Design + interior furnishing: Messrs. Protze GmbH, D-91088 Bubenreuth

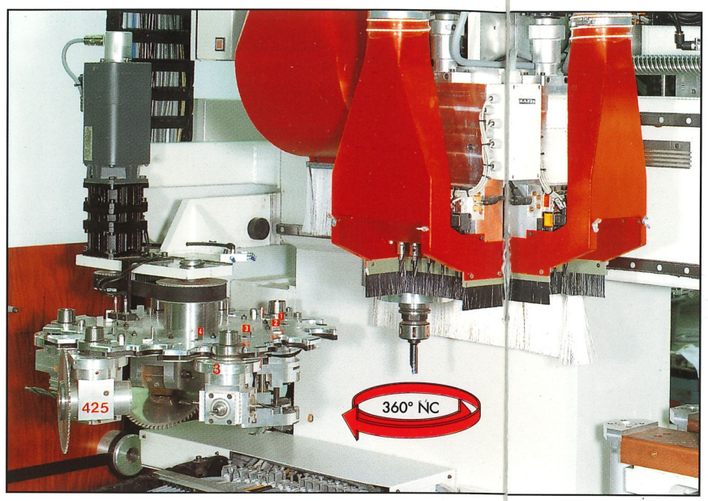
BIMA-Center 610/610 V

4-axes processing center for custom-made solutions

IMA

Universal processing center

BIMA 610/610 V

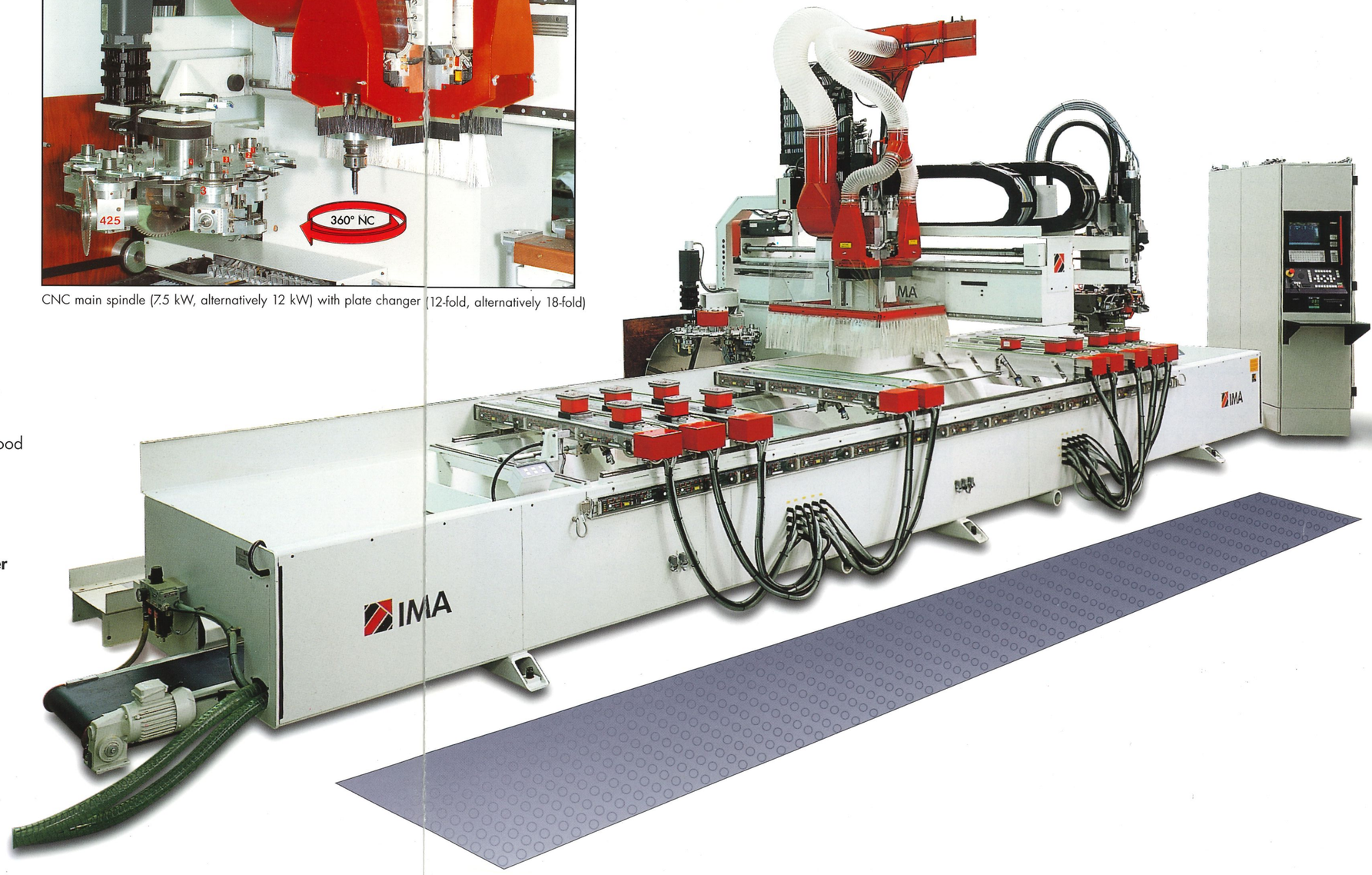


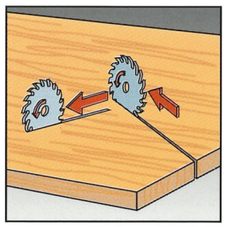
CNC main spindle (7.5 kW, alternatively 12 kW) with plate changer (12-fold, alternatively 18-fold)

The BIMA 610 unites the latest developments in CNC-technology in one machine group. It is the result of a consequent and steady development in CNC-technology over years with the aim of a perfect complete processing of workpieces in one setting. This means especially edgebanding being integrated into the processing center.

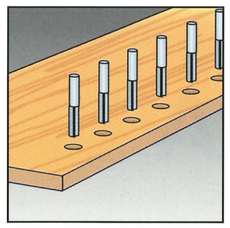
The BIMA 610 has been designed as a modular assembly system and may therefore be equipped with many different processing modules corresponding to the needs of the customer. It can be used as:

- a pure **router** with 1 or 2 main spindles for solid wood processing such as
  - Door processing,
  - Solid wood furniture production
- a **universal processing center** for
  - Door production
  - Interior furnishing
  - Shop fitting
  - Furniture production
- an **edgebanding machine** for
  - Furniture industry
  - Shop fitting
  - Interior furnishing



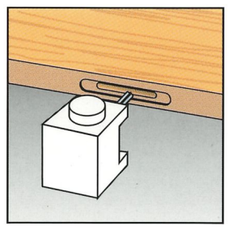


formating

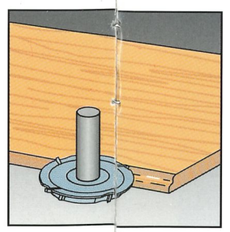


hole row boring

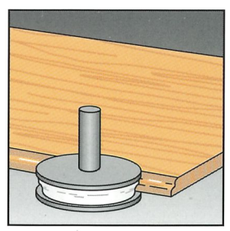
horizontal boring



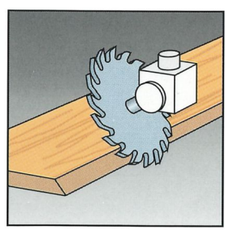
horizontal milling



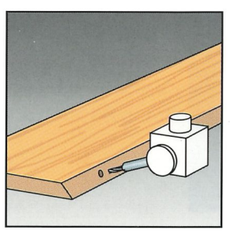
profile milling



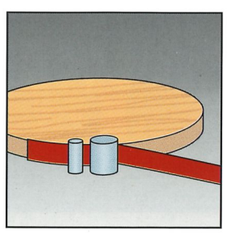
sanding



mitre sawing

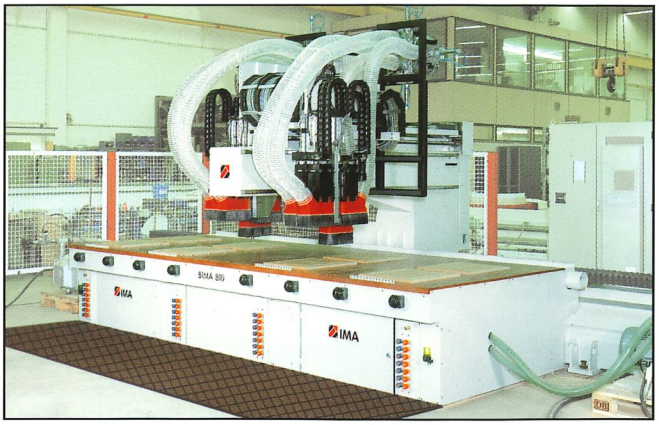


hinge hole drilling

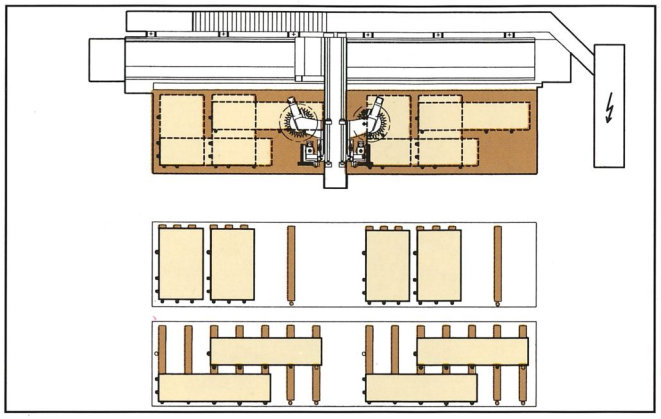


edge banding

Design variations

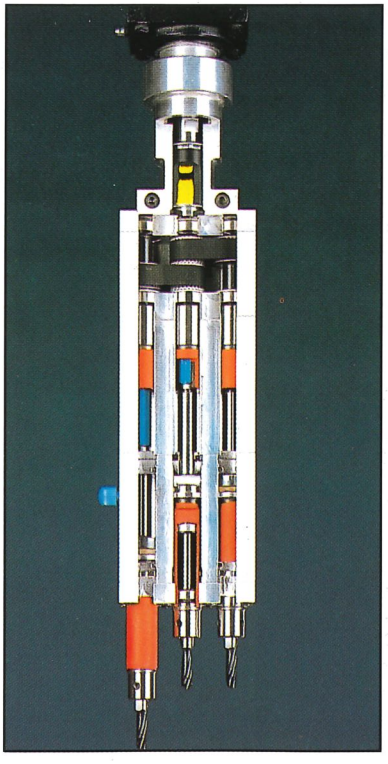


BIMA 610 with continuous worktable and 2 main spindles for split panel loading.

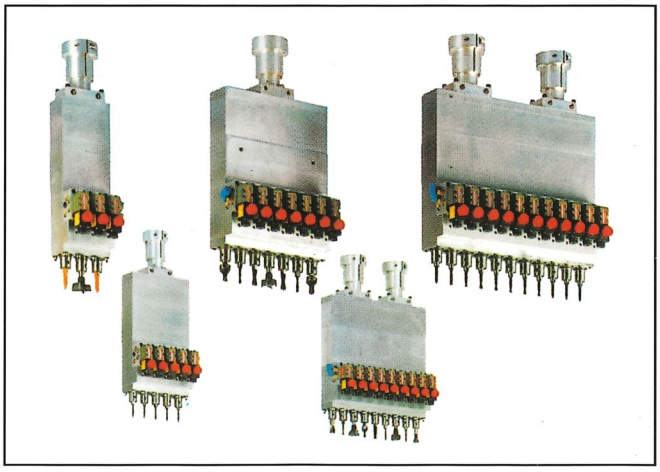


Loading possibilities when using 2 main spindles.

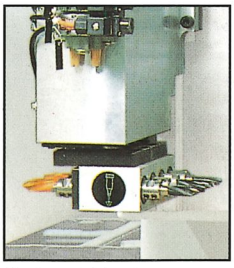
Optionally, the BIMA 610 may be equipped with a chip transport band. Chips and residuals will be removed automatically and will therefore impair neither the feeding nor the processing.



Precise and clean borings in the long run, even tear-free through-hole borings are possible with these unequaled boring units. Boring spindles kept in 3-fold ball bearings move up to 9000 rpm (speed may be regulated from 6000 to 9000 rpm) and see to short boring times. Another advantage: The units are maintenance free – no lubrication necessary.



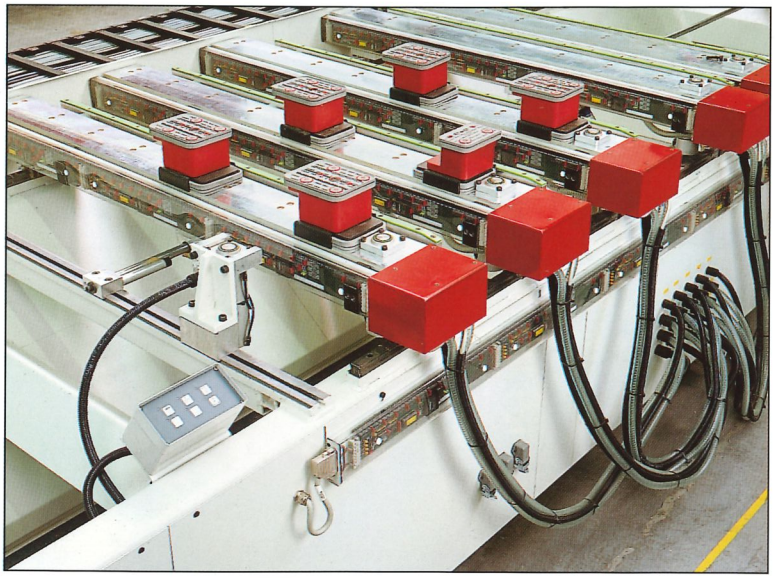
Vertical boring gear



Horizontal boring gear

An extensive programme for vertical and horizontal boring gears is available for the needs of the furniture industry.

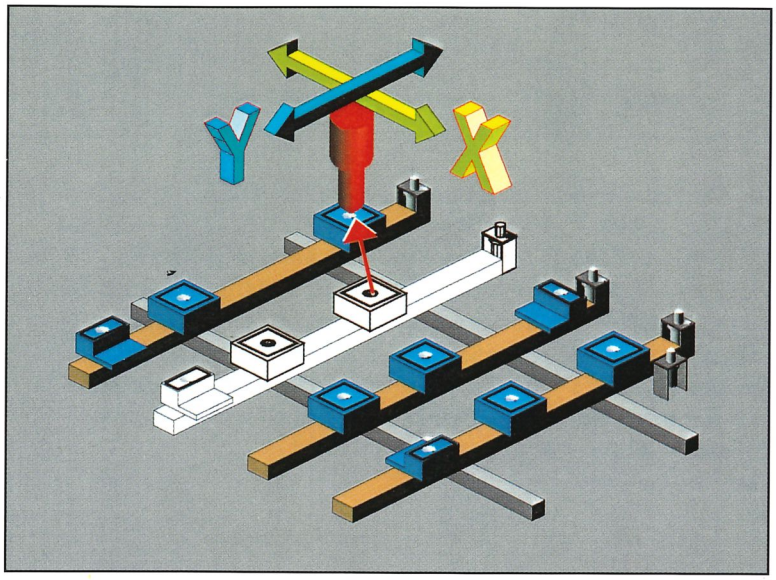
Save setting times



The quick and convenient feeding of the processing center is an important criterion for its economic efficiency. Single and order batch production require a quick positioning of the vacuum clamping blocks. We offer different solutions for it:

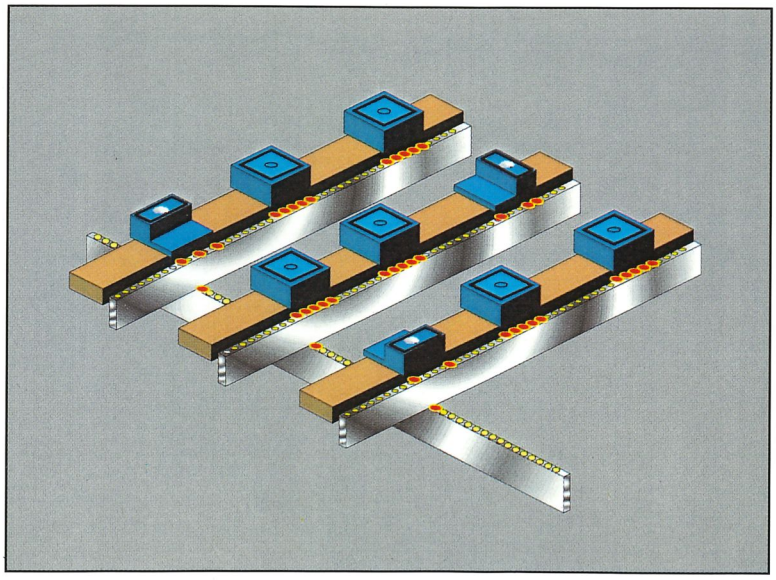
Vacuum clamping block positioning with setting adapter.

The tappet is exchanged directly from the vacuum clamping block depot into the main spindle. It clamps the hoseless vacuum blocks which are carried by the head assembly to the required position (see also following drwg.)



Rotatable about the C-axis

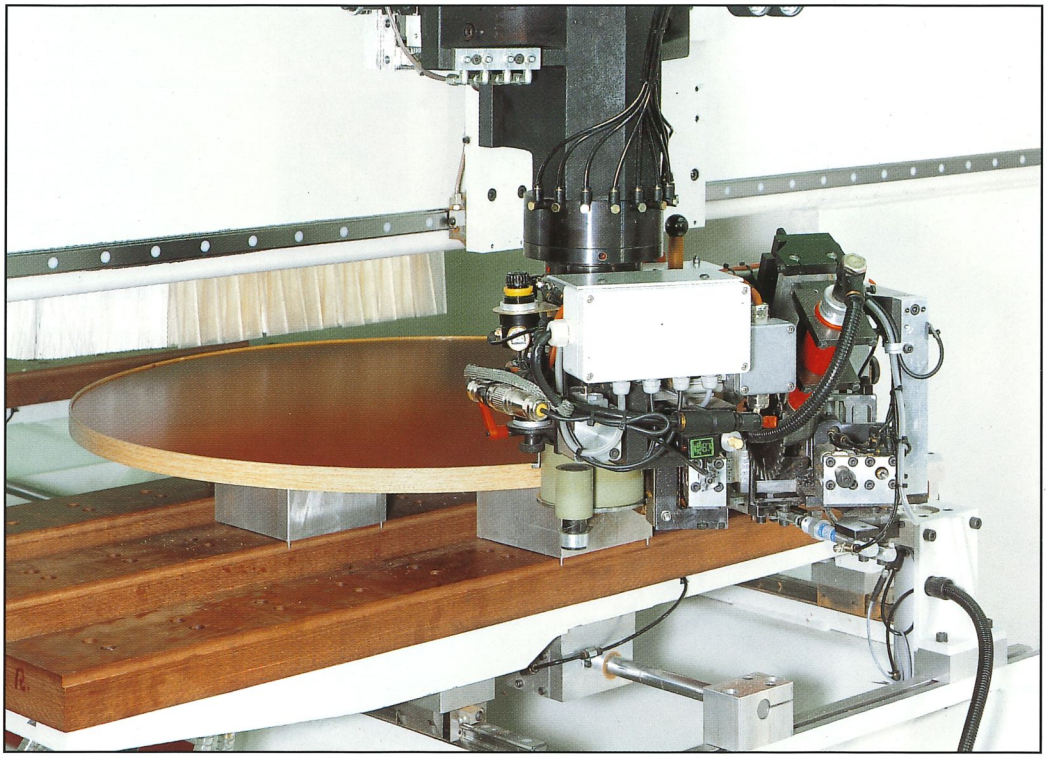
For the panel clamping different vacuum clamping block types in different sizes are available. Advantage: Smaller vacuum blocks may be turned by 90° over the C-axis of the main spindle (see drwg.) – necessary for small workpieces or panel cuttings.



Quick setting for changeable loading: LED-setting aid

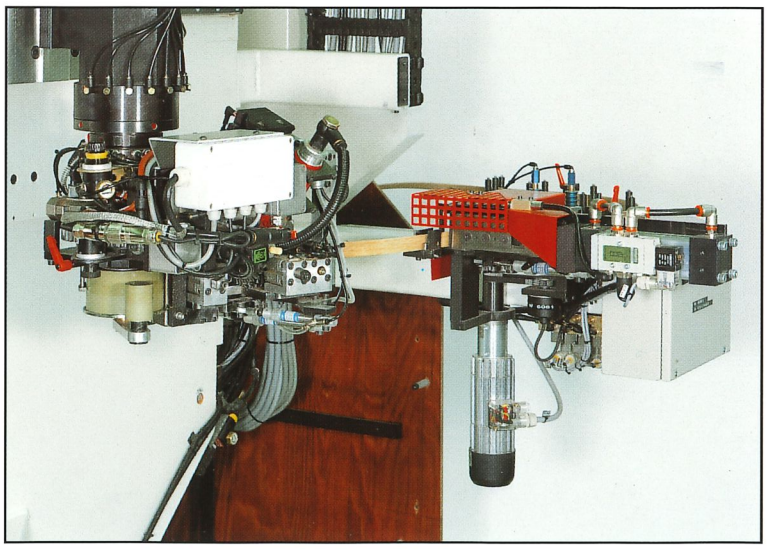
To position the vacuum blocks even quicker, LED illuminated bands are mounted to the support rails. The individual block positions are indicated via the CNC controller. This means that the operator may manually position the vacuum blocks on the other machine side while the machine is processing a panel on one processing side. There will be no time lost for preparation!

360° butt joint edgebanding



In 1987 IMA introduces as the first manufacturer worldwide a processing center with edgebanding on the occasion of the LIGNA in Hannover and becomes a pioneer of the edgebanding in connection with processing centers. Since then several hundred machines have been installed in the furniture industry and the experience gained have been uncompromisingly converted into gluing techniques, which are unequaled up to now.

Edgebanding requires detailed precision from the machine and knowledge of glue and material from the user so that a reliable and perfect result will always be reached. We do not only offer simple standard solutions but will also inform you in detail about the different possibilities – and with this the best solution for your special needs.



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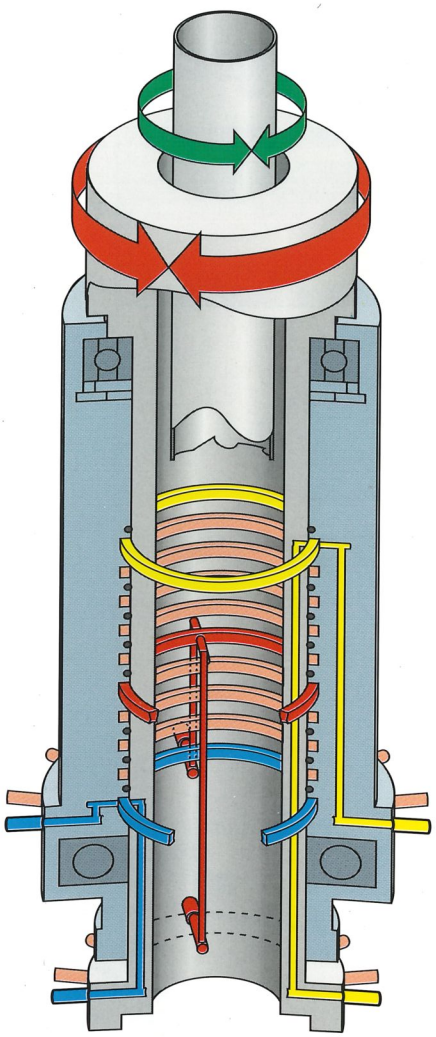
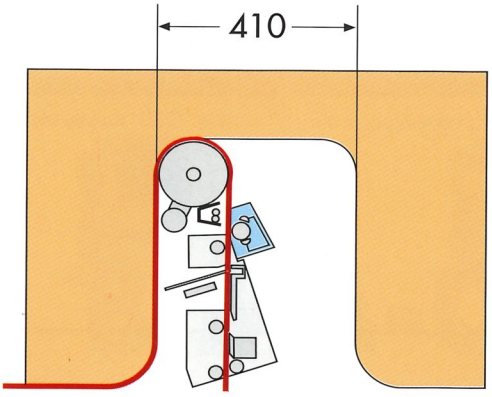


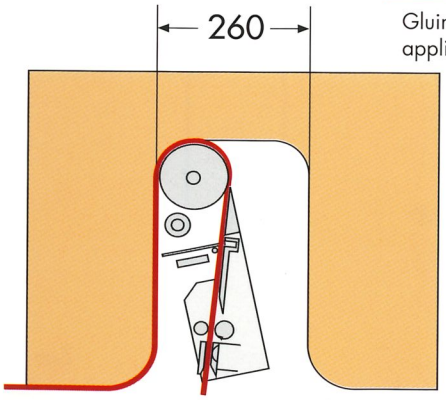
Reliability by means of precision in detail

To ensure that the gluing unit will work reliably for a long time we have removed disturbing and sensitive pneumatic hoses from the pneumatic supply. The pneumatic supply of the gluing unit is carried out by a mechanical turning distributor which is, therefore, free of disturbances. The energy supply tubes are situated in the middle of the axis and protected against heat.

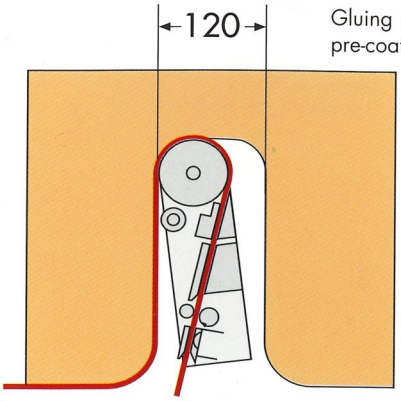
Important for the gluing of small and narrow radii is the feed regulation of the edging material. An AC-servomotor ensures that for small curves and radii the feed may be regulated towards zero. This guarantees a strong grip of the edging material towards the workpiece.



Gluing unit, butt joints on 4 sides, with direct glue application



Gluing unit, butt joint on 4 sides, for pre-coated edging material



Gluing unit, 3 sides, for pre-coated edging material

The perfect solution for your special requirements

Different gluing units may be used on the BIMA 610 V:

- **Gluing unit for pre-coated edging material**
- **Gluing unit with direct coating of the edging material within the gluing unit**

These two variations may be used for
- **360° butt joint edgebanding**

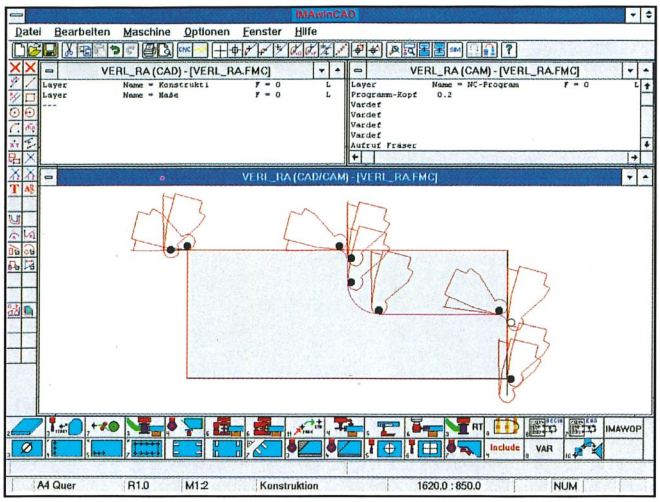
or
- **3-side edgebanding**

From manual to fully automatic creation of CNC programs

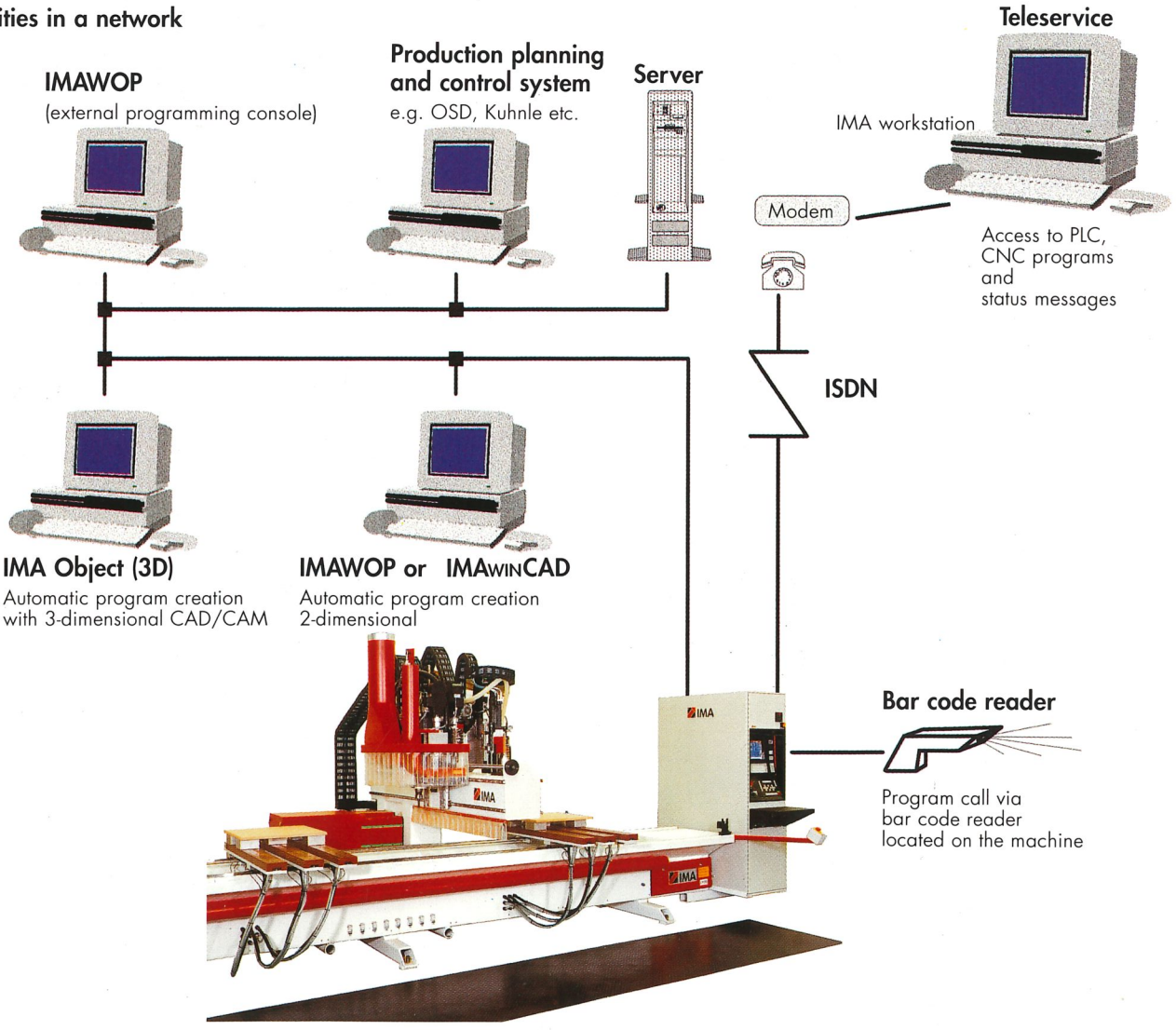
User comfort with IMAWOP for Windows (WOP–Workshop Oriented Programming):

IMAWOP is a workshop oriented user interface running under WINDOWS. This very user-friendly man-machine interface does not require any CNC knowledge by the operator. In addition, IMAWOP includes a wide range of macros for all types of machinings as well as a tool manager.

IMAWOP offers graphic representation of part programs. An integrated postprocessor generates an executable CNC program and optimizes all tool paths.



Possibilities in a network



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