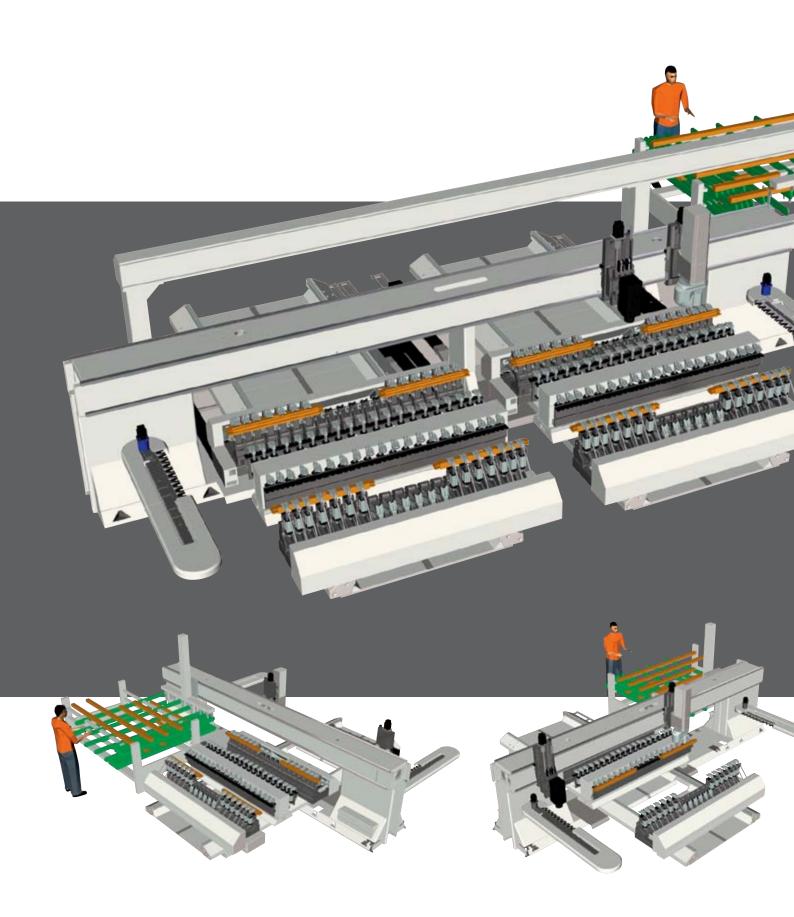


cnc machining cell for doors, windows and door frames



cnc machining cell for doors, windows and door frames

• REALISATION OF EVERY TYPE OF DOOR AND WINDOW WITH ANY DESIGN CONCEPT

The Integra cell allows to realise prefinished doors and windows or storm-proofing independently from work piece joints, profiles and hardware.

MODERN TECHNOLOGY FOR HIGH FLEXIBILITY AND EVERY USAGE

The worktable is designed for the execution of every type of profile ensuring the highest finishing quality. The spindles provide high power at low rpm and fast tool changing in order to reduce down-times to a minimum.

AUTOMATIC WORKCYCLE AND INTEGRATION WITH OTHER MACHINES

Completely automatic work cycle and loading/unloading buffer: the very best productivity with minimum intervention by the operator.









cutting-off. planning.



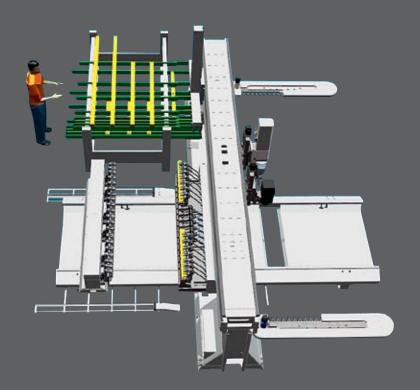
tenoning.
routing.
profiling.
sanding.

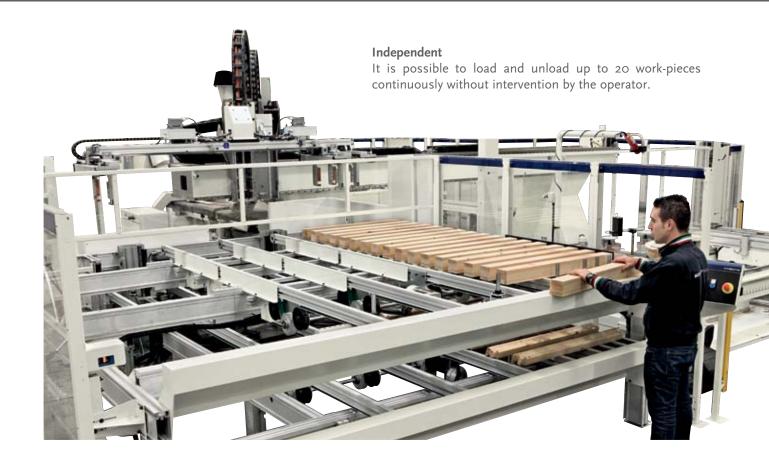
integra easy to use, independent, precise

Easy to use

The fully automated cycle allows control of workpiece dimensions and of all machining to be performed, including loading/unloading.





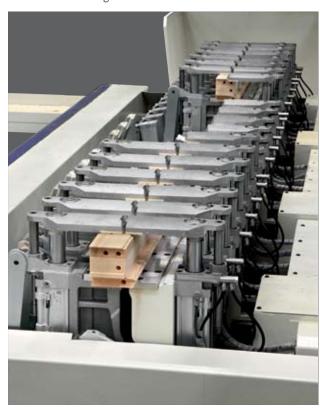


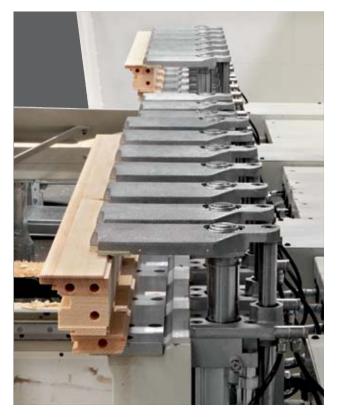


Precise

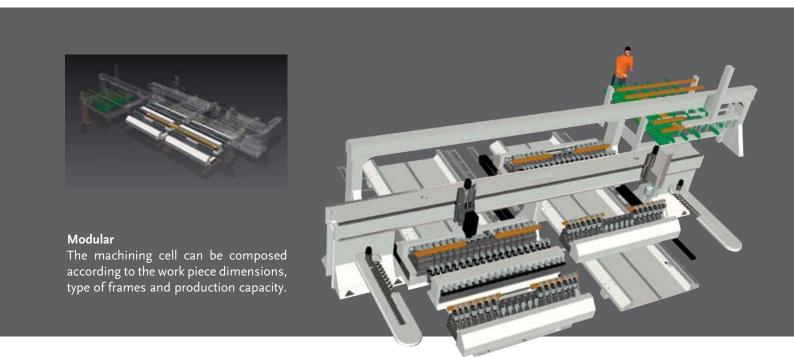
The **Combiflex worktable** ensures the work piece is correctly clamped independently from the type of profile and section to be executed. The direct exchange between collets avoids errors of parallelism and straightness. According to the machining cell configuration, the Combiflex worktable makes it possible for the processing of 2 to 8 work pieces at the same time, even with different length, width and height. According to the profile to be executed, it is also possible to re-clamp the work piece with the same carriage and in different positions or to have more exchanges of the work piece between the carriages.

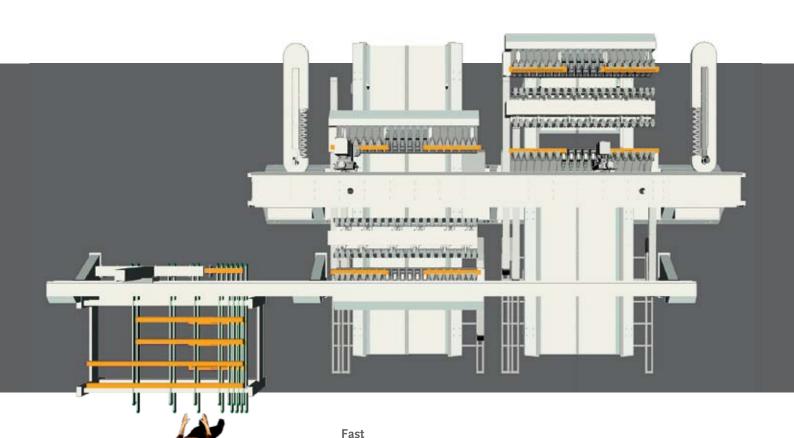






integra modular, fast, complete





During the working cycle the loading/unloading of work pieces is in masked time and it is also possible the superimposition of the working cycle during the tenoning, profiling and drilling-routing operations. In this way it is possible to have high production capacity of up to 75 door and window frames/working shift.





Complete

Thanks to the possibility of integrating the **FX bar worktable** it is possible to make arches, carry out storm proofing on door panels and frames, solid shutters and louver shutters, to square wooden door panels and panels in general, with the operator only required to load/unload the workpieces.



technology and high performance without half-measures



The **BRC** drilling, routing and cuttingoff machining head ensures high flexibility and productivity without using commercially available driven heads.

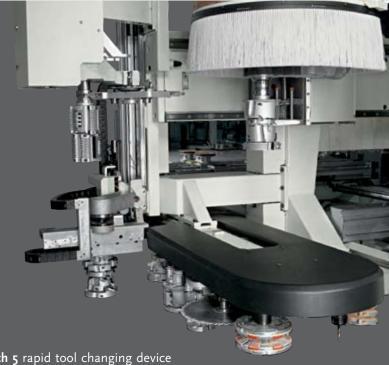






Spacious

According to production requirements and the type of door and window frames, the machine can be fitted with toolholders of up to 48 stations, positioned in sequence, for a **total capacity of more than 300 tools.**

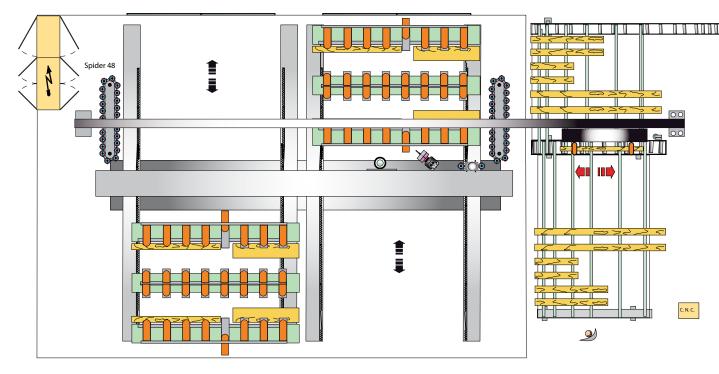


The Mach 5 rapid tool changing device enables electrospindle tool changing in only 5 seconds (wood-to-wood), reducing down-times to a minimum

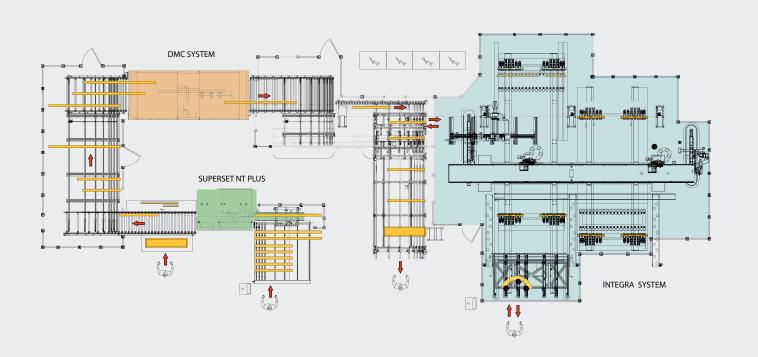
during the processing.

Fast

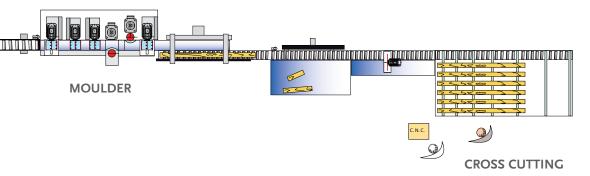
integra system the integration of working process



CELL







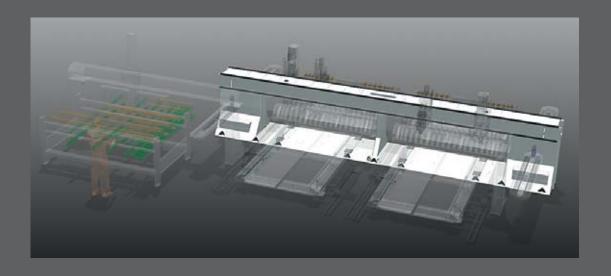
Complete working process

According to production requirements, it is possible for the integration of:

- Cutting-off and cutting optimisation
- Planing and glazing bead recovery
- Sanding
- Insertion of glue and dowels
- Glazing bead recovery
- Laser or Ink-jet work piece marking



leading mechanical structures and electronics



Structure

Monobloc structure designed with the assistance of solid modelling systems (mechanical joints avoided). All mechanical machining is performed on CNC machining centres with a single positioning operation to guarantee precise processing.



Drives

The positioning of all working units is through rack or female screw with recirculating balls, according to the movement of weight, and slides along prismatic guideways. Brushless Motion Control with digital drives ensuring **high precision in reduced production times.**



Operator interface

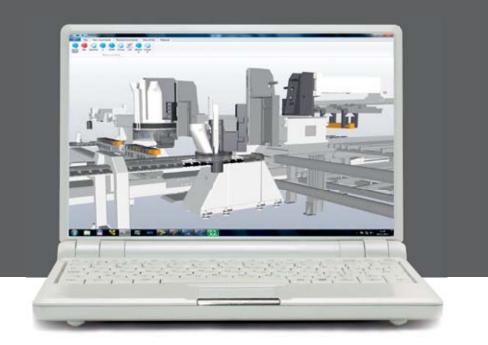
Maestro makes easy and intuitive the programming. It is possible to:

- manage all the machining process included working plate
- create mix of production
- generate programs using an Editor with graphical icons
- signal the presence of wrong pieces
- keep in memory all tools data
- guide the operator during the machining with graphic support
- visualize the diagnostic and data of production made/to make

Simulator

The **Proview** simulation software allows an accurate simulation of the programs to be run in the machine for:

- collision checks
- cycle time and productivity checks
- machining operation type and position checks

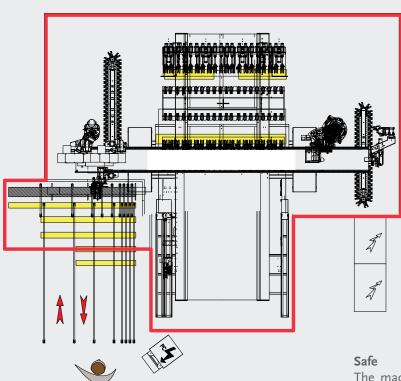


sav€nergy, high performance and energy saving

Sav€nergy

- Optimum feed speed depending on the material and tool
- Recovery of energy produced during electrospindle braking
- Optimisation of compressed air consumption
- Optimisation of vacuum pump speed of rotation, depending on the vacuum required
- Electrospindle heat exchanger management, depending on the operating temperature
- Automatic switch to stand-by for motors not being used for machining, manual or NC
- Opening of the exhaust outlets related to the machining in progress.





The machining area is separated from the operators position: the operator works in completely safe conditions. Upon request is also available the soundproof enclosure.



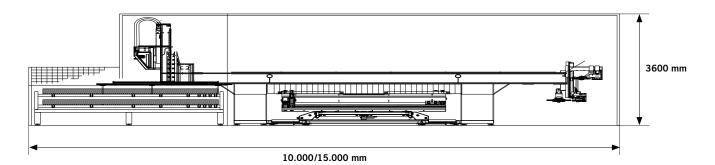
INTEGRA

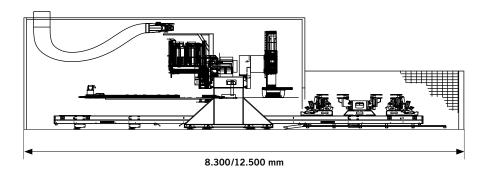
technical specifications

CNC MACHINING CELL FOR DOORS, WINDOWS AND DOOR FRAMES		INTEGRA
Min/max working length	mm	210 ÷ 3200 (opt 6500)
Min/max working width	mm	30 ÷ 220
Min/max working thickness	mm	20 ÷ 100 (opt 160)
Real distance under worktable	mm	110
Height of tenoning from worktable	mm	1020

INTEGRA

overall dimensions





The technical data can vary according to the requested machine composition. In this catalogue, machines are shown with options. The company reserves the right to modify technical specifications without prior notice; the modifications do not influence the safety foreseen by the CE Norms.

SINGERT





