

High-performance processing centres Gantry series BAZ 120 and BAZ 220

The new, highly productive machine generation

# BAZ 120 and BAZ 220: Complete processing on a whole new dimension

Homag is opening up a whole new competitive dimension for its customers with a pioneering new development for stationary CNC processing. The series BAZ 120 and BAZ 220 high-performance processing centres are capable of achieving outstanding productivity in terms of both sizing and edge processing. A new machine concept, the use of the latest technologies and optimized interplay between all the technical components guarantee outstanding production speed, quality and economy.

# Designed for maximum piece numbers and capacity utilization

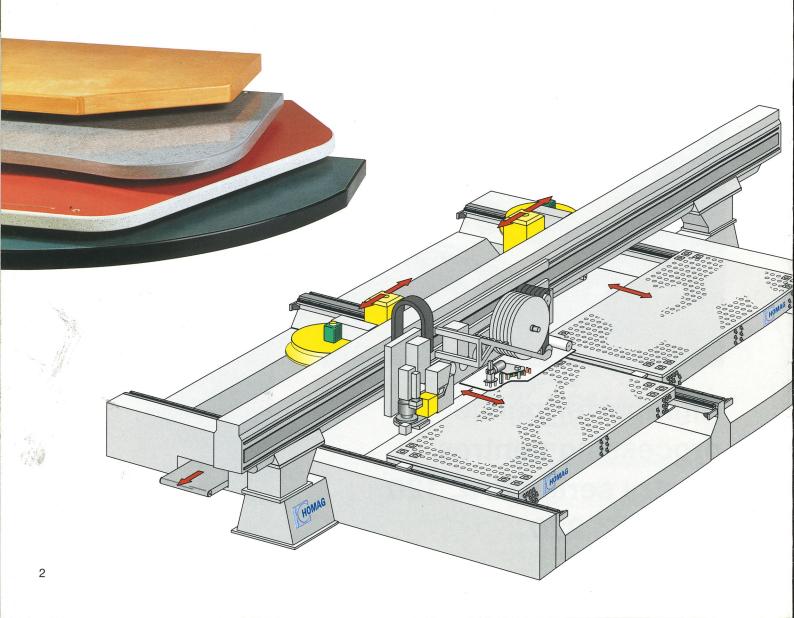
The machine concept: Gantry design with a tandem table. The line gantry of the BAZ 120 is equipped on one side with up to two processing supports, while the BAZ 220 comes equipped with supports also on the other side. The supports accommodate the processing units and the gluing unit for the edges. The two tables arranged in parallel formation move separately, each forming one of the feed axes. Both the supports with the processing units and also the tables are capable of independent operation. In this way, depending on the workpiece size and the task in hand, they are capable of either faster or more flexible working.

## Future-oriented engineering: Feed with direct linear drive

In order to achieve outstanding drive dynamics, in the new series for the very first time a linear motor has been used on the X axis of the support (optional extra). This permits the elimination of all mechanical transmission elements, maximum speed and operating reliability, as well as wear-free drive systems. Or put another way: Technology out of the very top drawer!

### Great in terms of workpiece sizes too

Another benefit of the new Homag processing centre series: Workpieces up to 5.60 m in length and 2.40 m in depth (width) can be processed without problems - for example high fitted cupboard elements for interior fittings or side elements for caravans.





# Intelligent design with solid benefits

The wide span of the crossbeam places maximum demands on the machine things by halves. The gantry was designed with the aid of state-of-the-art calculation methods (FEM) so as to achieve maximum rigidity of its closed frictional connections with the supporting structural components. This ensures that no impairment is caused to the operating accuracy and trimming quality of the machine by acceleration movement of the support or process





# Three tables, four operating modes almost unlimited possibilities

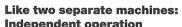
Four different operating modes open up scope for impressively varied, flexible production possibilities. Depending on the task in hand, you can choose between three different table variants.

The extending tables traverse alternately out of the machine danger area for loading, permitting continuous operation. And for extremely large workpieces, both tables work in synchronous mode.

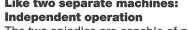


#### Smooth table with aluminium top

This table permits completely optional positioning of the suction cups. Vacuum transmission takes place by means of solenoid valves, eliminating the need for hoses or sealing profiles. Trouble-free disposal of waste and simple position of the vacuum clamps.



The two spindles are capable of processing two different workpieces completely autonomously - table tops on the left, carcase elements on the right! The high increase in performance depends on the way the workpieces are spaced and the resulting spindle applications.



**Practically zero downtimes:** fast changeover The two spindles are used jointly to process a single workpiece. While one is still in operation, the other is fitted with a new tool and travels to the

correct position.





#### Outstanding handling simplicity: The knee-type table

The suction cups which hold the workpiece in place operate without the need for hoses and permit fast, simple adjustment. The open table design permits optimum disposal of chips and waste pieces.

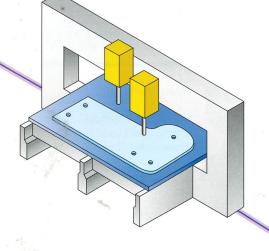


#### Highly flexible: the smooth table

This table permits the suction cups for workpiece clamping to be moved to any optional position.

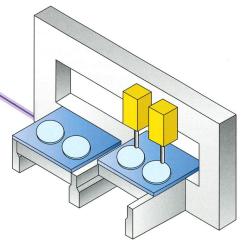
#### Maximum series productivity: Interleaved operation with the BAZ 220

All three operating units are used simultaneously for this operating mode: e.g. synchronous sizing on table 1, edge banding on table 2.



#### **Double the output: Synchronous** processing

The two spindles operate synchronously at two identical workpieces, producing double the quantity within the same time.



# Sophisticated technology for demanding applications



BAZ 120 and BAZ 220 processing centres operate with separate processing supports, each equipped with working spindle, drilling unit and adapter unit. The working spindle interface is supplied from an 18-slot plate changer and optionally also an operating unit pickup system.

## Lower capital outlay or reduced piece costs - the choice is yours

The machines are equipped as standard with a powerful controlled 14.5 kW spindle making use of state-of-the-art technology. A high-performance variant with an output of 21 kW, HSC technology and linear motor is also available (Power-line version). The basic model is characterized by substantially lower investment costs, while the Power-line version offers significantly lower piece costs as a result of reduced processing times.

#### **Working spindle**

External drive via working spindle with 14.5 or 21 kW

#### C axis

C axis for turning

#### Pneumatic system

Compressed air supply

#### **Electrics/electronics**

Self-drive with 220 V and control with 24 V

## Technological ingenuity: the interface

The open interface leaves unrestricted scope for processing unit technology. This is responsible for power transmission to the units and for the transmission of compressed air.

The swivel range is unlimited.



Open interface

Horizontal 4-spindle drilling head uses drive system and C axis



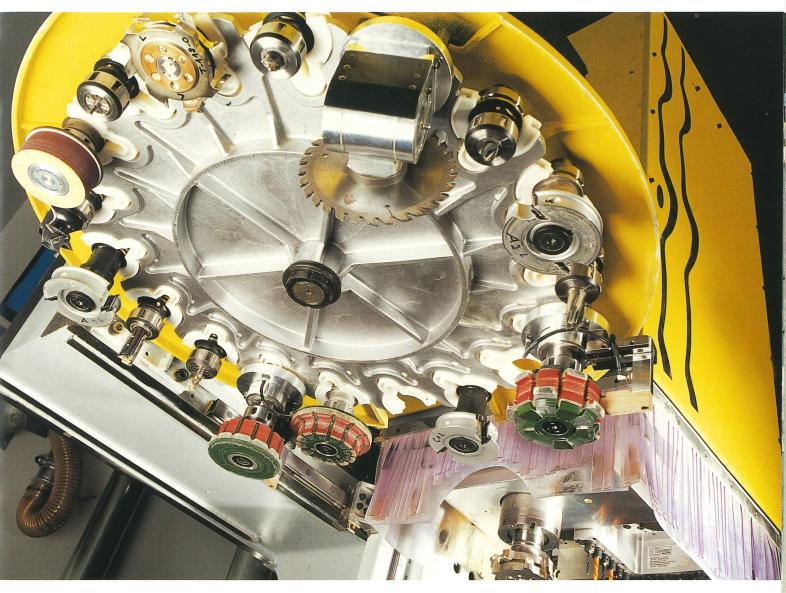




Traced flush trimming unit uses drive system, C axis and pneumatic

system

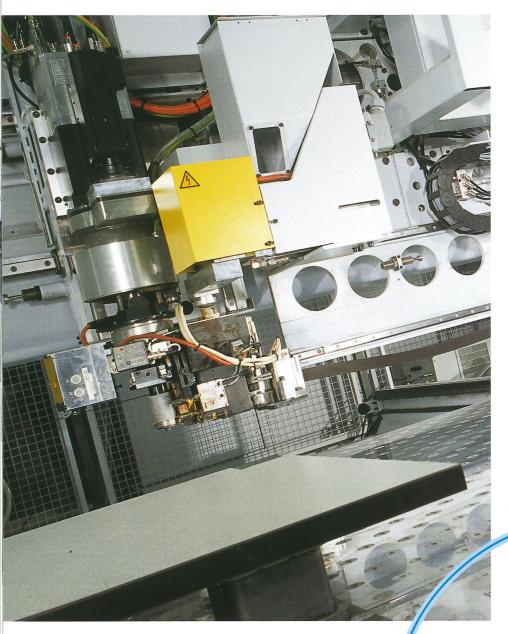




#### The modular processing units

A wide selection of units is available to cover a comprehensive range of processing requirements. The system is continuously further developed and extended, and is designed to offer unlimited scope for future upgrading. To find out more, simply ask us.

# Edge banding Homag style: Fast, clean, reliable



#### Direct gluing, optimum gluing

The Homag gluing unit operates with direct glue application - making it considerably faster than when using precoated edges, with a permanently fresh supply of glue for optimum edges. And you are no longer reliant on having sufficient pre-coated edge material in stock.

# Gluing technology that only Homag can supply

- Tried and tested Quickmelt melting unit used successfully on the highperformance edge banding machine models
- Direct hot melt glue application at a feed rate of up to 20 m/min.
- Pressing and controlled postpressing roller applying a constant contact pressure for the edging material
- Pre-snipping station for cutting edges to length

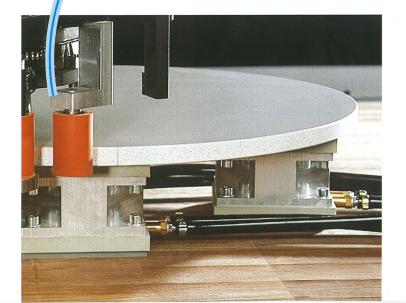
Veneer edges and plastic edges up to 3 mm in thickness, or optionally even up to 4 mm are suitable for processing.

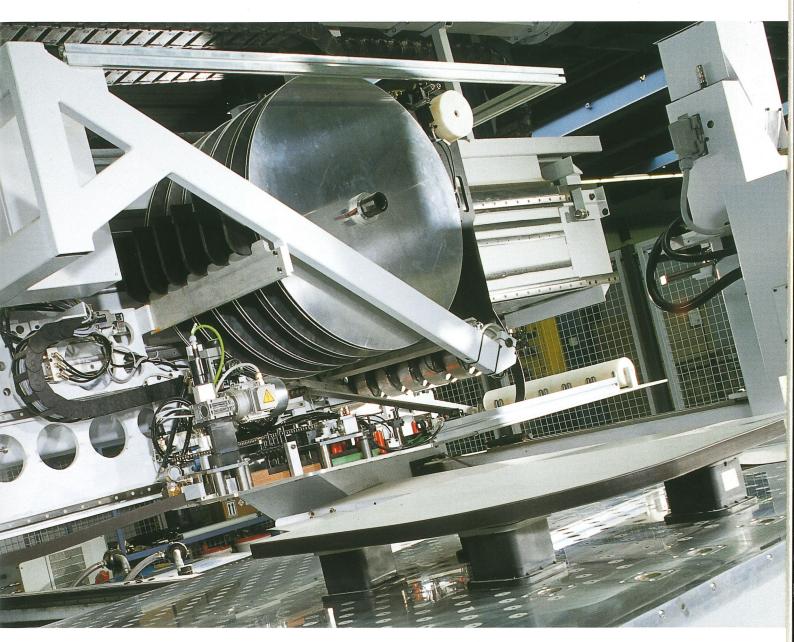
#### All-round - the full $360^{\circ}$

The 360° gluing head permits perfect all-round gluing, with the edge ends abutting so precisely that only a hair-line join is visible.

#### **Outside or inside**

The gluing head is naturally also able to produce outstanding results on inside radii (up to R 30 mm).





#### Single or multiple

Instead of thick solid edges, it is also possible to glue several veneer edges one above the other, followed by a profiling process.

- The "interface" for the gluing unit
  1. Simple maintenance and cleaning.
  Short changeover times (max. one minute).
- 2. Use of several units such as the T-material edge gluing unit or hot foiling unit (optional)

  3. Interchangeability of units if several
- machines are in use.



# Homatic open - a control system for tomorrow, today

Homatic open is an open-ended, operationally reliable control system designed in line with the requirements of stationary technology: A control system to address the ever growing degree of automation and machine interlinking.

#### The future built in

The networking capability and openended structure of Homatic open provide scope for highly complex applications coupled with maximum operating simplicity. For example the use of modern technologies such as digital drive systems, decentral systems or mechatronics. The system offers wideranging, flexible extension possibilities offering scope for future upgrading.

# Date Bearbeiten Arsicht Sonturen Moloros Generieren Estras Hille Ogg Variable Wert L 1595.8 B 849.1 D 119 X-Ende: Länge XY, Winkel: Steigung F1 F2 F3 F4 F5 F6 F7

This new machine generation is controlled completely by an industrial PC (Windows NT 4.0). The user interface is familiar to the PC user, handling is fast and simple. A new, high-performance CNC control system permits several processing units to be used simultaneously in independent operation to produce different workpieces (multichannel technology).

# Program your way to success with WoodWOP

WoodWOP is a practical, workshoporiented programming system (WOP), optimized for the processing of panelshaped workpieces for the woodworking and furniture industry. The programs are written in the production engineering department, and can be optimized if required at the machine.



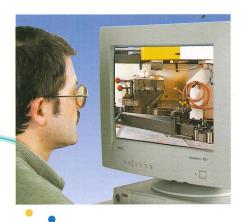
# It pays to be a Homag customer

#### Worldwide remote diagnosis

All CNC machines are fitted ex works with a modem to permit remote diagnosis. The engineeers at the Homag Service Centre are then able to search for and locate possible faults, and possibly also provide a remedy.

#### Homag is everywhere

For you, the customer, our extensive service, sales and dealership network means shorter distances, fast reactions and intensive customer proximity - the world over.



Identical parts, simple handling
A lot of parts, control elements and
assemblies used in Homag Group
plants and machines are identical.
Which simplifies operation and reduces costs, as well as cutting down
on the complex storage of spare parts
and accelerating maintenance and

servicing - to mention only some of

the many benefits.

# Even greater efficiency with video support

At the cutting edge of innovative technology: Remote diagnosis by video. The specialist at the service centre can inspect your machine direct.



#### Practically-oriented training

Although Homag products are easy to operate, thorough training and familiarization helps reduce the amount of time needed for commissioning, saves unnecessary trial and error, improves the level of operator skill and enhances the efficiency of plant and machinery.

#### **Careful maintenance**

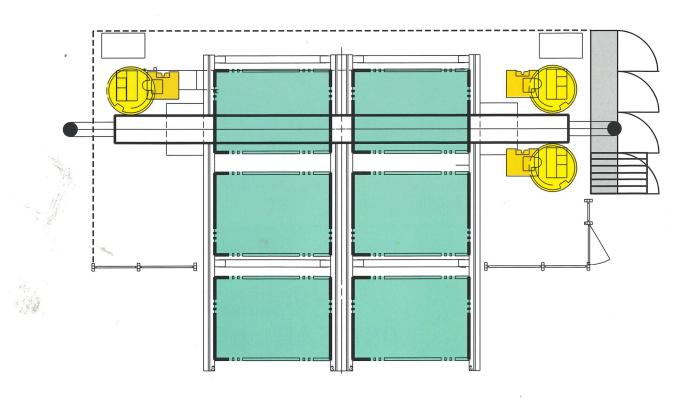
Scheduled, correctly performed maintenance helps reduce costs and increases plant and machine productivity.

#### **Outstanding quality**

The Homag Group is certified to DIN EN ISO 9001 (TÜV Certificate). And it goes without saying that our machines are fully in compliance with the CE standard. This is your assurance of a consistently high standard of quality.

# **Specifications**

Dimensions:		BAZ 120/50/18/_/_	BAZ 120/50/24/_/_	BAZ 220/50/18/_/_	BAZ 220/50/24/_/
Workpiece measurements with alternating processing	max	2550 x 1800 x 60	2550 x 2400 x 60	2550 x 1800 x 60	2550 x 2400 x 60
Workpiece measurements with coupled tables	max	5600 x 1800 x 60	5600 x 2400 x 60	5600 x 1800 x 60	5600 x 2400 x 60
Space requirement including safety gear	L (mm)	12500	12500	12500	12500
	B (mm)	6100 (7900*)	7600 (9750*)	7550 (9350*)	9050 (11200*)
	H (mm)	3400	3400	3400	3400
		* = Measurements with Io	ading station		
Specifications:					
Main axes / Drive systems		POWER LINE	GENIUS	POWER LINE	GENIUS
X1,2 Trimming/Drilling processing supports					
V <sub>max</sub>	(m/min)	160	80	160	80
a max	(m/s²)	10	3	10	3
X3 Gluing support					
V <sub>max</sub>	(m/min)	100	80	100	80
a max	$(m/s^2)$	3	3	3	3 -
Y1,2 Processing tables					
V <sub>max</sub>	(m/min)	100	80	100	80
<sup>a</sup> max	$(m/s^2)$	8'	3	8	3
Z1,2,3 Z axis, processing supports					
V <sub>max</sub>	(m/min)	44	44	44	44
a max	$(m/s^2)$	4	4	4	4
Edge height	max.	65 mm (with 360° gluing max. 45 mm)		65 mm (with 360° gluing max. 45 mm)	
Edge cross-section	max.	135 mm²		135 mm²	
Edge thickness (PVC)	max.	3 mm		3 mm	
Edge thickness (solid wood)	max.	2 mm		2 mm	
Coil plate		for 6 coils, coupled-motion	on f	or 6 coils, coupled-motio	n
V = speed a = acceleration					



#### Production

























#### Sales











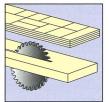


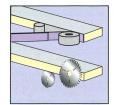


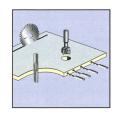












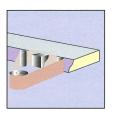


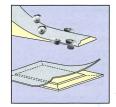


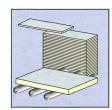
Schuler

















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