Processing Centre Optimat BAZ 41

Economical complete processing on a single machine – including edges and finish processing

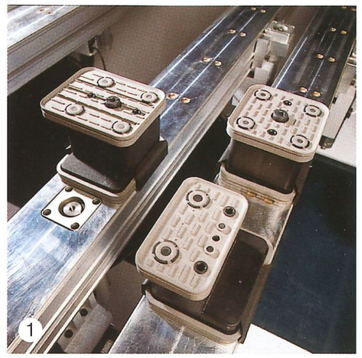
Processing Centre Optimat BAZ 41: Talented Allrounder with Scope for Future Upgrading

Optimat: High tech need not cost more

With the „Optimat“ series, the Homag Group offers a low-cost alternative to the customized special machine range. All the Optimat machines are equipped with the same leading-edge technology and the same legendary degree of quality and reliability that you have come to expect from Homag products. However, as the Optimat range is series produced, it comes at a substantially lower cost to you. And you also benefit from gratifyingly short delivery and installation periods.

Stationary, modular, reasonably priced
Due to the investment volume involved, stationary universal process engineering using CNC technology has usually been reserved in the past to industrial producers. With its Optimat BAZ 41, Homag is now able to offer the cabinet shop and interior fittings trade a particularly reasonably priced, open ended solution offering outstanding scope for future upgrading which offers profitable production for even the smallest batch sizes. The machine offers the advantage of being able to edge the workpieces immediately following sizing.

The whole spectrum of materials and processing possibilities
The whole range of sizing, profiling, drilling, grooving and dividing processes as well as edge banding with complete finish processing...: The Optimat BAZ 41 offers precisely the wide spectrum of possibilities you need to address your every-day production needs. And using every conceivable type of material: Chipboard, MDF, coreboard, solid wood, plastic etc.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Single or dual processing
The choice is yours: Individual feed for processing single workpieces **(2)**, or simultaneous dual processing. And for outsize workpieces, two additional rear fences are available.

Option: Alternating feed. Here, workpieces are processed alternately on each side, so substantially increasing productivity.


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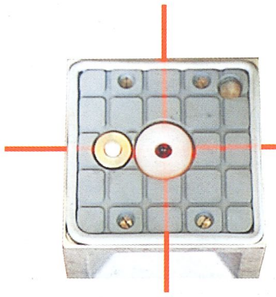
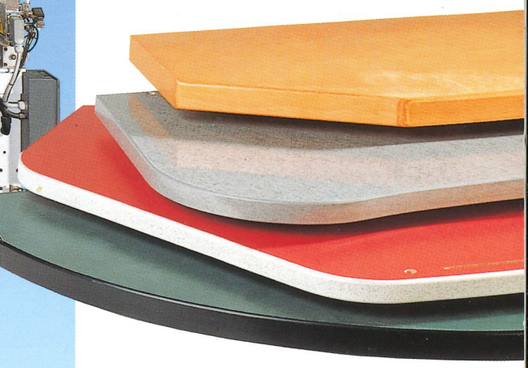
Knee-type table
The knee-type table permits simple, rapid adjustment of supports in the X and Y direction. As they work without the use of hoses **(1)**, the suction cups used to clamp workpieces for processing can be quickly and easily repositioned. A chip and waste piece disposal system using an integrated chip belt is provided as an optional extra **(3)**.

Setting aids using laser technology
For simple, rapid positioning of suction cups, Homag offers a positioning aid using laser technology - as a standard feature.



Suction cup positioning with the aid of a laser beam



A stroke of technical genius: The interface

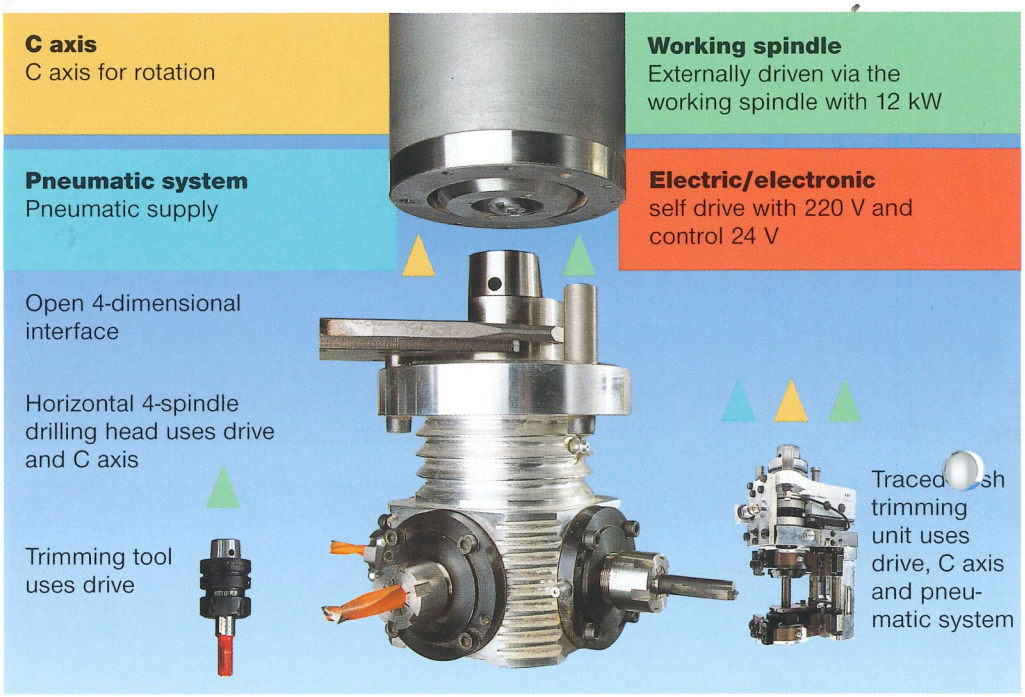
The open-ended, four-dimensional interface offers unlimited scope for the application of units:

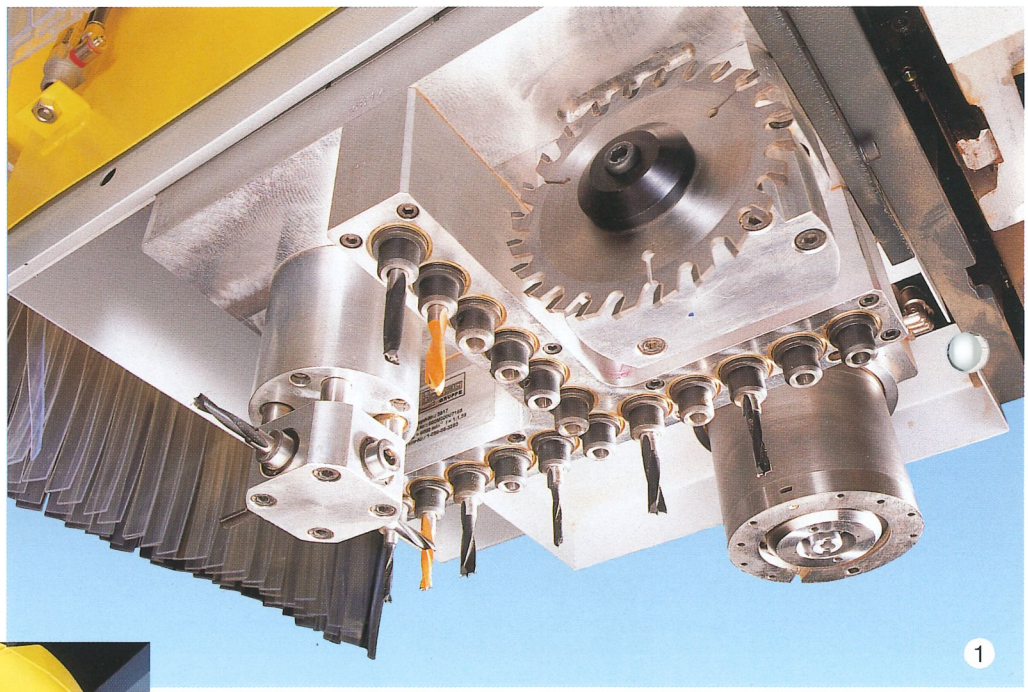
- **Power transmission** with a 12 kW asynchronous threephase motor
- **C axis** - rotation of units around their own axis up to 360 degrees
- **Pneumatic transmission** - e.g. for intermittent unit control
- **Electric/electronic connection** for the transmission of control pulses

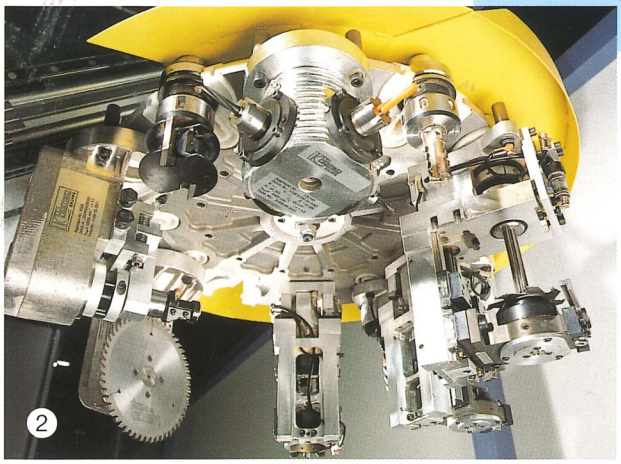
All units can be exchanged into the working spindle via the interface from a magazine. The 12 kW working spindle is required to fulfil a wide variety of functions, and is equipped with the very best that modern technology has to offer:

- Hybrid bearings (ceramic) = less friction, double the service life, maximum precision
- Maximum static and dynamic rigidity, ensuring a high degree of exchange and repeat accuracy
- Standardized tool interface HSK F63

The range of modular units
The units can be fully automatically exchanged and mounted in the working spindle by the tool changing system. This can be swivelled around a full 360 degrees using the C axis. Depending on the application, units are also fitted with pneumatic connections. The system is designed to offer scope for future upgrading and is continuously extended and updated. We recommend getting in touch with us for more detailed information.

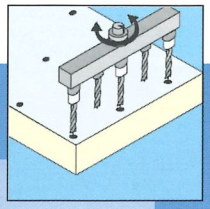


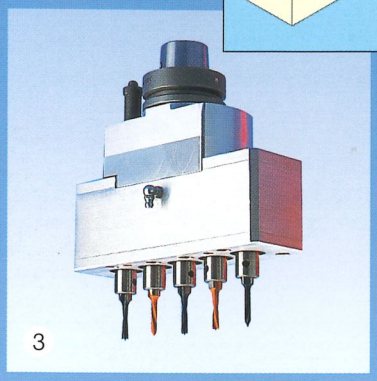




1) Universally applicable: the drilling units
17-spindle drilling head with individually accessible spindles for single or series holes. All spindles in reinforced design. Adapter units for grooving or horizontal drilling or trimming can be additionally mounted.

2) Performance on demand: the tool changer
The 12-slot plate changer is a low-cost solution for the provision of up to 12 tools and units.





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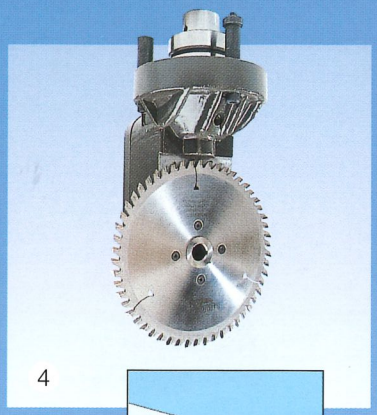

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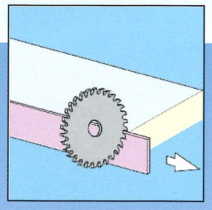

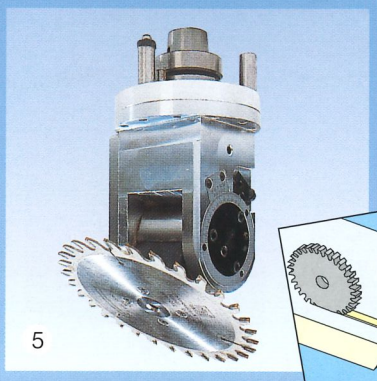

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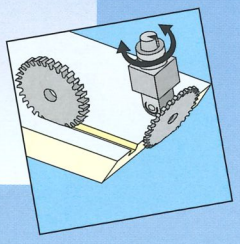

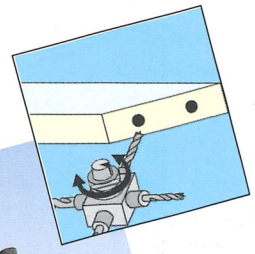

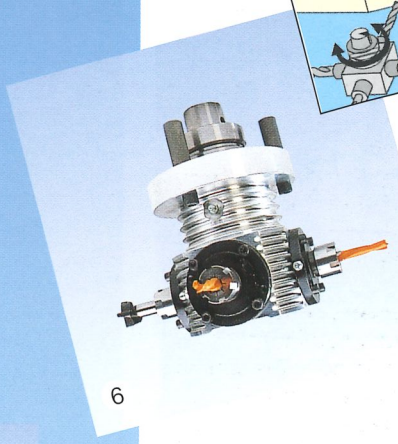

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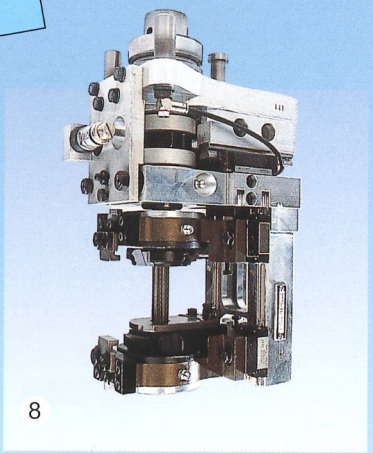

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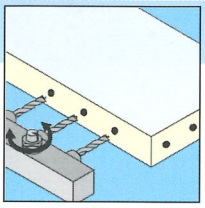
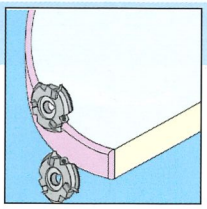




3) Vertical drilling head
For series holes at any angle with 5 or 7 spindles. Different grid spacing measurements are possible: 25, 30, 32 or 50 mm.

4) Sawing and snipping unit
Sizing, grooving, snipping and dividing cuts are executed, and recesses and notches sawn using the controlled C axis.

5) Swivel-mounted sawing / drilling unit
For sawing cuts and drill holes at any angle from 0 degrees (vertical) to 90 degrees (horizontal): Applications: Mitre cuts, hinge bore holes on doors etc.

6) Horizontal trimming unit, 4 spindles
For drilling and trimming work such as grooving, oblong holes, notches and trimming of edges at any optional angle.

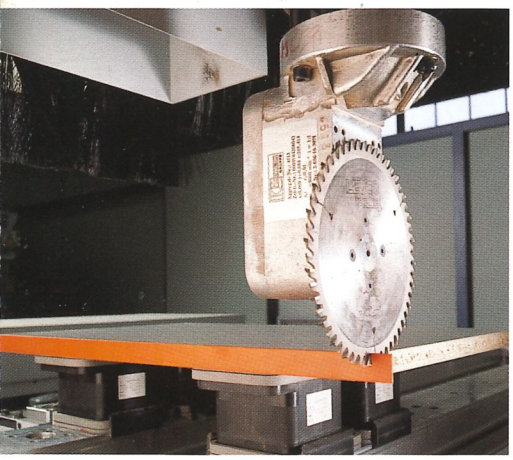
7) Horizontal drilling head, 3 spindles
360° swivel action using the C axis. The hole spacing is 32 mm.

8) Flush trimming unit
With tracing on three sides for compensation of workpiece and edge tolerances, scanning above, below and at the side. The contact pressure is exerted at right angles to the workpiece contour. Speed up to max. 12,000 rpm.

1) Vertical trimming unit with tracing pad
For trimming work in the panel surface or on profiles. Processing of workpieces with overhanging edges is also possible.

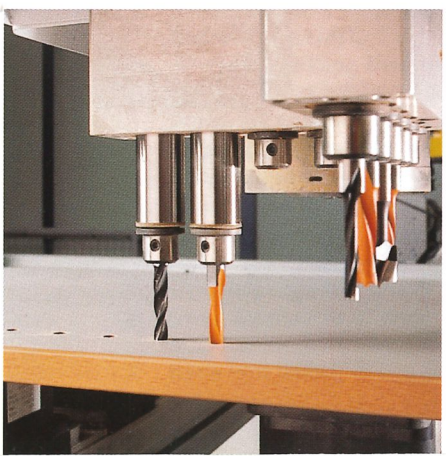
2) Lock recess trimming unit
For trimming recesses for locks on outer, safety or inner doors. With integrated cleaning air jet. Maximum useful tool length: 125 mm.

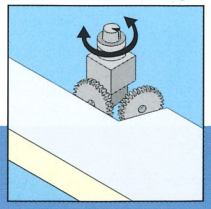
3) Underfloor trimming unit
For drilling and light trimming work underneath the panel, e.g. joining of worktops, spindle pointing vertically upwards. Max. overhang to the outside edge of the workpiece: 100 mm.

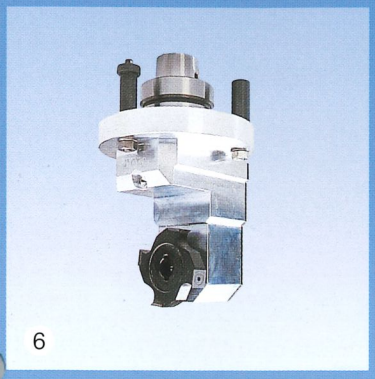


4) Horizontal trimming unit, with tracing
Trimming spindle for flush trimming of banded transverse edges at a softforming or postforming profile.

5) Vertical trimming unit, with tracing ring
For trimming work on profiles or grooves in the narrow surface with tracing from above.







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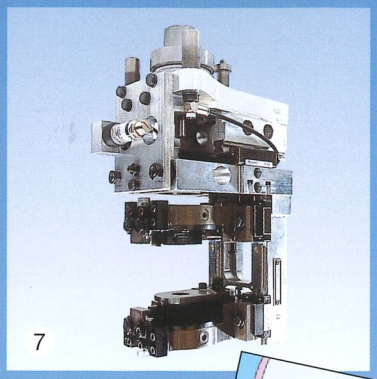

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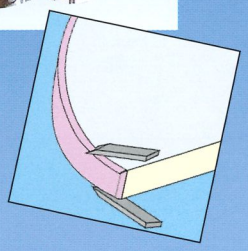

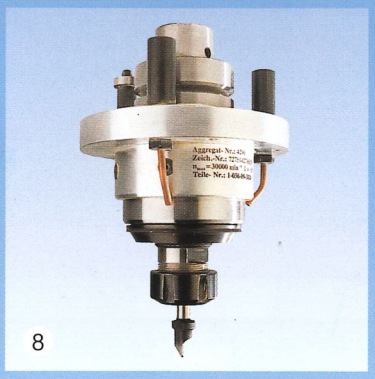

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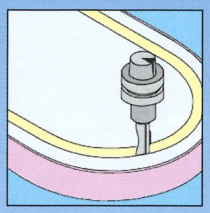

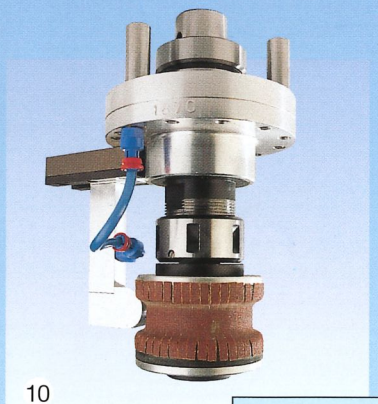

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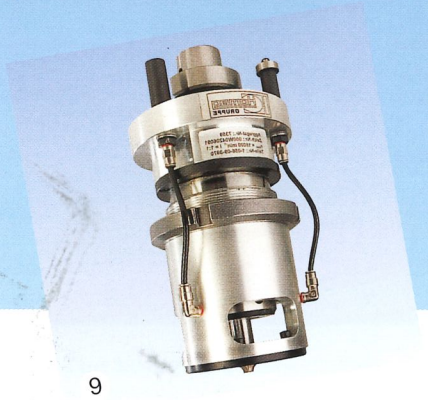

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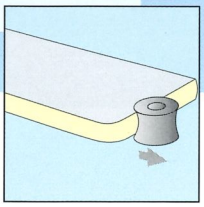
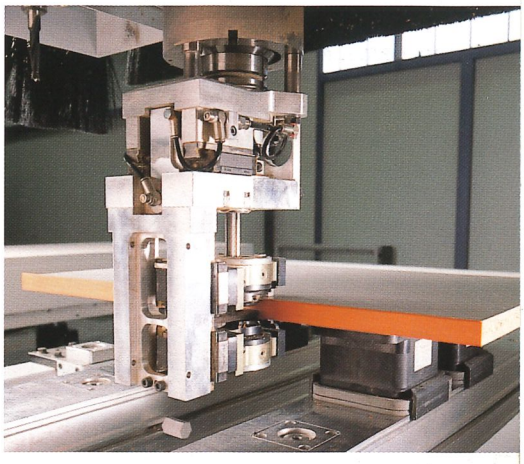


6) Corner notching unit
For the manufacture of right-angled, tear-free, sharp-edged internal recesses as required, for example, for ventilation slits or in the production of worktops.

7) Scraping unit
With tracing on three sides, for compensation of workpiece and edge tolerances. The contact pressure is applied at right angles to the workpiece contour. Available in the form of glue joint or profile scraping device.



8) Trimming unit with reduction gear
To trim grooves or engravings with small tool diameters. An integrated speed transforming gear permits a maximum speed of 30,000 rpm to be achieved. This permits a higher cutting speed for small tools and so higher feed rates coupled with improved trimming quality.

9) Vertical trimming unit with bell-shaped tracing device
For grooving and engraving work in the panel surface with tracing on the surface. Bell-shaped tracing device with integrated air jet.

10) Retainers for sanding disks
For sanding work primarily on solid wood edges or MDF panels. The sanding disk is clamped in a standard DIN collet chuck and continuously cleaned with compressed air using an air jet.

For a truly competitive edge: BAZ gluing technology

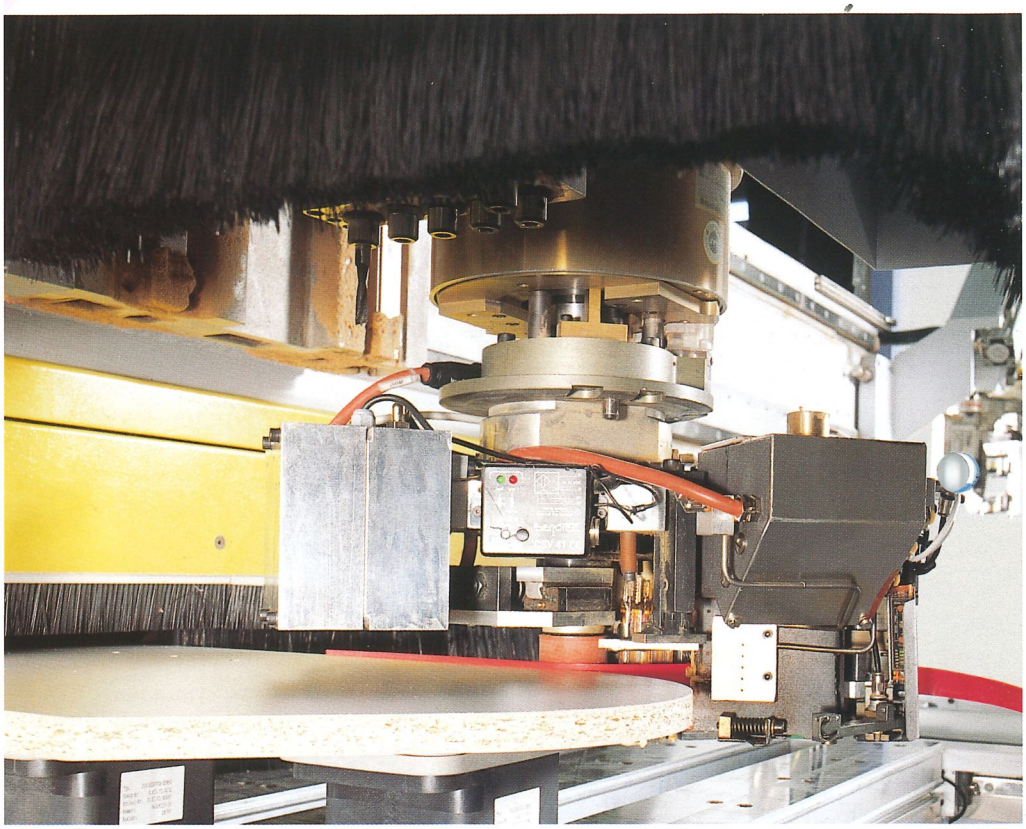
Making use of the universal interface, a number of gluing units are available for exchange mounting in the working spindle:

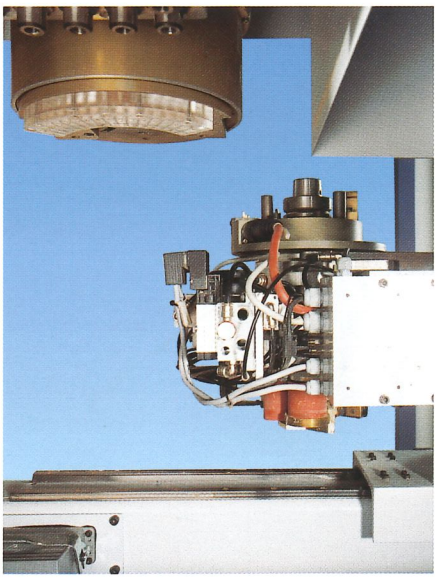
Unique from Homag: Exchange mounting gluing unit (also retro-fittable)
The „4-side gluing unit“ is designed to permit the low-cost, precise edging of shaped components on all sides. The unit is engaged and mounted in the interface of the working spindle by a pick-up system.

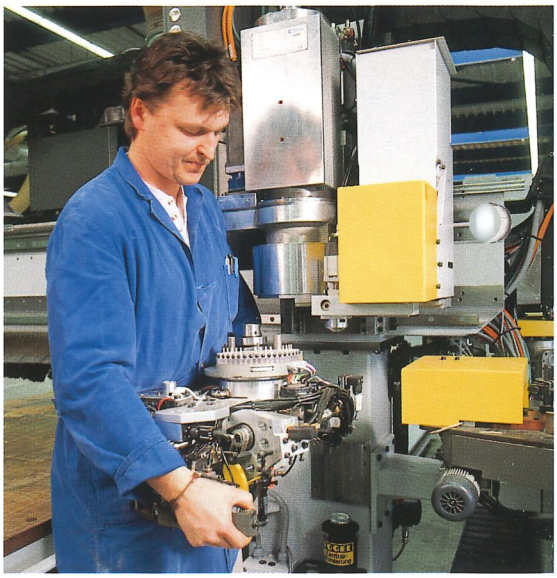
If required, the unit can be quickly removed from the pick-up station for simple maintenance and cleaning. The simple, low-cost gluing unit works with pre-coated edging material and is quickly ready for use without any heating-up delay. Option: Roller plate and pre-snipping station.

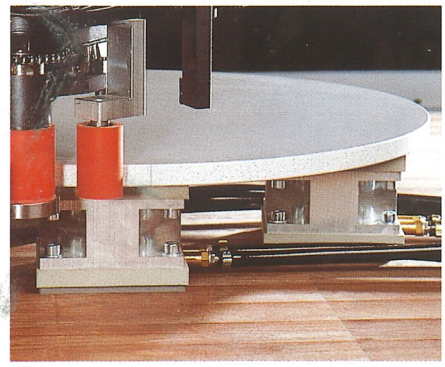
360° gluing unit
This gluing unit is also taken from the pick-up station as required and exchange mounted in the working spindle. It is designed for fault-free all-round gluing.
Both ends of the edging abut so precisely that only a hair-line join is visible. The gluing head naturally also takes inside radii easily within its stride (up to R = 30 mm).

The basic version operates with manual edge guidance. Glue application takes place directly, eliminating the need for the provision of pre-coated edge material.









Homatic and WoodWOP: Hardware and software highlights

Contour list

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Processing list

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Post-processor

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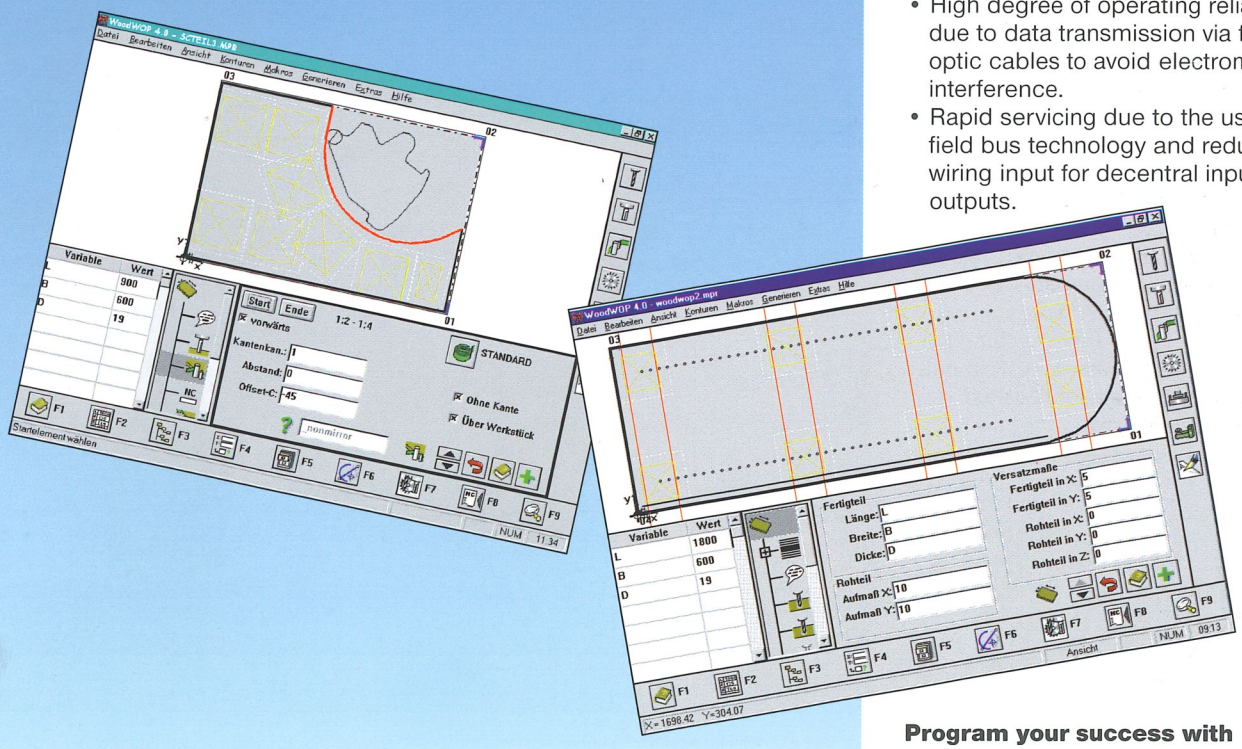
Optimized NC program

Homatic, the electronic control system developed by the Homag Group, was developed especially for wood processing requirements. Its open-ended structure permits highly complex applications coupled with simple operation. The graphic elements, on-line assistance and reliable operator guidance afforded by the processing program WoodWOP ensure active programming support to the user.

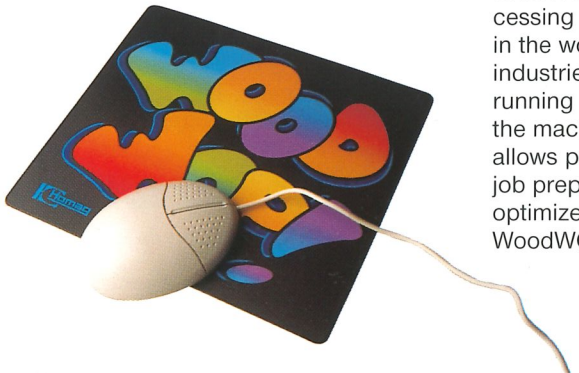
The benefits offered by Homatic:

- Large storage capacity due to integrated computer with hard disk. This guarantees continuous availability of all NC programs in the machine control system.
- Optimum availability due to integrated diagnostics (schematic machine diagram, ladder diagram and telephone diagnosis) for fast detection of error causes.
- High degree of operating reliability due to data transmission via fibre optic cables to avoid electromagnetic interference.
- Rapid servicing due to the use of field bus technology and reduced wiring input for decentral inputs/ outputs.



The benefits of WoodWOP:

- Convenient contour programming
- Complete macro processing
- NC generation with time optimization
- Variant programming
- Suction cup positioning and display
- Data transmission via standard interfaces



Program your success with WoodWOP

WoodWOP is a practical workshop-oriented programming system (WOP) which has been optimized for the processing of panel-shaped workpieces in the woodworking and furniture industries. WoodWOP is capable of running under MS Windows and on the machine control system. This allows programs to be written in the job preparation department and then optimized at the machine with WoodWOP.

It pays to be a Homag customer

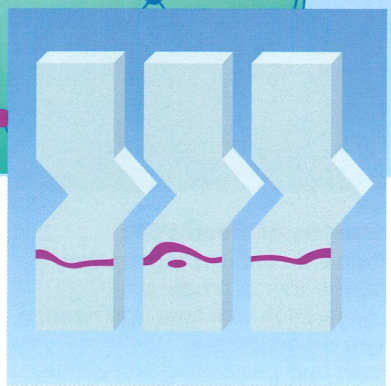
Remote diagnosis worldwide
All NC machines are fitted in the factory with a modem to allow remote diagnosis anywhere around the globe. A search for possible faults is performed from the Homag Service Centre. Once localized, errors can often be remedied immediately over the telephone line.

Careful maintenance
Scheduled, correctly performed maintenance helps reduce costs and increase the productivity and service life of plant and machinery.

Homag is everywhere
For you, the customer, a well-developed servicing, sales and dealer network means greater proximity, rapid response and improved customer support - around the world.

Practically-oriented training
Although Homag products are designed for outstanding operating simplicity, thorough training does help cut down on commissioning times, reduces trial wastage, helps develop the skills of the operator and generally improves efficiency.

Outstanding quality
The Homag Group is certified to DIN EN ISO 9001 (TÜV CERT). At Homag, it is a matter of course for machines to comply with the CE standard. This provides you with the assurance of consistent, certified quality.

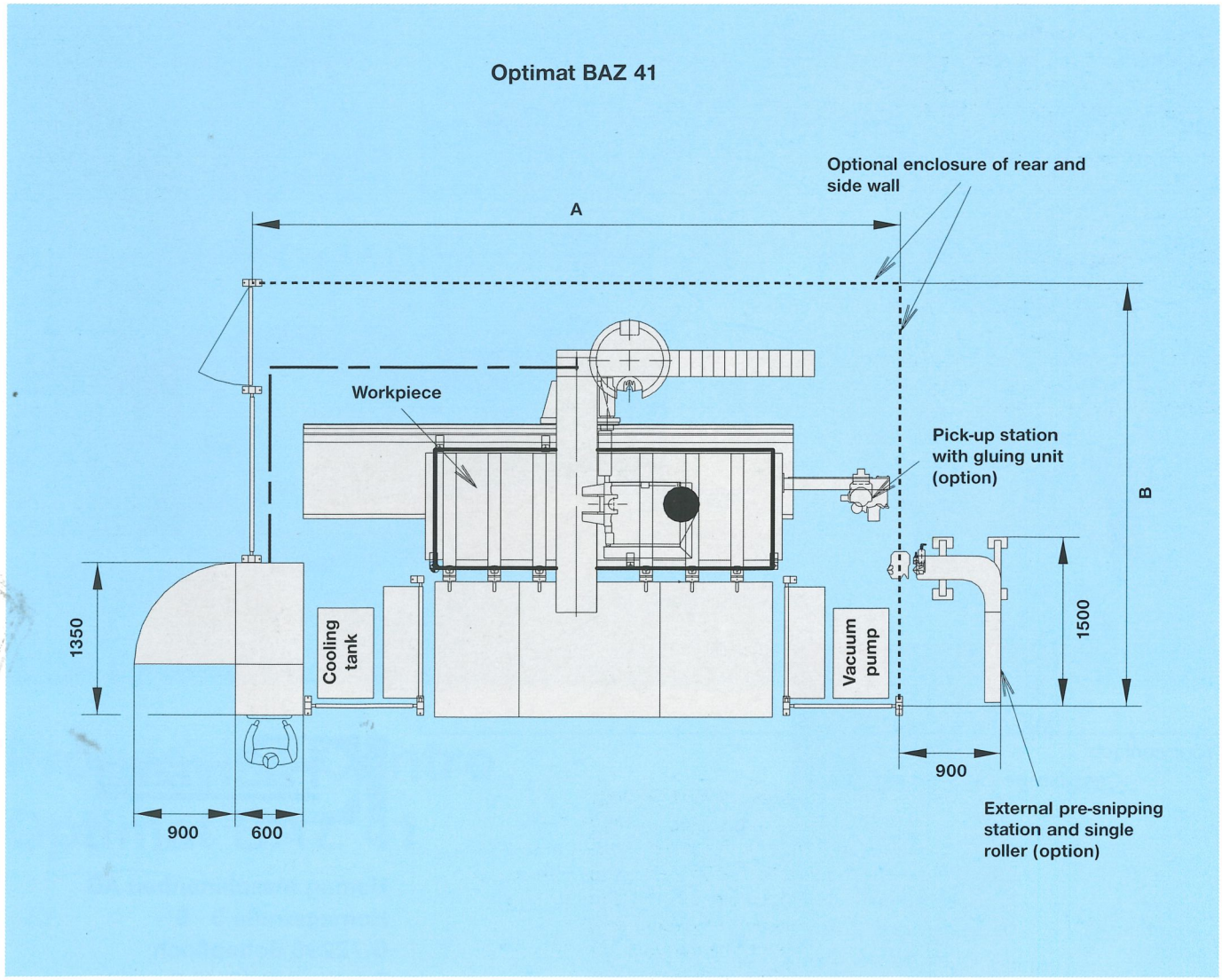


Identical parts, simple handling
A large number of the parts, control elements and assemblies used in Homag Group plants and machines are identical. The wide-ranging benefits of this policy include simplified operation, lower costs, streamlining of spare parts management and also faster maintenance and servicing to name but a few.

Specifications

Type		Optimat BAZ 41
A = Length [mm] B = Width [mm] C = Height [mm]		5.750 3.750 2.400
Extraction output for working spindle [m^3/h]		7.850
Extraction system connection [mm]		1 x Ø 315
Compressed air consumption [NL/min]		approx. 300
Connected electrical load [kW]		approx. 31
Max. workpiece sizes [mm]	Singel feed Dual feed	3.000 x 1.050 2 x 1.250 x 1.050
Alternate processing* (optional)		2 x 900 x 1.050

* Only sizing work possible (trimming/drilling)



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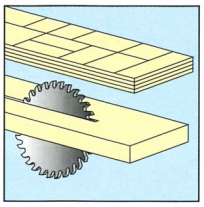
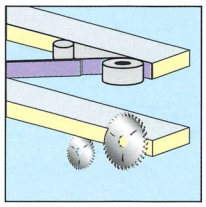
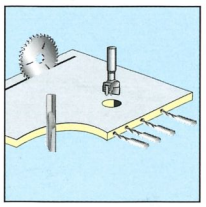
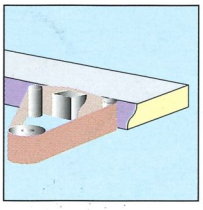
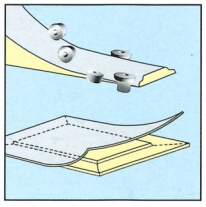
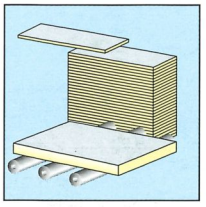
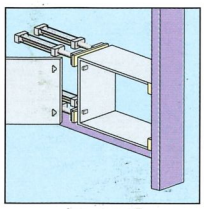
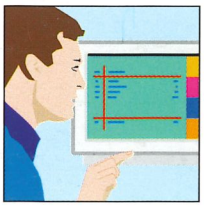
Weeke · Homag España · Homag do Brasil · Homag Anderson

Homag Austria · Homag Canada · Homag France · Homag Italia · Homag Asia · Hornberger Industrieanlagen

Schuler & Partner Unternehmensberater

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