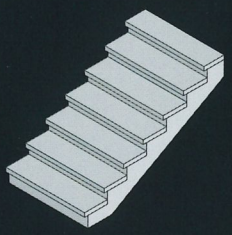
IMA

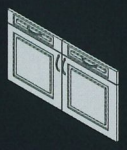
BIMA 200
Details

ENGLISH

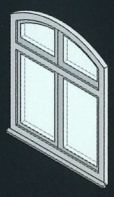
Stairs



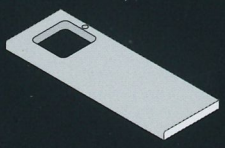
Furniture doors



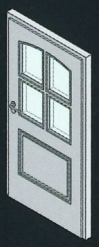
Round arch window*



Work tops



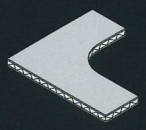
Entry door



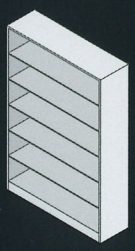
Aluminium profiles*

Doors

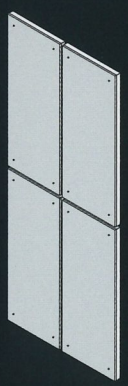
Honeycomb panels



Furniture components (incl. boreholes)



Façade elements



All equipment offered is made to metric standards. Dimensions shown in English measure are approximate and for comparison purposes only.

* Additional clamping devices are required.

BIMA 200

CNC-controlled 3-axis-milling and boring machine

BIMA 200 – milling and boring machine – the new efficient processing centre for flexible production of individual small batch- and single-part production of furniture components and components for interior fittings. The BIMA 200 emphasizes the 30 years' technological know-how of IMA in constructing trendsetting stationary processing centres.

The new BIMA 200

- **combines one high-capacity main spindle**
- **with an elaborately constructed tool changing device,**
- **offers high acceleration c-value and a high residual speed in all axis**

combining these features to an intelligent machine concept with minimal processing times with a maximum of operating efficiency.

With the time-tested software *IMA WOP 6.0* the BIMA 200 is equipped with an optimal machine control. The Windows®-based control with automatic set-up times and processing programs as well as tool movements in real-time incl. 3-D-process simulation can either be used directly at the operator panel at the machine, respectively during work preparations or for customer presentations at the PC workplace (second licence included).

Characteristics

- **Working field of 3,300 mm x 1,250 mm [129-7/8" x 49-1/4"],**
- **equipment options for adapter units**
- **panel clamping system on linear guidings for panel processing with highest accuracy**
- **ergonomic, user-friendly IMA-product design**

optional:

IMA boring gear 14 vertical spindles and 6 horizontal spindles, plus grooving saw 90° swivelling

or

IMA boring gear 21 vertical spindles plus cross head 90° swivelling with 4 horizontal spindles and grooving saw

Further equipment options

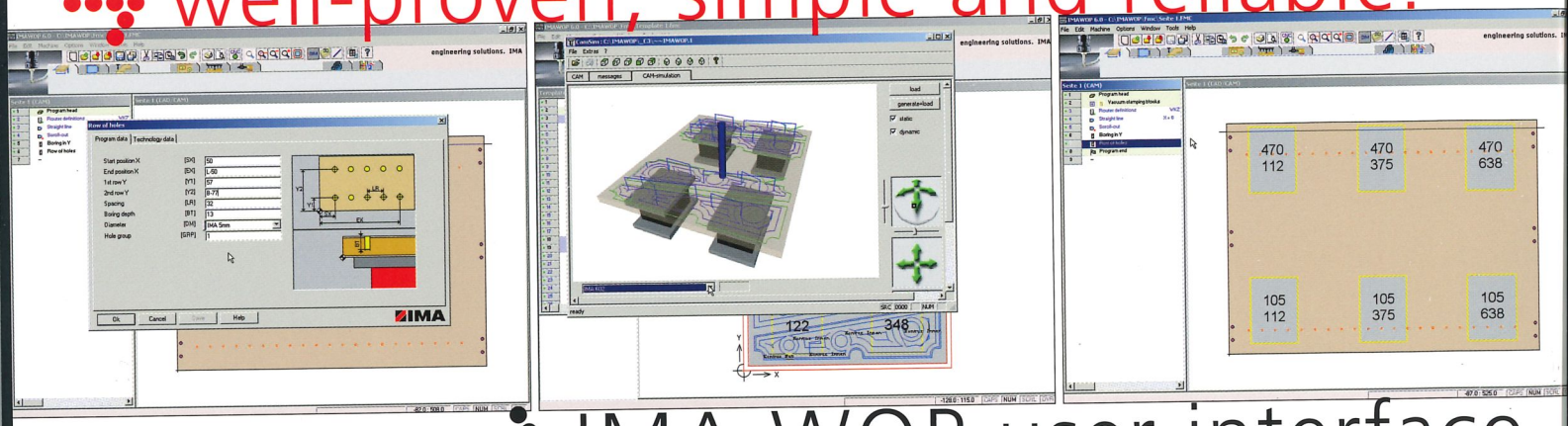
- **Option for ›Twin load‹ by second row of stops**
- **LED-set-up system for quick and automatic set-up of the clamping system**

The CNC-controlled BIMA 200 is connected directly to the high-capacity control *IMA WOP* via the ergonomic operator panel.

IMA WOP is the optimal processing control with user-proven software for flexible production of different panels. It is equipped with the latest automatic, preset set-up and processing programs.

Movements of the processing head, respectively the entire process can be simulated in 3-D pictures – for highest efficiency and reliability - for both, small batch production and production of individual parts.

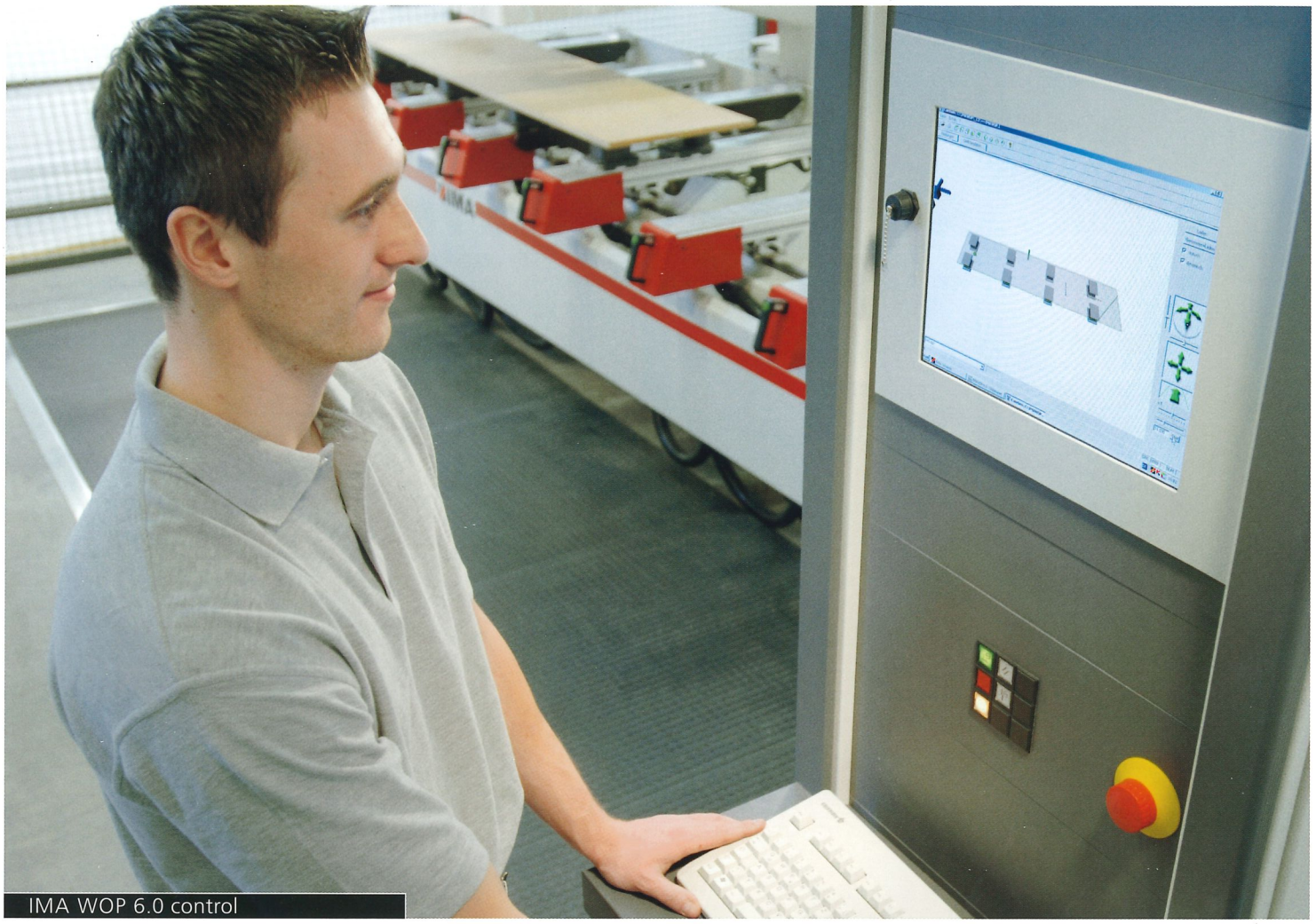
well-proven, simple and reliable:



IMA WOP user interface

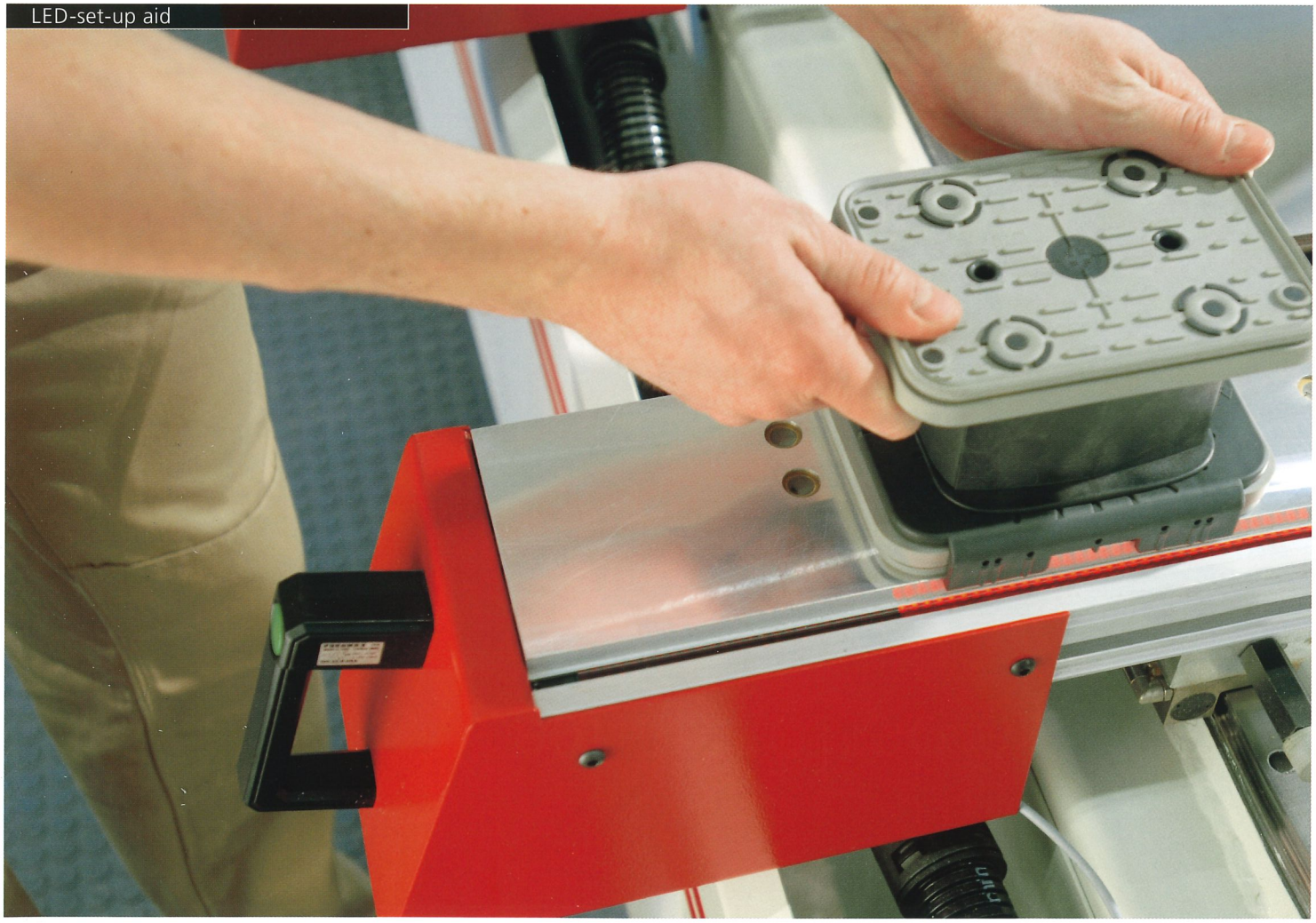
IMA WOP control – overview

- simple, graphic user interface/menue guidance
- creation or take-over of CAD drawings of panels if required
- automatic record of statistic data such as quantities, production- and work schedules etc.
- integrated program solutions for automatic optimal positioning of panels and vacuum suction elements
- automatic set-up of the machine
- compatible control system for all well-established network solutions



IMA WOP 6.0 control

LED-set-up aid



Standard equipment

- PC control with *IMA WOP 6.0* and second licence [office-workstation]
- USV [uninterruptible electric power supply]
- Safety shut-off mats
- Basic equipment of tools
- Processing area in X = 3300 mm [129-$^{7}/_{8}$"]
- 6 vacuum support arms
- 12 entire suction pads
- 6 half suction pads
- 6 lifting rails
- 8-fold tool changer
- central extraction
- template connection
- main spindle [7,5 kW] with 45° index ring
- tooling – basic equipment

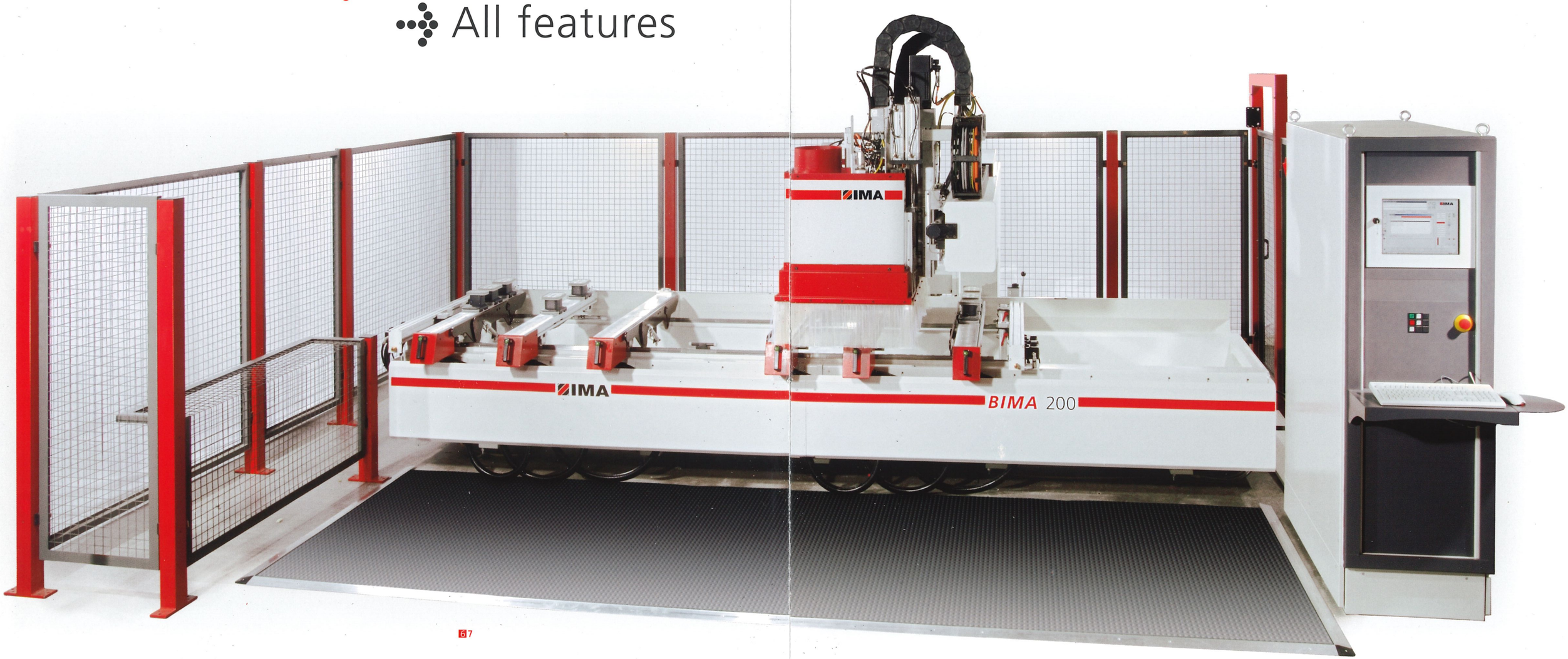
Optional:

— IMA boring gear 14 vertical spindles and 6 horizontal spindles, plus grooving saw 90° swivelling
or
— IMA boring gear 21 vertical spindles plus cross head 90° swivelling with 4 horizontal spindles and grooving saw

BIMA 200
All features

Additional options for the equipment of BIMA 200

- second row of stops *(twin load)*
- DXF interface
- air conditioner
- LED-set-up aid
- point laser



double performance –
double precision

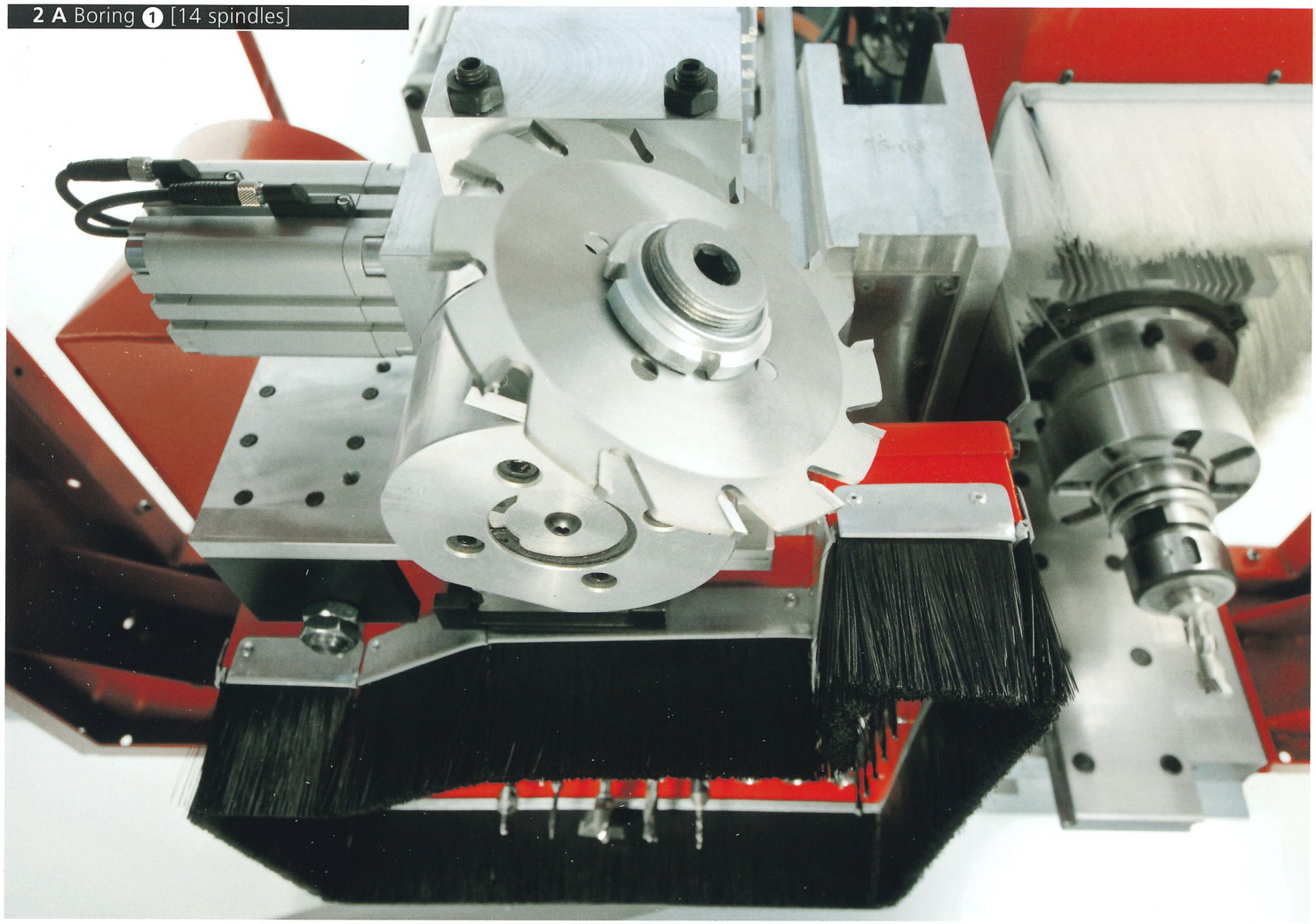
1 BIMA-main spindle system

1. BIMA-main spindle system
The new high-efficient BIMA-main spindle system with a capacity of 7,5 kW and a maximal torque of 18.000 rpm for horizontal and vertical boring leaves nothing to be desired: with the angular heads six different boring tools for horizontal processing can be assembled. The additional ›on-board‹ tool magazine is able to hold eight individually selected tools. Adapter unit such as for example lock case milling unit etc. are inserted into the main spindle manually.

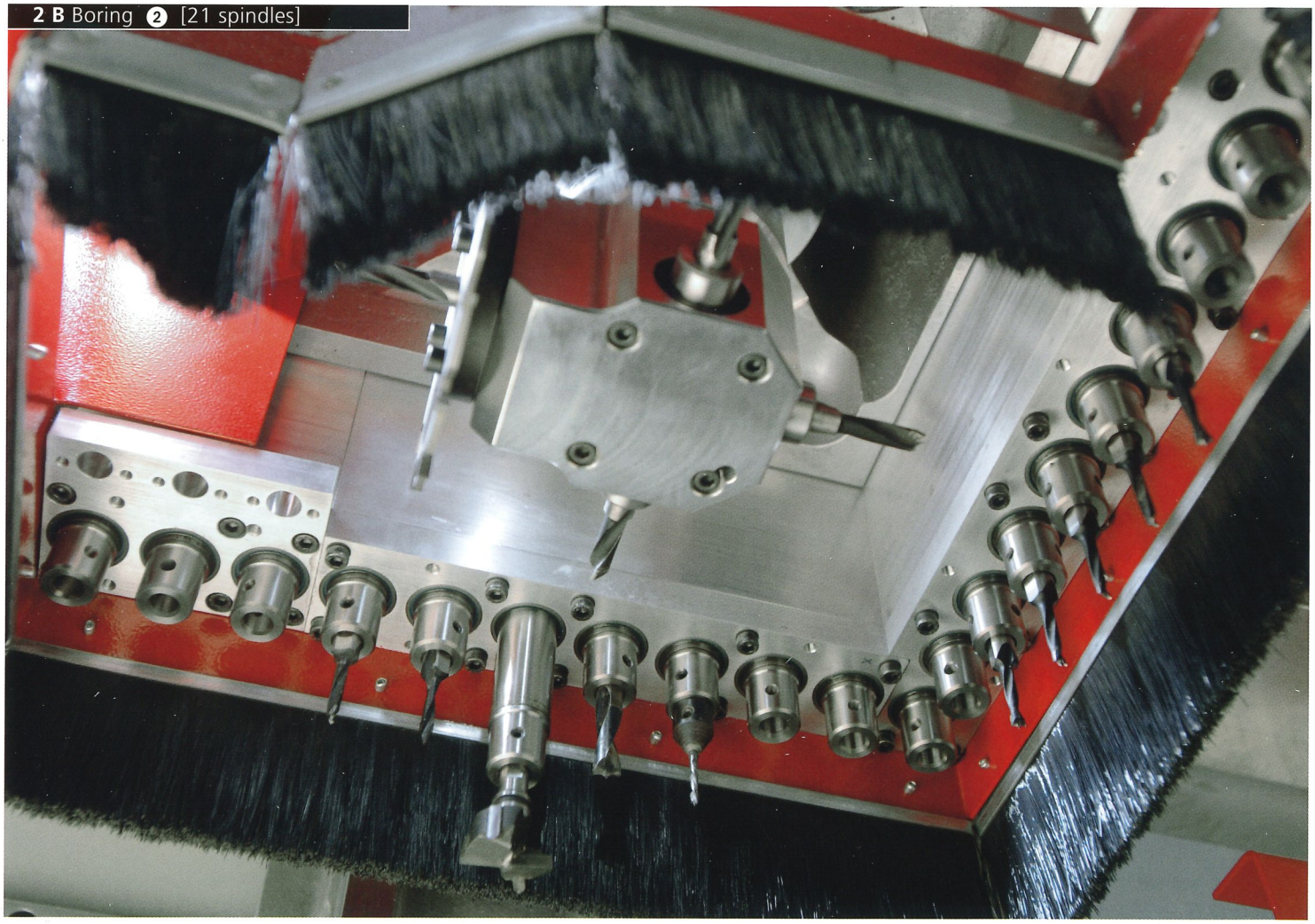
2. BIMA-boring/sawing unit
The additional IMA boring/sawing gear with 9.000 rpm can be configurated modularly for different vertical as well as horizontal boring spindles.
Optional:
Boring ①
- IMA boring gear 14 vertical spindles and 6 horizontal spindles, plus grooving saw 90° swivelling

or
Boring ②
- IMA boring gear 21 vertical spindles plus cross head 90° swivelling with 4 horizontal spindles and grooving saw

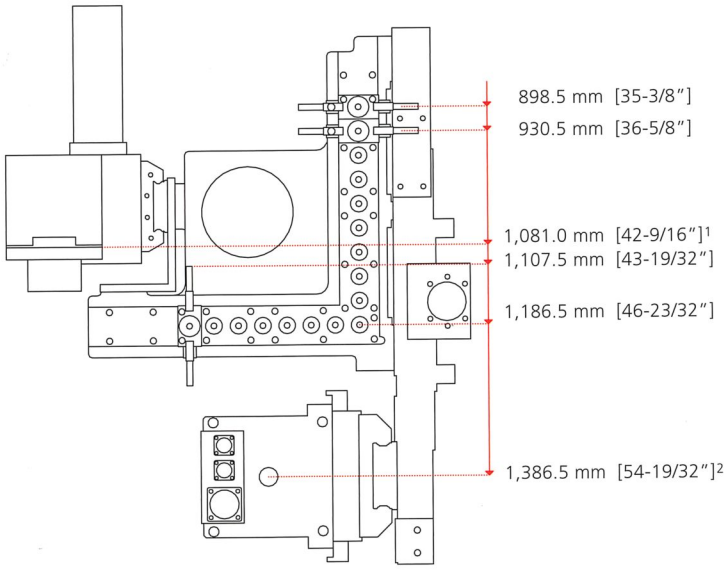
2 A Boring ❶ [14 spindles]



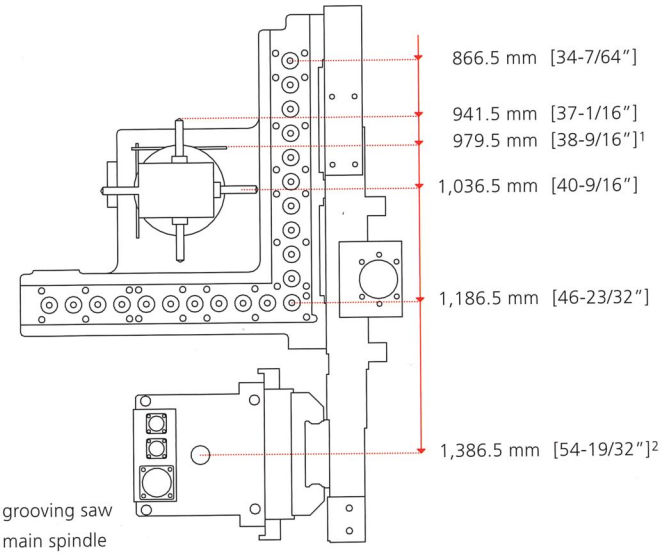
2 B Boring ❷ [21 spindles]



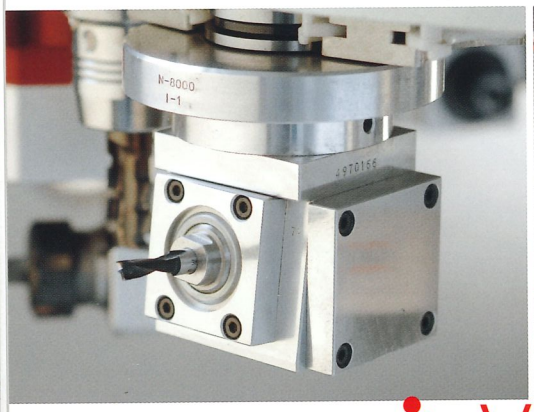
Boring ❶ [14 + 6 spindles]

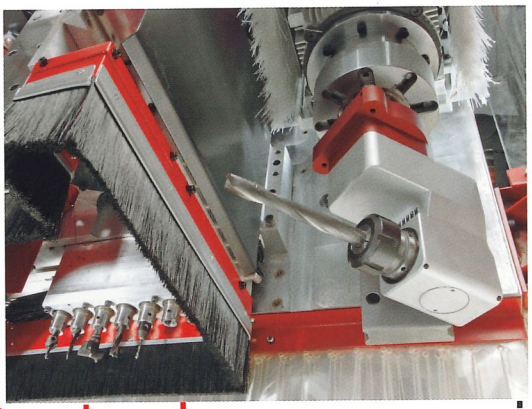


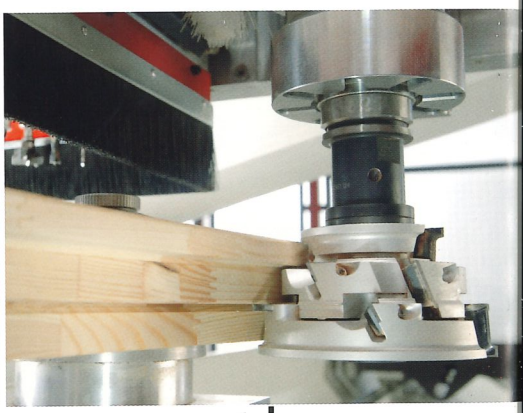
Boring ❷ [21 + 4 spindles]



1 grooving saw
2 main spindle







Varied processing options

Stairs, round arch windows, entry doors and doors, furniture doors, work tops, aluminium profiles or honeycomb panels – the range of application of BIMA 200 is flexible and offers many options.

Some examples for different processing options:

- Row and construction boreholes: boring head with high-capacity spindles 9000 rpm; milling: main spindle with 7,5 KW
- Horizontal boring unit in X- and Y-direction
- Grooving unit for back board grooves and cutting operation 90° swivelling
- Door production with lock case milling unit [adapter unit] for horizontal door processing
- Boring head [adapter unit] for hinge holes
- Processing of stairs with high-capacity 7,5 kW milling spindle
- High-capacity milling spindle for processing of wooden beams and round arch components for the window production

The table is used to clamp the panels for processing. The different support arms and suction plates can either be positioned via the control or manually, under consideration of the panel dimensions.

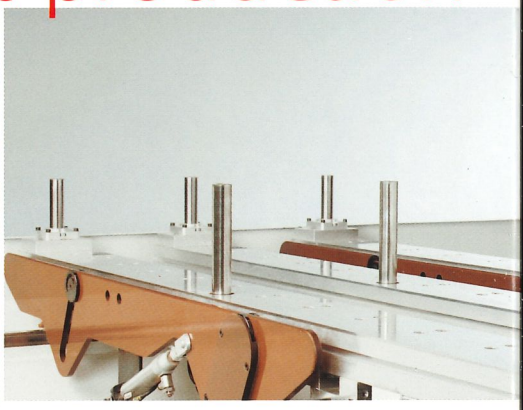
In y-direction the BIMA 200 can additionally be equipped with a second row of stops (each 1 rear and 1 centre stop per support arm). Panels up to a depth of 600 mm [23-$^5/_8$"] can be positioned at the centre stops, panels over 600 mm [23-$^5/_8$"] have to be positioned at the rear stops. The advantage of this allocation is that the reference edge always remains at the rear edge of the panel, no matter where it has been aligned – at the rear or in the centre.

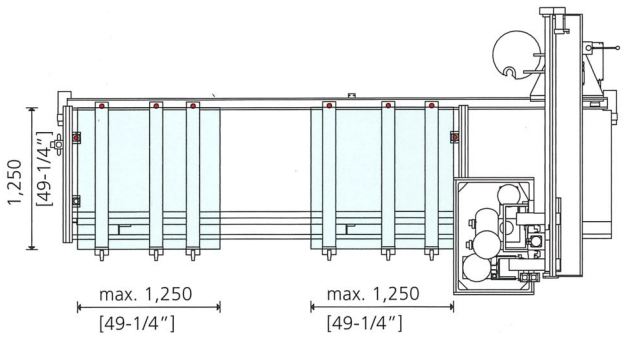
On the BIMA 200 it is possible to position two panels in y-direction successively per machine side: optionally 2 r.h. / l.h. panel or each 1 r.h. and l.h. panel.

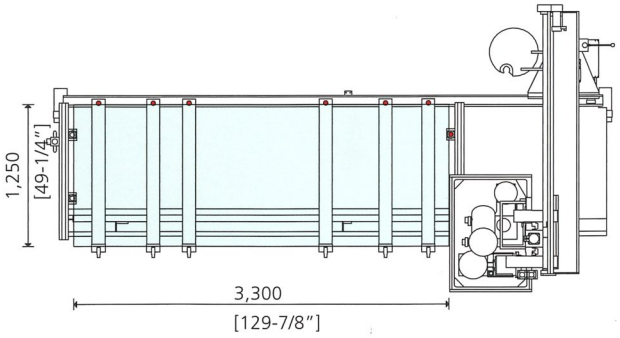
Further equipment options:

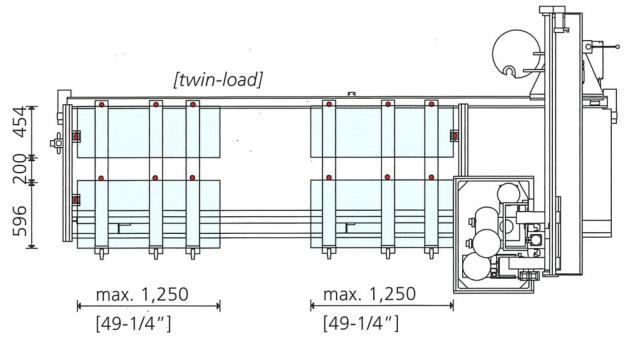
- If required: Application of pneumatical clamping elements for aluminium profiles (such as e.g. for window- and façade elements) on the support arms.
- Vacuum suction elements in varied dimensions for flexible production
- Additional equipment with LED-set-up table for precise and quick positioning of clamping elements and panels
- point laser for precise definition of measure

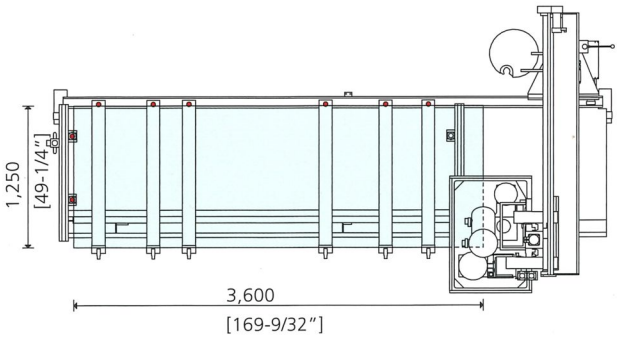
Efficient production











Dimensions in millimetre [inch].


BIMA 200

BIMA **200**
[Milling and boring machine]

OPERATING RANGE

X	3,300 mm (3,600 mm) [129-7/8" (169-9/32")]
Y	1,250 mm [49-1/4"]
Z	125 mm [4-59/64"]

MACHINE

Main spindle	7,5 kW
Tool changer	8-fold moving in x
Borer vertical	14 or 21
Borer horizontal	6 or 4
Grooving saw	90° swivelling
Sound level	Operation without processing < 80 dBA [dependent on tools, feed speed and material]
Central extraction connection	∅ 250 mm with slider control

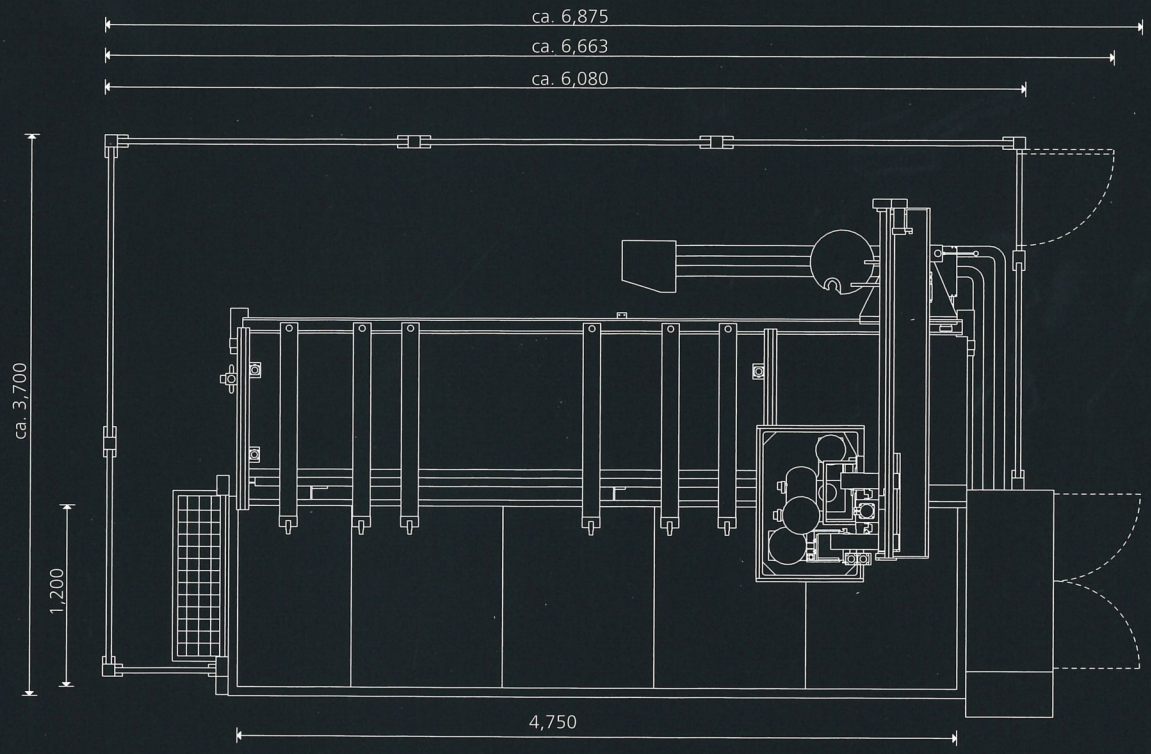
ADDITIONAL EQUIPMENT

	LED-set-up aid
	diverse adapter units [to be changed manually]
	chipping belt
	automatically controlled support rails
	pneumatic suction elements [e.g. for window elements or aluminium profiles]

Subject to technical modifications and amendments and to further developments. The offer, respectively the order confirmation is relevant in either case! The picture of the machine could have been taken without complete protection devices. The protection device is part of the scope of delivery. Photos could also be options, not being part of the scope of delivery.

Stand February 2007

BIMA **200**



All dimensions in millimetre.

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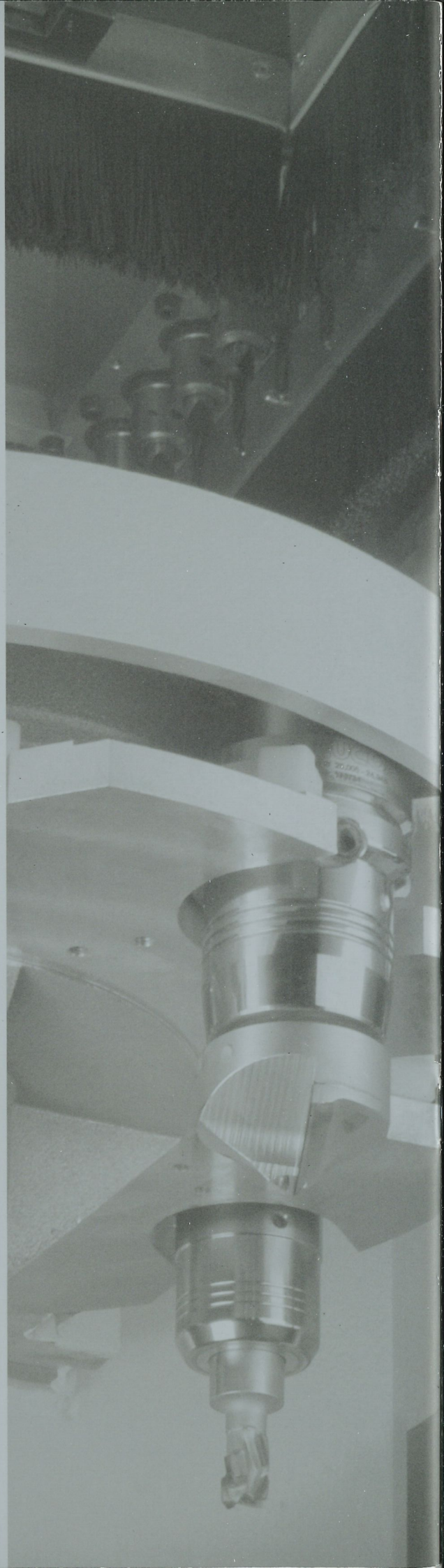

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