degree of flexibility with short production times. 30-mm and 32-mm grid versions are also available.

#### Drilling unit, three spindles, flat table

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.

#### Cranked swiveling drilling/trimming unit

The offset of the unit enables the use of drills and trimmers with a long usable length, e.g. for bore holes for fixtures and hinge trimming in room doors. The maximum usable tool length is between 78 mm and 85 mm depending on the unit design.

#### Drilling unit, 3+1 spindles

The dowel corner joint has become more and more established in window construction. In addition to the mullion and transom bore holes, this unit can also be used to rationally produce corner connections with different drilling patterns through three bore holes in one cycle (20-mm or 32-mm grid). The additional drill on the rear side offers greater flexibility, e.g. in the case of small diameter mullion doweling. Effective drill lengths of 50 mm are standard; with the 20-mm grid version, even 80 mm is possible.

#### Hinge drilling unit, 3 spindles

Drilling unit for concealed hinges in front production. All three bore holes can be drilled in one step thanks to the spindle distance being aligned to the fixtures.

# Efficiency gains through innovation | FLEX5(+)

With the units from HOMAG, production tasks in furniture construction can be executed more productively and economically. One example: the FLEX5+ unit with automatic angle adjustment and automatic tool change. This allows you to process multiple workpieces with different shapes completely, without manual intervention.





# Sawing, drilling, trimming – to the highest degree of perfection



#### FLEX5 sawing, trimming and drilling unit with automatic angle adjustment

Precise execution of shift cuts or bore holes at any angle with no manual settings significantly improves productivity by eliminating the need for test cuts and enhances quality. Depending on the angle setting of the A axis, cutting depths of up to 70 mm are possible as well as drilling with a usable tool length of 65 mm.

### FLEX5+ sawing, trimming and drilling unit with automatic angle adjustment and automatic tool change

Sawing, trimming, and drilling at any angle with automatic tool change. This enables the complete processing of a wide selection of workpieces, e.g. pyramids, with no need for manual intervention. Depending on the A axis angle, cutting depths of up to 60 mm are possible as well as drilling with a usable tool length of 60 mm.









### **Built for high chipping rate**

Excellent processing quality and new standards for speed. HOMAG units for the manufacture of windows and doors provide numerous innovative technologies. They can be combined and precisely coordinated to your specific application situation. Even special tasks are worked out safely and efficiently.





### **Built for high chipping rate**



#### Horizontal planing unit

The tool chuck with counter bearing guarantees an excellent processing quality and unit loadbearing capacity, regardless of whether you're planing, grooving or performing heavy profiling work. The maximum tool length is 120 mm with a maximum diameter of 150 mm.

#### Horizontal trimming unit

A high-rigidity tool bearing enables smoothing in furniture construction, burr connections in facade construction or handrail profiling in staircase construction. The maximum tool length varies depending on the tool diameter (maximum 200 mm) and the type of processing or material of the workpiece. Available in two lengths.











#### Lock casing trimming unit with two tool chucks

For trimming operations such as lock casings and door latch plates, with integrated blow-out nozzle for optimum chip removal. The unit features a two-sided spindle outlet for two tools with a maximum usable length of 135 mm or 35 mm. Available in two lengths. Also available in a high-performance version for heavy trimming work with high feed rates and a long period of use.

#### **Chip deflection unit**

Trimming chuck with chip deflector for tools with a bore hole for optimizing chip removal in the case of large chip removal volumes at the outer contour of workpieces. The chip deflector is controlled via the C axis and adapted to the contour.

#### **Chip deflection unit**

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 bore hole can be inserted and the whole tool can be removed with the chuck for sharpening or cleaning.

#### **Underfloor trimming unit**

For trimming 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.

#### Swiveling underfloor trimming unit

For angled trimming and drilling of workpieces from the underside, such as for window and block frame processing.



### From the workpiece to the masterpiece



#### Trimming chuck with blowing nozzle for compressed air and liquids

For trimming operations with a supply of compressed air, e.g. for tool cooling when processing plastic or for improving chip removal when trimming deep grooves (nesting). For aluminum processing, material-compatible processing can be implemented in conjunction with minimum quantity lubrication. The maximum tool diameter is 120 mm with a maximum tool projection of 80 mm.

#### Trimming chuck with four blowing nozzles

For trimming operations with a supply of compressed air, to swirl the chips in accordance with the direction of the trimming contour for improved chip removal and suction, e.g. when trimming deep grooves (nesting).





Tool chuck with high-precision expansion chuck and turbine for improved tool cooling and chip removal. Offcut separator (patented) to prevent offcuts becoming firmly lodged in the wings and the associated risk of spindle damage due to imbalance.

#### Vertically traced trimming unit

**Aerotech tool chuck** 

By means of a tracing ring with Ø 70 mm or Ø 130 mm or a tracing pad from below, custom-fit connecting grooves or profiles that are fed out with no transition, for example, can be executed regardless of the thickness tolerances of the workpiece.



#### Vertically traced trimming unit

Short tracing unit for speeds of up to n=24,000 rpm, allowing optimal use of small tools. Fast and precise adjustment by means of a grid ring. Fan wheel for chip extraction - clean workpiece surface.

#### Vertically traced groove and trimming unit with tracing pad

With a tracing pad, grooves or profiles that are fed out with no transition, for example, can be completed regardless of the thickness tolerances of the workpiece.

#### Trimming unit, horizontal (traced)

Horizontal trimming is performed exactly to the workpiece surface using a detector roller, e.g. when flush trimming edge overhangs on the postforming profile of a kitchen worktop. The detector roller and the trimmer are aligned in diameter, usually to 20 mm.







### From the machine to the all-rounder

Cutting, chiseling, sanding — innovative units expand the possibilities of CNC processing centers. Where processing is otherwise impossible or can only be performed manually, these solutions offer complete processing with machine precision and quality.







#### Belt sanding unit

For sanding edges as well as outer and inner contours >1000 mm for furniture parts, stairs, doors. Sanding belt width of 100 mm and integrated blowing nozzles. The unit can be oscillated automatically in the Z height via the woodWOP program. This ensures an optimum sanding pattern, avoids the formation of tracks and results in low consumption costs.

#### Sanding unit with blowing nozzle

For sanding solid wood or MDF boards. The grinding wheels are picked up via a DIN clamp and continuously cleaned with compressed air via a blowing nozzle. This increases the service life of the sanding materials and improves the quality of the workpiece surface.

#### **Eccentric sanding unit**

Sanding unit for the smoothing and sanding of molded parts and edges. Ideally suited for use in five-axis processing centers. With commercially available components with a diameter of 125 mm, the grain size of the sanding equipment and the flexibility of the disc can be easily adapted to the application.





#### **Measuring device**

Measuring device for determining and transferring the relevant actual dimensions in X, Y and Z. The data can be calculated in the processing program using stored formulas. Adapted versions for workpieces with and without a covering layer overhang.

#### Fiche hinge unit/chisel mortising unit

Units with swiveling chisel for the production of narrow rectangular slots and pockets. This allows for easy, fast and precise production of mortises, e.g. for fiche hinges for windows in listed buildings (the unit is available with vertical and horizontal working direction).

#### Film cutting unit

Films, textiles and leather can be cut cleanly, precisely and in a way that is tailored to the specific application using a cutting wheel.

#### Hollow chiseling unit

For drilling or chiseling rectangular recesses. The unit is available with vertical and horizontal working direction.

#### **Cutting unit**

An oscillating blade enables contour cutting of carpets, solid wood veneers, linoleum, plus other linings and materials that can be cut.

### Innovative edge banding technology for everyone

HOMAG processing centers are optimally prepared for the use of state-of-the-art edge banding technologies. The edge banding units are available in different performance classes and can be optimally matched to your individual production requirements.





HOMAG edge banding units are the result of more than 2000 processing centers for edge banding and are a complete family of edge banding units for a wide range of applications. In combination with pre-snipping stations with direct access to up to 12 edge types, the edging of workpieces in batch size 1 in perfect quality is economically guaranteed.



#### powerEdge Pro/Pro Duo

CNC edge gluing at a new level. One unit for all requirements. The new powerEdge Pro Duo is based on the experience of 30 years of unit construction for shaped edge banding. Optimized handling and simplified programming combined with innovations in unit technology and control make the new powerEdge Pro Duo what you need: a unit that allows you to master current and future requirements.





#### Gluing internal contours

melamine and thin edges.

easyEdge edge banding unit

The clever solution for edging with small

quantities for veneer, ABS, PP, PVC,

The powerEdge units can also be used to glue cut-outs and inner circles.





- **Granulate container:** The granulate container can be loosened with a bayonet lock and removed from the machine. This allows you to change the glue color quickly and easily. Alternatively, small quantities can also be filled directly into the application unit.
- 2 **Application unit:** The application unit can be changed quickly and easily to change the glue color or glue type.
- **Fine adjustment via scale:** The glue quantity can be set easily and reproducibly via a scale.
- **Hot air unit:** The intelligent control system of the hot air nozzle improves the contouring of the edge and ensures a constant temperature at the joining point, regardless of feed, whether you're using conventional hot-melt glue or pre-coated edges.
- 5 **Press roller:** The press roller presses the edge onto the workpiece with program-controlled exact force. In combination with a defined temperature, this ensures perfect workpieces with the simplest programming.



Edge gluing with PUR hot-melt glue

Edge banding with a thin glue joint and high moisture resistance in all performance levels. With manual filling, a piggyback melting unit or a separate station with drum melting unit for high throughput.





#### powerEdge thickness 100 mm

Edge banding on molded parts up to a workpiece thickness of 100 mm.



#### Quick service function

The Quick service function enables fast and efficient maintenance and cleaning of the edge banding unit by "unfolding" the edge banding unit.

### **Special processes in gluing technology**



#### Softforming

Gluing a real wood edge with a quarter round profile. Post-pressure zone with profile pressure pad.



#### Chamfered edge gluing

Gluing at any angle from +45° to -7°. Thanks to the automatic adjustment of the unit, both shaped edges and inclined edges can be attached to the same workpiece in any direction.



Inner corner edging

Gluing of right-angled inner corners with the inner corner edge banding unit.





#### Rebate edging

Complete processing of inner doors with the powerEdge edge banding unit with post-pressure zone for rebated edges.



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### **Perfection for corners and edges**

In order to ensure high production quality but simultaneously achieve more economical production, constant innovations are required. HOMAG, for example, develops state-of-the-art units that trace workpiece tolerances pneumatically and automatically compensate for them during processing. Combination units combine several work steps and increase the processing speed.





#### Combination snipping and corner rounding unit

Often, rectangular workpieces that have already been edged are post-processed on a processing center—for example, to produce bevels or round contours. For post-processing, the patented unit offers not only the traced cutting of the edge overhangs to length but also a precise corner rounding of edges up to a thickness of 3 mm on a 90° workpiece corner.

#### **Blowing nozzle**

Contraction of the second

For removing dust and chips from the trimmed edges to ensure optimal glue joint quality during edge banding.

#### Sawing and snipping unit

The position of the saw blade in the center of the C axis allows snipping cuts in particular to be executed with a high level of precision during edge banding. Of course, all other sawing up to a cutting depth of 65 mm can also be done.

### **Perfection for corners and edges**

The HOMAG units take on numerous tasks in production and always deliver excellent results. The workpieces processed meet the highest quality requirements and have exactly the required properties. And if you want it to go even faster? We also have a solution for this!

#### Combined flush trimming/scraper unit

Combination unit for flush trimming of the edge overhang and for scraper processing. The exact arrangement of the profile blade in the extension of the trimming spindle axis (patented) guarantees the avoidance of stress whitening and indents, especially for smaller radii. The three-sided tracing of the unit compensates for workpiece and edge tolerances. The unit is available for the workpiece thicknesses of 60 mm and 100 mm and as a profile scraper or surface scraper. Versions with rolling side tracing for sensitive surfaces or extended tracing pads for pointed workpieces are available on request.





The traced flush trimming unit compensates for workpiece and edge tolerances. In addition to flush trimming edges, workpiece edge profiling such as rounding steps can also be performed. Simultaneous, traced processing from above and below reduces processing times and increases workpiece quality.

#### Flush trimming unit

Unit with adapted tracing and small tools for processing narrow inner radii up to 20 mm.



#### Profile scraper unit or glue joint scraper unit

Blade strokes and other impressions are removed by a traced profile scraper. The exact arrangement of the profile blade in the extension of the trimming spindle axis guarantees the avoidance of stress whitening and indents, especially for smaller workpiece radii. The variant with the glue joint scraper eliminates glue residue from the top of the workpiece, especially in case of production cells with automatic workpiece handling where manual cleaning is not possible or required.

#### Flush trimming unit for chamfered edges

Profile trimming and profile scraper for post-processing of chamfered edges from below. The lateral tracing is adapted to the inclination of the edge. Supplementary versions for processing from above are available.

#### Combined profile and glue joint scraper unit

Perfect workpiece quality that requires no retrospective scraping thanks to scraper processing of the edge profile and the glue joint in the workpiece surface transition. The combination of both functions eliminates unit change times.

#### Profile scraper unit with chip shredder

Applying a separating agent reduces the glue residue on the workpiece surface. An integrated chip shredder (patented) shreds the long chips of the profile scraper and avoids interference caused by entangled chips (clumping).

#### Flush trimming unit with separating agent

The application of separating agent during flush trimming reduces the glue residue on the workpiece and often eliminates the need to subsequently scrape the glue joint using a glue joint scraper unit (depending on the glue and edge type and the quality requirements). Two versions are available for workpiece thicknesses 60 mm and 100 mm.



### Clean and fast | The console table

The classic with the dual-circuit vacuum system. The vacuum suction units can be positioned with infinite variability 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. Whether it's squared timber, strips, rounded parts, narrow parts or frame parts, etc.— clamping systems from HOMAG can hold even unusual workpieces in position.



#### Laser beam

Vacuum suction units are displayed with a laser beam (crosshair). The workpiece contour can be "moved" as a positioning aid for freeformed workpieces.



#### LED system

Arguably the fastest and safest positioning system for consoles and clamping elements (patented).



#### Single-circuit vacuum system

In the single-circuit vacuum system, the vacuum suction units with a height of 50 mm are used, which are flatter than the dual-circuit vacuum system. The vacuum clamps the workpiece and the clamp simultaneously.



#### **Dual-circuit vacuum system**

In the first circuit, the dual-circuit vacuum system fixes the vacuum suction units to the console with infinite variability. Workpieces can be positioned without the risk of the suction units slipping. Activating the second circuit fixes the workpieces in place and holds them in a stable position. Thanks to their lip technology, the rubberized surfaces of the vacuum suction units guarantee maximum force distribution.



#### Laser projection

Laser projection of the clamping equipment and the workpiece contour for optimal utilization and simple positioning of unprocessed parts that cannot be aligned on the stops.



#### Double-lip technology

Thanks to double-lip technology on the underside of the vacuum clamp, infinitely variable positioning on the consoles is possible. It is irrelevant whether the clamp is fully or only half-mounted on the valves.

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



#### Vacuum suction unit 115 x 140 mm

- Vacuum suction unit for infinitely variable positioning on the console
- Replaceable rubber lining
- Construction height 50 mm



#### Vacuum suction unit 125 x 75 mm

- Vacuum suction unit for infinitely variable positioning on the console
- Replaceable rubber lining
- Construction height 50 mm



#### Vacuum suction unit 130 x 30 mm

- Vacuum suction unit for infinitely variable positioning on the console
- Replaceable rubber lining
- Construction height 50 mm
- Also available in 50 x 120 mm



#### Vacuum suction unit 75 x 125 mm, longitudinal

- Vacuum suction unit for infinitely variable positioning on the console
- Replaceable rubber lining
- Construction height 50 mm
- Lengthwise squaring
- Also available in 30 x 130 mm



#### Vacuum suction unit 125 x 75 mm, 360° (also in 120 x 50 mm)

- Vacuum suction unit for infinitely variable positioning on the console
- Replaceable rubber lining
- Construction height 50 mm
- 360°
- Also available in 50 x 120 mm

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

#### Vacuum suction unit 115 x 160 mm

- Vacuum suction unit for infinitely variable positioning on the console
- Replaceable rubber lining
- Construction height 100 mm

#### Vacuum suction unit 125 x 75 mm

- Vacuum suction unit for infinitely variable positioning on the console
- Replaceable rubber lining
- Construction height 100 mm

#### Vacuum suction unit 125 x 75 mm, height 125 mm

- Vacuum suction unit for infinitely variable positioning on the console
- Replaceable rubber lining
- Construction height of 125 mm allows more free space for processing (e.g. CENTATEQ S)

#### Vacuum suction unit 75 x 125 mm, longitudinal (also in 120 x 50 mm and 130 x 30 mm)

- Vacuum suction unit for infinitely variable positioning on the console
- Replaceable rubber lining
- Construction height 100 mm
- Lengthwise squaring
- Also available in 50 x 120 mm and 30 x 130 mm

#### Vacuum suction unit 125 x 75 mm, 360° (also in 120 x 50 mm and 130 x 30 mm)

- Vacuum suction unit for infinitely variable positioning on the console
- Replaceable rubber lining
- Construction height 100 mm
- 360°
- 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 suction units can be positioned with infinite variability 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 suction unit 115 x 160 x 100 mm

- Vacuum suction unit for infinitely variable positioning on the console
- Replaceable rubber lining
- Construction height 100 mm

#### Vacuum suction unit 125 x 75 x 100 mm

- Vacuum suction unit for infinitely variable positioning on the console
- Replaceable rubber lining
- Construction height 100 mm

#### Vacuum suction unit with lifting device 160 x 115 x 100 mm crosswise

- Vacuum suction unit for infinitely variable positioning on the console
- Replaceable rubber lining
- Construction height 100 mm
- With integrated lifting device

#### Aluminum vacuum suction unit H100 mm with emery cloth

- Vacuum suction unit made of aluminum with additional mechanical clamping on the console for clamping solid wood parts. The suction cup can be rotated and replaced
- Lining made of emery cloth
- Dimensions 160 x 120 mm and 125 x 75 mm

#### Aluminum vacuum suction unit H100 mm with rubber friction lining

- Vacuum suction unit made of aluminum with additional mechanical clamping on the console for clamping solid wood parts. The suction cup can be rotated and replaced
- Rubber friction lining
- Dimensions 160 x 120 mm and 125 x 75 mm

#### Vacuum suction unit for templates

- Vacuum suction unit for infinitely variable positioning on the console
- Replaceable rubber lining
- Construction height 75 mm, for templates with a thickness of 25 mm
- With the dual-circuit system, the vacuum for clamping and releasing the workpieces is transferred to the template without hoses through the vacuum suction unit; the template remains clamped.

















#### Vacuum suction unit 75 x 125 x 100 mm (0/90°)

- Vacuum suction unit for infinitely variable positioning on the console
- Replaceable rubber lining
- Construction height 100 mm
- Can be manually refitted at 0/90°



#### Vacuum suction unit 50 x 120 x 100 mm (0/90°)

- Vacuum suction unit for infinitely variable positioning on the console
- Replaceable rubber lining
- Construction height 100 mm
- Can be manually refitted at 0/90°



#### Vacuum suction unit 30 x 130 x 100 mm (0/90°)

- Vacuum suction unit for infinitely variable positioning on the console
- Replaceable rubber lining
- Construction height 100 mm
- Can be manually refitted at 0/90°



#### Vacuum suction unit 125 x 75 x 100 mm (360°)

- Vacuum suction unit for infinitely variable positioning on the console
- Replaceable rubber lining
- Construction height 100 mm
- 360°



#### Vacuum suction unit 120 x 50 x 100 mm (360°)

- Vacuum suction unit for infinitely variable positioning on the console
- Replaceable rubber lining
- Construction height 100 mm
- 360°



#### Vacuum suction unit 130 x 30 x 100 mm (360°)

- Vacuum suction unit for infinitely variable positioning on the console
- Replaceable rubber lining
- Construction height 100 mm
- 360°



### Multi-clamp | powerClamp | Three-level clamp

Whether it's squared timber, strips, rounded parts, narrow parts, or frame parts, etc. – clamping systems used at HOMAG can hold even unusual workpieces and workpiece shapes in position.





**Mullion insertion aid** 

Special inserts for clamping mullions also serve as insertion aids.





#### powerClamp "Basic" (8-78mm) for K table 100 mm

- Mechanical/pneumatic clamping element for clamping squared timber, narrow parts, strips and stacks of panels
- Arrangement on clamping console with manual clamping
- Lowerable base plate, for releasing clamping elements in bend production
- High holding force for performance-oriented machining
- Incl. locking accessories
- Can only be used in conjunction with a pneumatic supply unit



#### powerClamp clamping element (58–120 mm) for K table 100 mm

- Mechanical/pneumatic clamping element for clamping squared timber, curved parts or stacks of panels
- Arrangement on clamping console with pneumatic clamping
- Lowerable base plate, for releasing clamping elements in bend production
- Incl. spacer ring for varying the clamping depth
- Can only be used in conjunction with a pneumatic supply unit. Note: For machines with a workpiece height of 125 mm



#### Multi-clamp for K table

- Vacuum-actuated clamping element for clamping strips and elements
- Height 100 mm
- Clamping area of 10–100mm
- Grid adjustment of the upper clamping plate for quick adjustment of the clamping area
- Incl. clamping levers for attaching to consoles





### Additional features | "Nothing is impossible"

We also offer suitable clamping equipment for a wide range of applications. For fast and efficient handling in all aspects.











Stop for parts with covering layer overhang

Easy and safe alignment of parts with veneer or covering layer overhang for dimensioning. Design possible as a slip-on bushing, manual flap stop or automatic with lifting/turning device.



#### Lift-off rails

In addition to the standard HPL version, lift-off rails with replaceable plastic sliding coating are available for gentle handling or polydirectional rollers for easy alignment of heavy components.



### MATRIX adapter plate for K-table 1550/2100/3050 x 1550/1220 mm

Grid-grooved plastic adapter plate for mounting on the K table, e.g. for use in nesting applications.

- Includes vacuum fixing elements for clamping the adapter plate
- Incl. additional two-level monitoring for wear plate calibration and processing mode
- Construction height 100 mm as for the standard vacuum suction unit
- Groove width 4 mm/groove depth 5 mm (for sealing cord 4 x 6 mm), incl. 20 m foam rubber sealing cord
- The workpiece is clamped on the adapter plate by means of a manual lifting valve
- Depending on the processing, an additional vacuum pump is required



#### Clamping device for jambs and scantlings

Mechanical/pneumatic clamping element with adjustable clamping jaws for secure clamping of stair posts, beams, squared timber etc. The horizontal clamping makes it possible to process the workpieces from above and from the side optimally. Available in heights of 40 mm and 100 mm and in single or double version.



#### Vacuum suction unit base plate

Base plate module for mounting on the console as a basis for special clamping devices.



#### Vacuum suction unit that can be lowered for offcuts

Vacuum suction unit for holding and pneumatic lowering of offcuts from processing height to console level. The offcuts are lowered from the processing area and remain fixed in place in order to avoid any disturbances during further processing. <complex-block>

### Automatic and flexible | The A-FLEX table

The A-FLEX table is the perfect combination of the console table and the automatic table. With the A-FLEX table, you can automatically set up the consoles and vacuum suction units and at the same time, remain flexible and universal in operation. This means that you are perfectly positioned for all your requirements.



#### Floating instead of pushing

The vacuum suction units move on an air cushion on the console. Blowing nozzles at the front and rear blow dust and chips off the console and ensure a trouble-free and long-lasting system.



#### LED setup aid and free number of vacuum suction units

Fit the correct suction units correctly aligned and in the correct order. Fast and safe, supported by the LED display on the console. You are free to choose the number of suction units per console, up to eight can be positioned automatically.



#### Vacuum clamp 115 x 160 mm

- Version with and without momentary valve
- Replaceable rubber lining
- Construction height 100 mm



#### Vacuum clamp 75 x 125 mm

- Version with and without momentary valve
- Replaceable rubber lining
- Construction height 100 mm
- With momentary valve also available in 50 x 120 mm and 30 x 130 mm
- Can be modified for right/left use



#### Vacuum clamp rotatable 360°

- Replaceable rubber lining
- Construction height 100 mm
- 360°
- Available in 75 x 125 mm, 50 x 120 mm and 30 x 130 mm



### Automatically in the right place | The A table

The A-table is the key to greater convenience and automation. Through the program-controlled positioning of the consoles and clamping equipment, batch size 1 operation is possible without manual intervention and workpieces can be moved apart after a separating cut.



#### Vacuum suction unit 160 x 115 mm, countertop table

- With momentary valve unused suction units can remain on the platform
- Construction height 100 mm



#### Automatic repositioning

Automatic reclamping of the single parts for double-sided processing.



#### Move apart in the program

In staircase construction, for example, steps can be moved after separating for complete processing. In window construction 5-sided processing without manual intervention can be implemented by means of automatic clamping.



#### Aligning the clamping elements

The stop pins in the brackets guarantee an exact positioning of the clamping equipment for a high-precision single part production of window profiles without "rabbeting" the frames. In addition, the stop pins are used as an insertion aid for wide scantlings. This patented principle guarantees an exact crosswise profiling regardless of the part width.



#### Integrated pneumatic transfer

The integrated pneumatic transfer into the clamping elements enables the clamping plates and workpiece surfaces to be blown off before reclamping. This patented function means that no chip residues are pressed into the workpiece surfaces.



### Versatile use | The grid table

The grooved aluminum raster table means that clamping equipment can be attached with positive locking and so workpieces are held securely — even with high hogging forces. The design of the vacuum transmission within the table optimizes the distribution of the vacuum, reduces leaks and losses in vacuum transmission, and makes complex installations unnecessary. Thanks to various clamping equipment with variable clamping heights, the grid table can also be used with units.









Multi-clamp for grid table

Vacuum-actuated clamping element for clamping strips and scantlings:

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



Slot nuts

Slot nuts with thread for the positive locking of clamping devices in the dovetail guide.



Aluminum raster table

Aluminum raster table with trapezoidal grooves for flexible, positive fastening of all types of clamping equipment.



#### Rail for powerClamp clamping elements

Rail for fastening the powerClamp clamping elements from the K table range for the pneumatic clamping of squared timber, curved parts or stack of panels. The rail can be fixed in the system groove mechanically in both directions on the table; alignment of the clamping elements with stop pins.



### The grid table | For nesting and a range of other applications



### Basic construction of the vacuum suction unit for the grid table

Adapter ring can be positioned quickly and easily in the grid of the table. The adaptive vacuum suction units can be adjusted in 15 degree increments.



#### Vacuum suction unit 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.







Vacuum suction unit for grid table

Vacuum clamping element 160 x 160 x 45 mm for insertion into the grooves of the grid table.



Vacuum suction unit for grid table

Vacuum clamping element 160 x 96 x 45 mm for insertion into the grooves of the grid table.



Vacuum suction unit

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



#### Maxi-FLEX system

Vacuum suction unit with magnetic base plate, height 102 mm

- Maxi-FLEX vacuum suction unit 120 x 120 x 102 mm
- Maxi-FLEX vacuum suction unit 125 x 75 x 102 mm asymmetrical



#### Maxi-FLEX system base plate

Modular system for freely positionable vacuum suction units on the base plate. This makes it easy to adapt to the workpiece geometry. Base plate 253 x 163 mm, overall system height incl. vacuum suction unit 102 mm.



#### Maxi-FLEX system

Freely configurable system base plate for vacuum suction units.



#### **Flexible**

The aluminum raster table can be used for a wide range of applications and materials.



Vacuum block suction unit variants

Thanks to the wide range of vacuum block suction unit variants, horizontal processing is also quick and easy to perform on the grid table.

### Solutions for working with protection boards

Nesting processing on the protection board is not only limited to clamping the entire panel. Air cushion function for easy and gentle transport in and out and vacuum clamps for processing without dismantling the protection board.











One-piece vacuum clamps or vacuum clamps with a grid ring system for direct placement on the protection board. The vacuum clamps the workpiece and the suction units.







#### **Hollow screw**

Hollow screws for the positive fastening of templates or protection boards in the existing vacuum openings. In the version for attaching templates, the vacuum can be fed into the template via the bore hole in the screw.



#### Air cushion function

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

### Nothing is impossible

Whether plastic or aluminum processing, special drilling units with 35 spindles or clamping systems for molded parts, clamping of foam panels or filigree cutting of foils. In the past, we have already taken many individual customer requirements into account. This knowledge is your benefit. Just ask us. We are happy to help! Regardless of whether it's clamping systems, clamping techniques or unit solutions. We are your partner!





#### **Clamping device for block frames**

Exact clamping to the reference edge for a pair of block frames.

#### Clamping device for rod, panel and square workpieces

Safe and fast clamping of narrow and long workpieces for trims and panels.



#### **Block clamp**

Adapted block clamping device for round wood elements.



#### **Clamping device for trims**

Vacuum clamping device for a pair of rabbet and decorative trims according to customer design. Mounted on a base plate module.





Special clamping elements for aluminum processing





#### Clamping device for round pipes

Clamping device for five-axis processing of plastic round pipes.



#### Drilling unit: 21 spindles

Simultaneous drilling of 21 holes, e.g. for the use of acoustic panels. The unit can be inserted in the main spindle from the pickup slot.



#### Drilling unit: 144 spindles

Simultaneous drilling of 144 holes, e.g. for use with acoustic panels. Clamps for holding different shaft diameters. Unit permanently mounted on the bracket.



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

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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.

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

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

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