



COMBIMA

**...for the most exacting
tasks of edge processing**



COMBIMA I

Rational production of small batch sizes



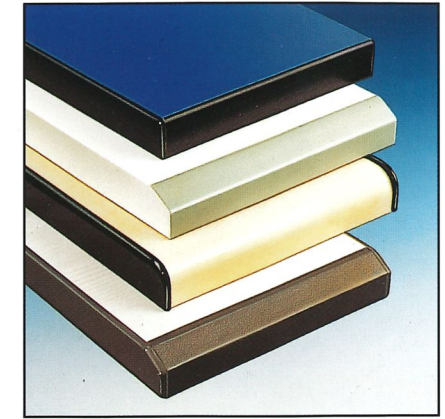
Vacuum infeed table enabling a precise and automatic panel infeed.

Small size order batch production of furniture parts made to customers' specifications, i.e. with differing length and width dimensions, requires a length and width independent operating method.

The COMBIMA I, a left- or right-hand single-sided machine optimally meets these requirements. While on a double-sided machine the last workpiece must always have left the machine prior to any width adjustment, COMBIMA I works continuously.

This method of working is particularly recommended when workpieces with a defined cutting allowance are to be processed which arrive parallel and perfectly rectangular from the dividing saw. Specific additional workpiece infeed equipment is available according to requirements.

The workpieces illustrated on this and the following pages clearly show the wide range of edge design possibilities COMBIMA offers the user.



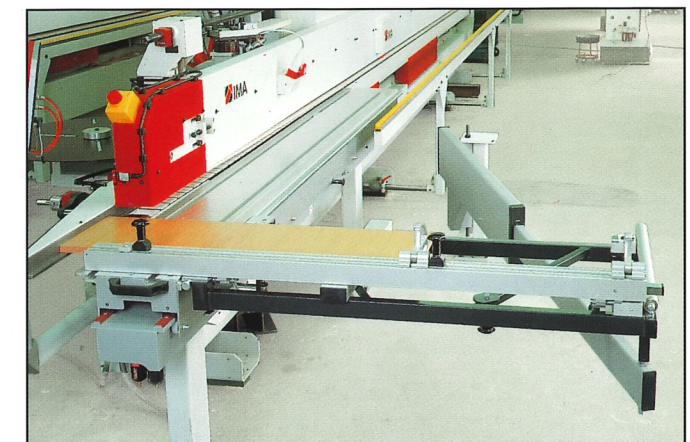
Perfect edges even with small batch sizes and narrow parts.



Single sided COMBIMA with the processing units

- panel sizing
- edge banding
- fine finishing

down to the ready-to-assemble furniture element.

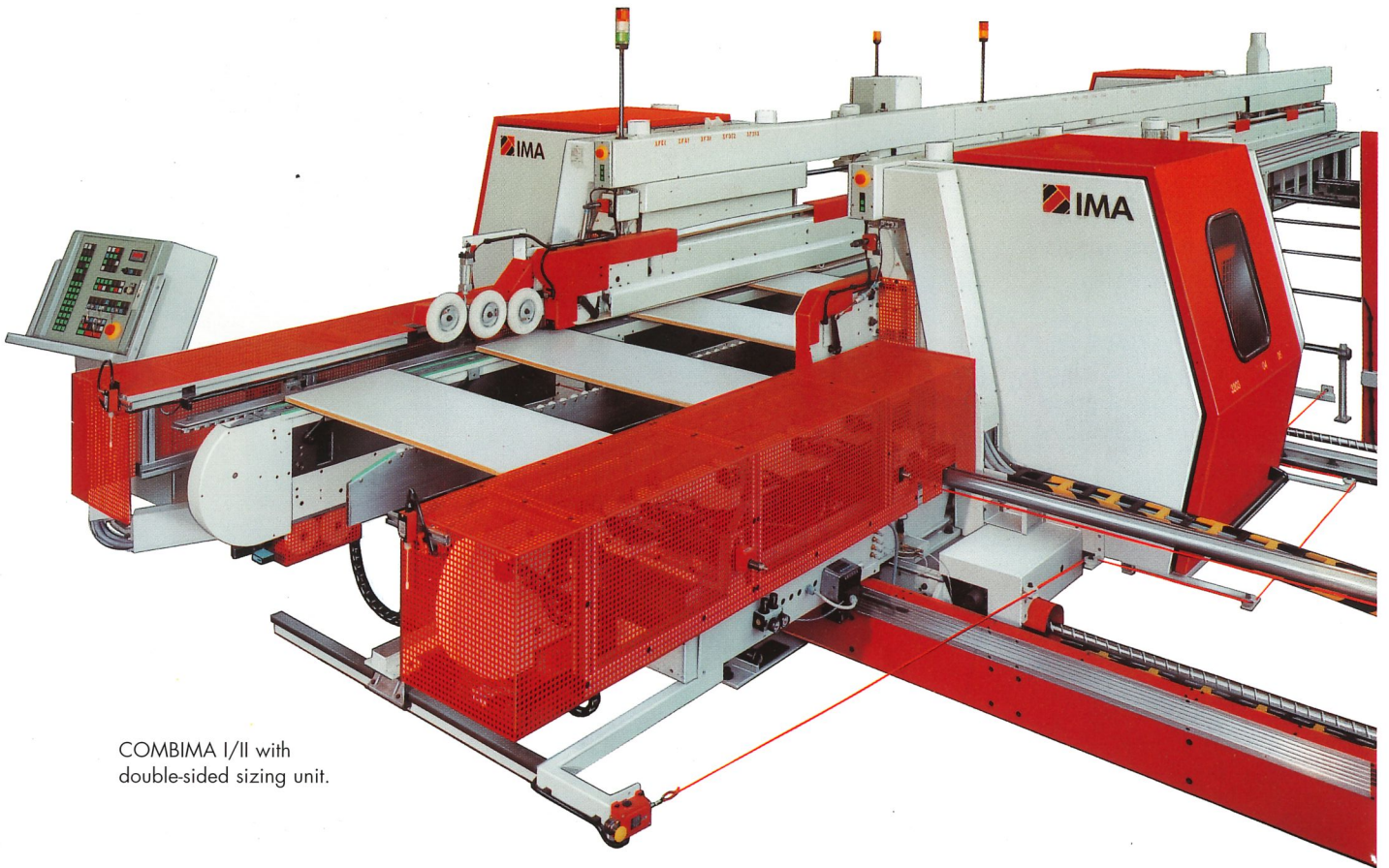


Infeed table for manual infeed of small panels (cross processing).



COMBIMA I/II

High efficiency also with minimum batch sizes

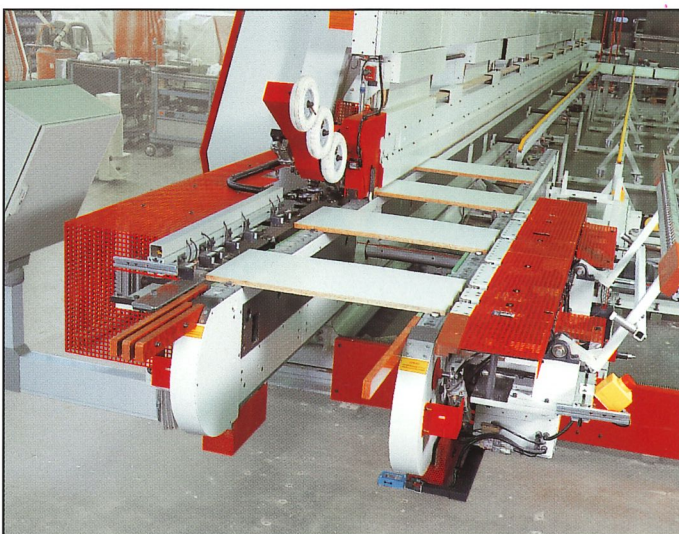


COMBIMA I/II with double-sided sizing unit.

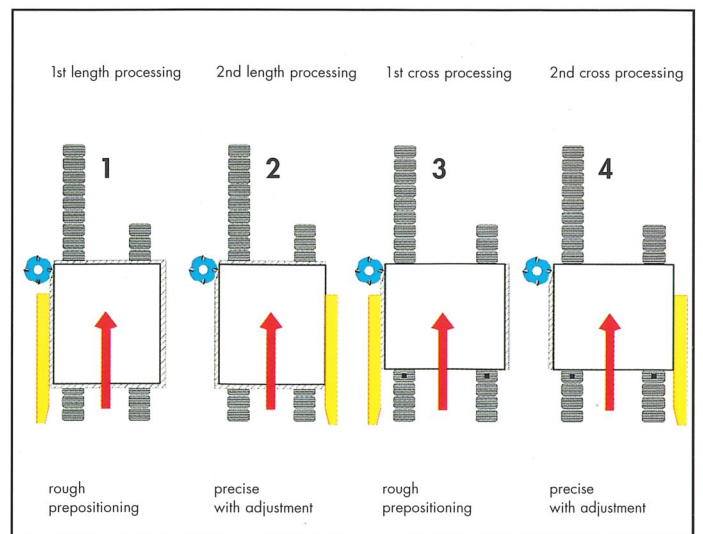
With this COMBIMA design synchronously running precision roller bearing chains with dogs ensure rational production of small batch sizes with dimensional and angular accuracy. On the long side the workpieces

are tenoned, edge banded and finish processed. On the short chain track on the opposite side, precise parallel panel sizing is simultaneously made. Once the workpiece has left the panel sizing area, the width of the

following workpieces is set. Precision linear guides combined with recirculating ball screw spindles permit the change-over to a new width dimension in seconds.



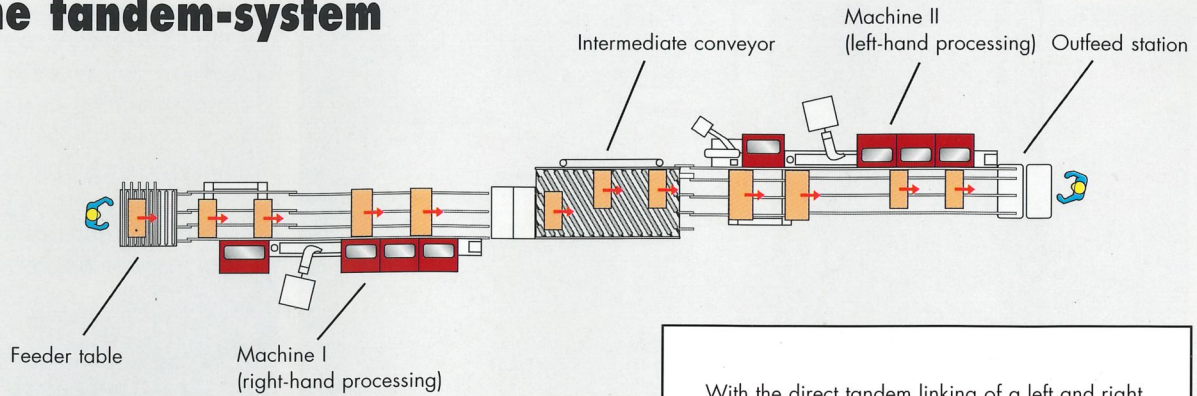
Single-sided sizing unit and parallel chain design.



Operating sequence for four-sided processing of panels with common tolerances.

COMBIMA integrated into...

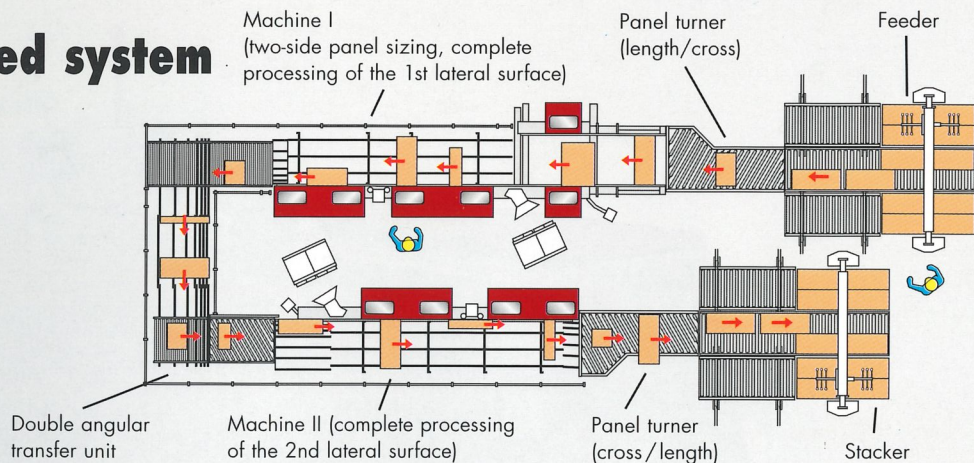
...the tandem-system



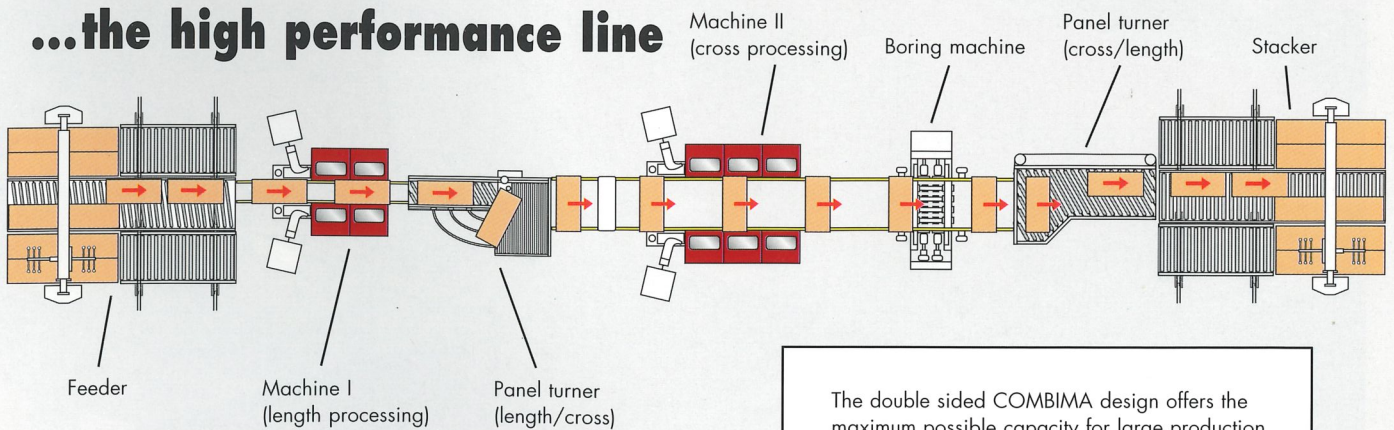
With the direct tandem linking of a left and right hand machine to form a machine system, narrow workpieces can be processed double sided.

...the U-shaped system

A capacity comparable to the COMBIMA II is achieved by linking 2 single sided machines with the corresponding intermediate transport.



...the high performance line



The double sided COMBIMA design offers the maximum possible capacity for large production series. Capacity is doubled by linking machines for longitudinal and cross processing.

COMBIMA II

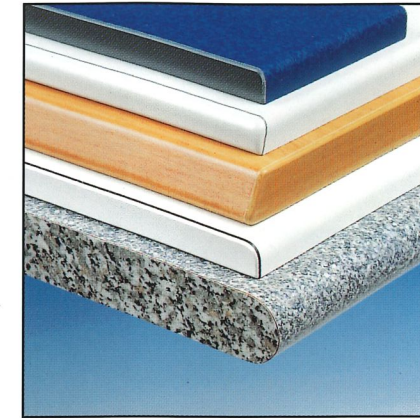
Complete edge banding



COMBIMA II infeed situation: panel transfer in one plane (optional: 2nd plane).

The sturdy and heavy construction of the COMBIMA, together with a precision ball bearing roller chain for easy running ensures accurate, parallel and precisely rectangular panel sizing as well as continuous profiling, edge banding and finish processing without additional transfer or conveying units.

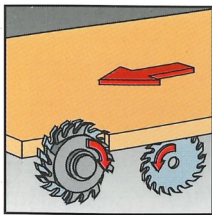
COMBIMA: precisely converts surface laminated panels into furniture parts or construction elements.



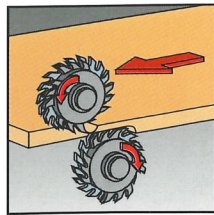
Room doors and furniture elements – some examples of the many possibilities the COMBIMA range offers.



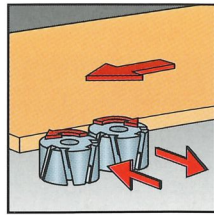
All that is possible - with maximum precision



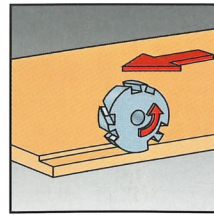
Scoring/hogging



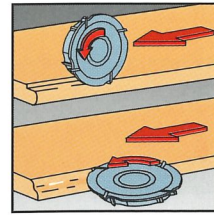
Double hogging



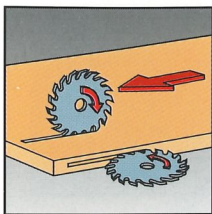
Jump milling



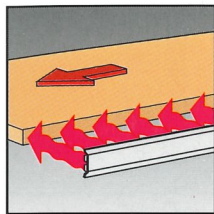
Scoring/flat surface cutting



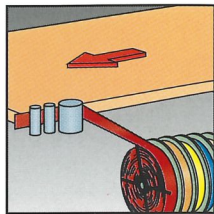
Profile cutting/flat surface cutting



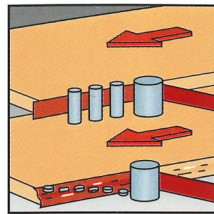
Grooving



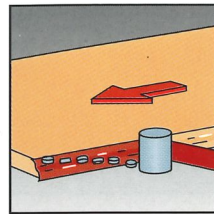
Heating area



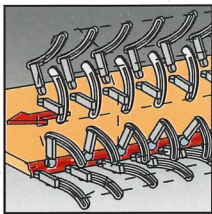
Edge banding



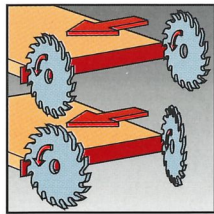
Profile edge banding



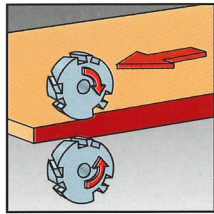
Profile pressing



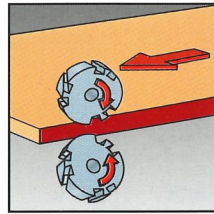
Multi-pressure track



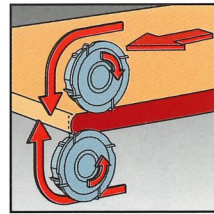
End trimming



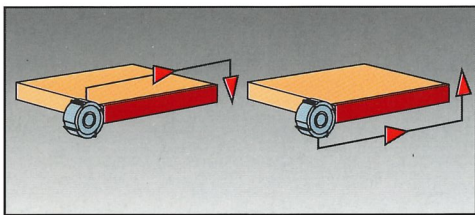
Rough milling



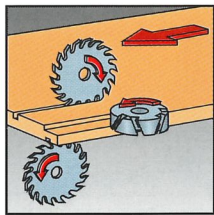
Chamfer milling



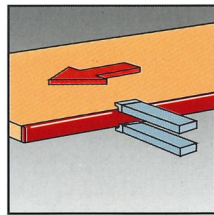
Contour trimming



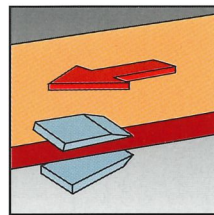
Multiple Machining Unit (M.M.U.)



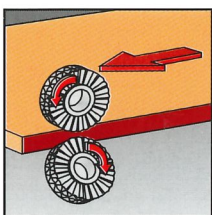
Universal milling



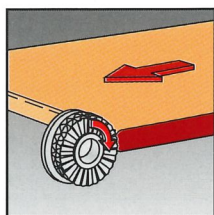
Profile scraper



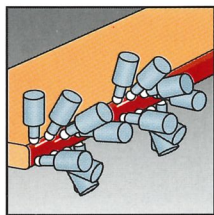
Flat scraper



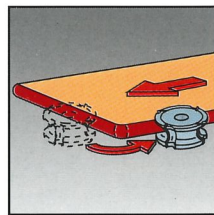
Buffing



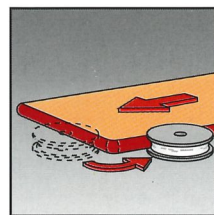
Corner contour buffing



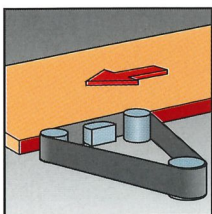
Smoothing



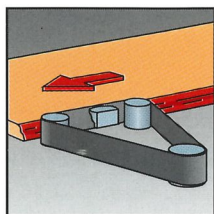
Corner rounding



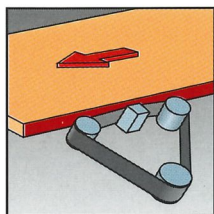
Corner rounding/sanding



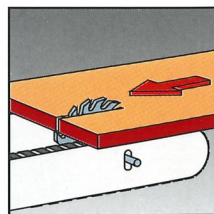
Band sanding



Profile band sanding



Chamfer band sanding



Splitting saw



IMA

IMA Maschinenfabriken
Klessmann GmbH
D-32292 Lübbecke, P.O. Box 1246
D-32312 Lübbecke, Industriestr. 3
Phone 05741/331-0
Fax 05741/4201