

accord 25 fx

numeric control machining centre



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numeric control **machining centre**

Machining centre providing excellent performance with minimum investment. Designed for small and medium workshops, it combines high-tech performance with extreme user-friendliness for flexibly to produce doors, windows, stairs, solid wood parts and for machining panels made of wood and other materials.

VARIED PRODUCTION

Possibility of producing various types of products thanks to the increased machining dimensions and a large number of tools always available within the machine.

HIGH QUALITY FINISH

Top level precision and finishing on the entire machining area, thanks to the mobile gantry structure and the machining units designed for intensive use.

SMART PROGRAMMING

Thanks to the Xilog Maestro software suite developed by SCM, programming is easy, intuitive and effective. Now enhanced with new integrated modules:

- **Maestro 3D**, for 5-axis machining of 3D surfaces
- **Maestro WD**, for designing door and window frames
- **Maestro Pro View**, for simulating in the office the machining to be carried out on the machine
- **Maestro APPS**, a library of functions developed by SCM for producing doors, windows, stairs, furniture and furnishing elements.





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technological **advantages**



LARGE WORKPIECE MACHINING

The considerable vertical stroke allows **workpieces up to 250 mm in height** to be machined using large tools.



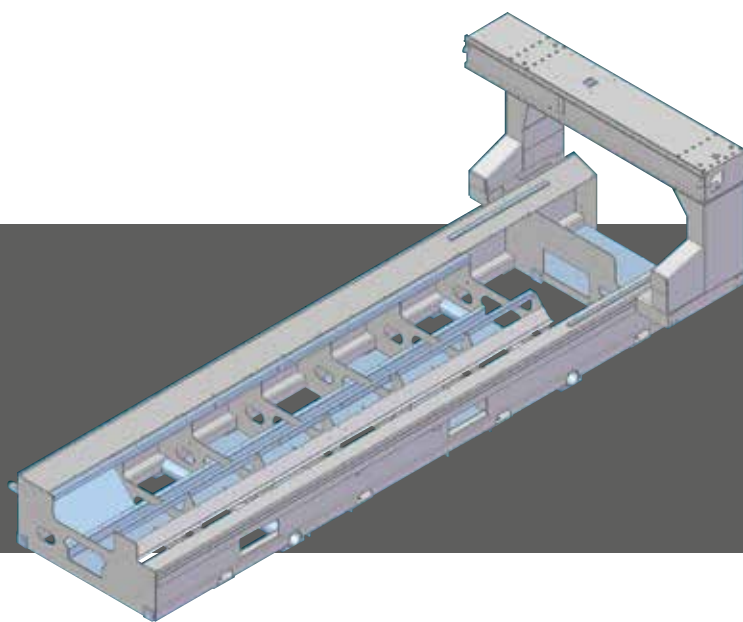
WORKTABLE WITH AUTOMATIC POSITIONING

The high-tech SCM solution allows **rapid, precise positioning of any workpiece hold-down device**. Xilog Maestro software, completely developed by SCM, makes set-up management easy and effective.



ERGONOMIC AND SAFE

The new Pro-Speed system with horizontal photocells and new bumpers on the movable guard combines **maximum access to the worktable and total operator safety** during workpiece loading/unloading. During machining, the top speed can be reached for **maximum productivity**.



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Prisma 5-axis machining unit

The unique construction geometry chosen by SCM gives high power and compact dimensions.

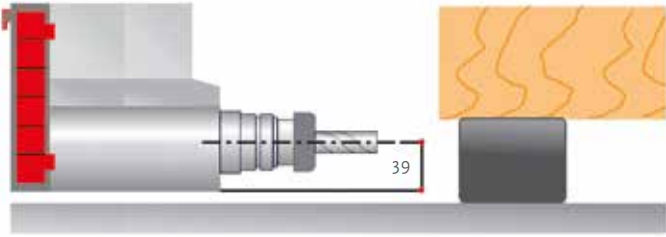
Available in two versions:

- **High-Torque**, ideal for machining solid wood and essential for machining door and window frames
- **High Speed**, with speeds of rotation of up to 24000 rpm, for machining panels and non-wood materials even with small diameter tools.



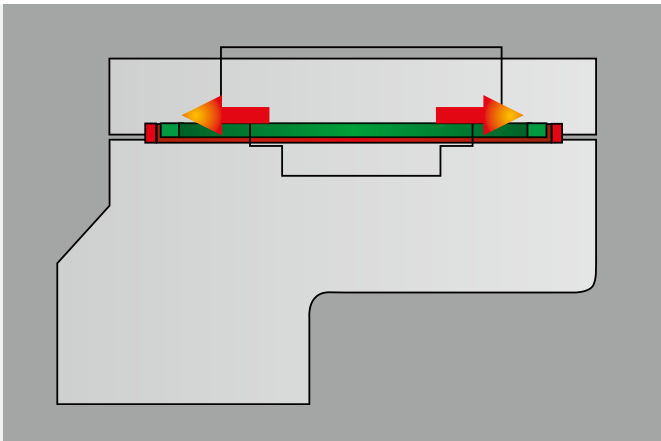
Clean working environment with the conveyor facilitating removal of shavings and sawdust produced by machining.

Available for 3- or 5-axis units, it can be used both with single-profile tools and double-profile tools.



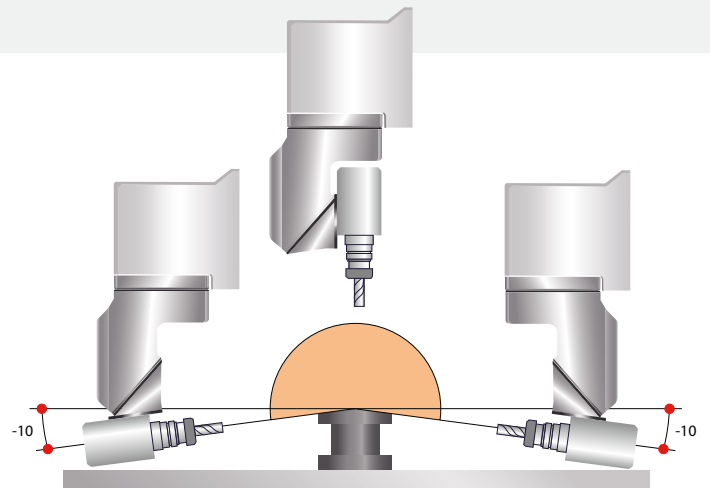
Zero maintenance, maximum flexibility and top finish quality with the **BEL TECH (Belt Technology System)**, the belt drive system that eliminates transmission of vibration and heat from the tool to the motor. Thanks to its particular geometrical configuration the Prisma head allows to work on horizontal axis in reduced space.

Use of **blades with a diameter up to 350 mm** for cutting thick workpieces in the various operating conditions.



The **TTS (Total Torque System)**, unique to SCM, mechanically locks the rotating axis during machining with vertical tools, increasing system rigidity.

Prisma machining unit geometry allows it to operate at **angles of up to 10°** below the workpiece supporting surface.



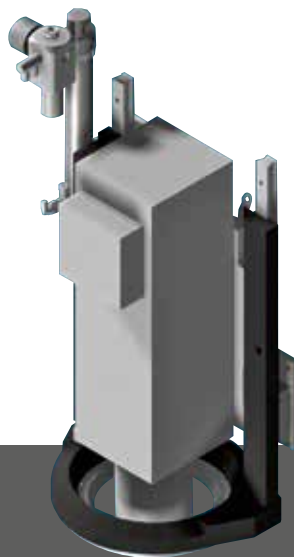
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Basic 3- or 4-axis machining unit

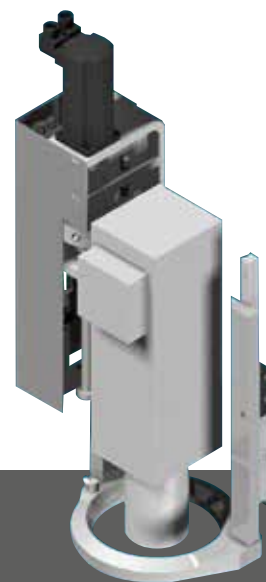
The traditional solution, compact and reliable. The sturdy carriage is anchored directly to the vertical guides. With a wide range of high powered electro-spindles.



Allows the application of devices dedicated to the various customer requirements:



Coaxial mechanical presser, essential for holding down small workpieces.



Synchron electronic copying device, for constant-depth vertical machining. Copies the workpiece surface through the synchronised movement of the Z-axis.

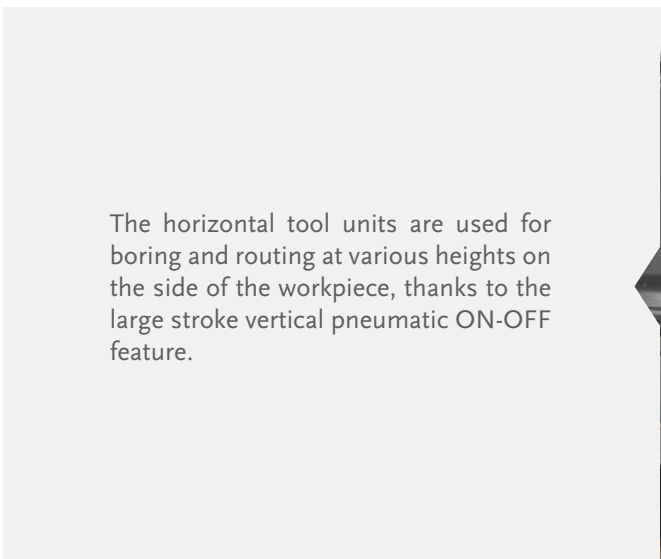
BRC machining unit

BRC

Cutting, routing and boring both vertically and horizontally, without needing a tool changer. Fast and precise, all additional machining is carried out with a single aggregate.



The 300 mm diameter blade, adjustable through 360°, allows straight or angled cutting on very thick elements.



The horizontal tool units are used for boring and routing at various heights on the side of the workpiece, thanks to the large stroke vertical pneumatic ON-OFF feature.



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aggregate machining units

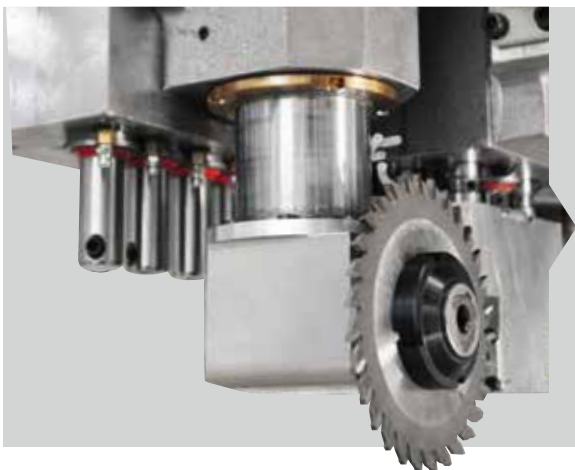
BORING UNIT

We provide the optimum solution to any boring needs with our wide range of modules, equipped with vertical and horizontal independent boring units. Available with **configurations of from 12 to 30 spindles**.



RO.AX SPINDLE, FOR PERFECT BORING

There is no backlash during machining with the new **RO.AX (Rotoaxial spindle technology)**. The spindle with the best performance on the market, with speeds of rotation up to 8000 rpm.



For cutting, a dedicated blade unit can be fitted, either in a fixed position or with adjustable angle 0-90°.

HORIZONTAL ROUTING UNIT

This double output electro-spindle performs fast, effective horizontal axis machining, reducing cycle times. **Ideal for hardware seats and for additional machining on doors.**



tool magazines

TRC 32

32 position chain magazine, anchored to the mobile gantry, developed for managing heavy and large tools used for solid wood machining.



RAPID 16 AND RAPID 24
16 or 24 position circular
magazine: the universal
solution for machining panels
and non-wood materials.

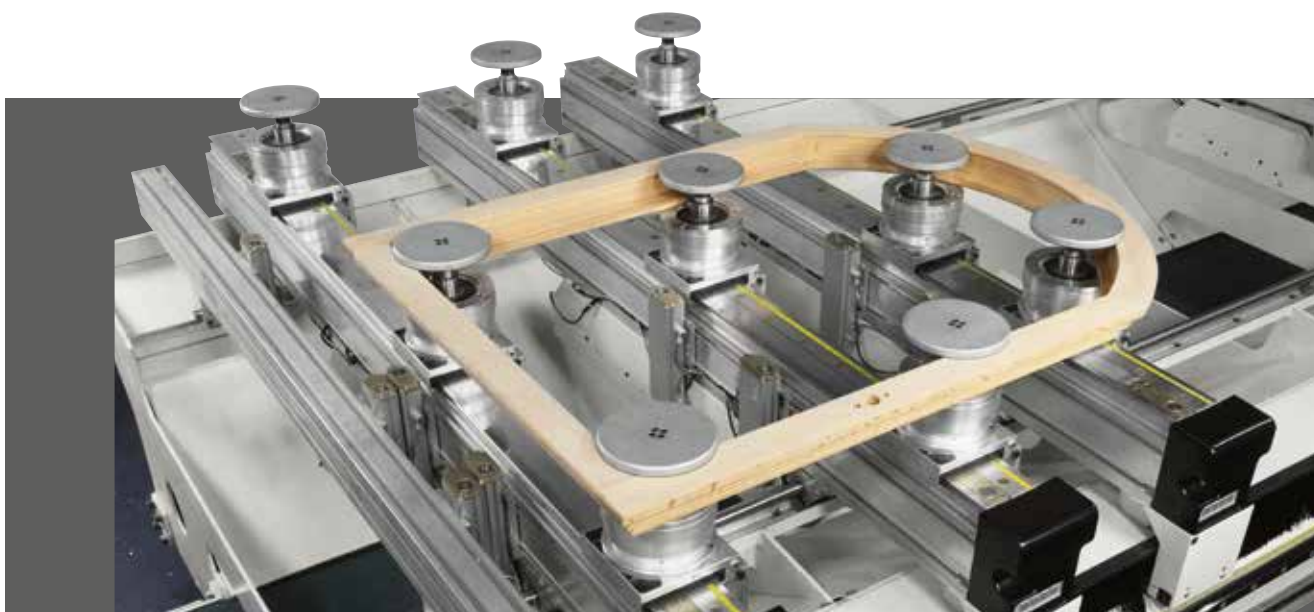
TR 10 AND TR12

10 or 12 position straight magazine, to the right of the worktable, so that all tools are always available within the machine.



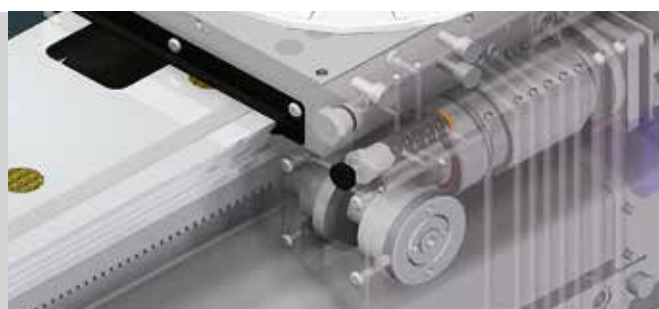
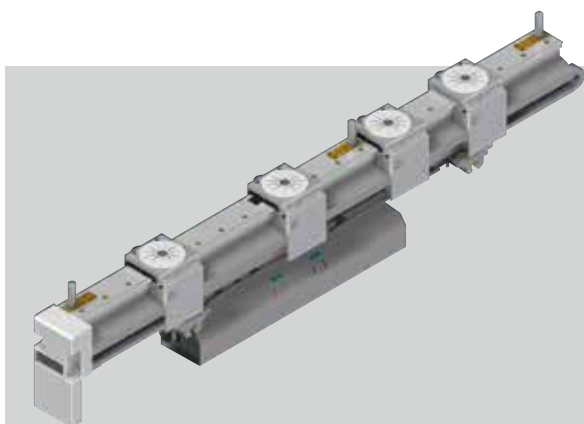
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worktables



MATIC WORKTABLE

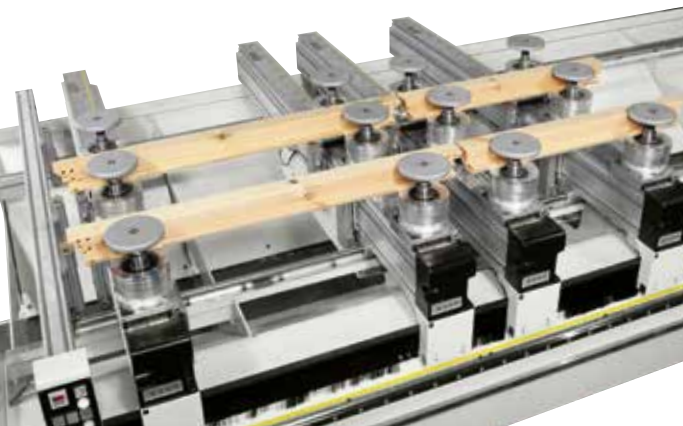
Fully automated, managed directly by the machine's Xilog Maestro software. Allows complete set-up in seconds.



The bars and bases are moved using a rack and pinion **direct transmission system** and have **independent drive units**. These exclusive, high-tech design solutions allow fast, precise positioning.



Switching from clamps to suction cups and vice versa is quick and easy. The quick coupling developed by SCM allows operators to change the accessory at the press of a button.



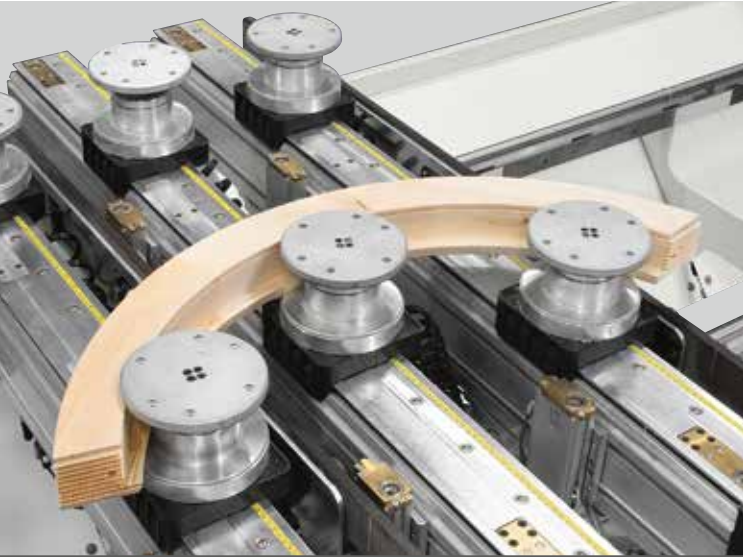
Load and unload workpieces easily and ergonomically, automatically move them to the machining zone and avoid any type of collision thanks to **worktable total management**. Cleaning is carried out using blowing systems that remove shavings both from the sliding zone and the workpiece supporting surface; this function makes the MATIC table ideal for machining pre-finished elements, requiring workpiece repositioning in the program.



Reference and hold-down systems for curved workpieces.

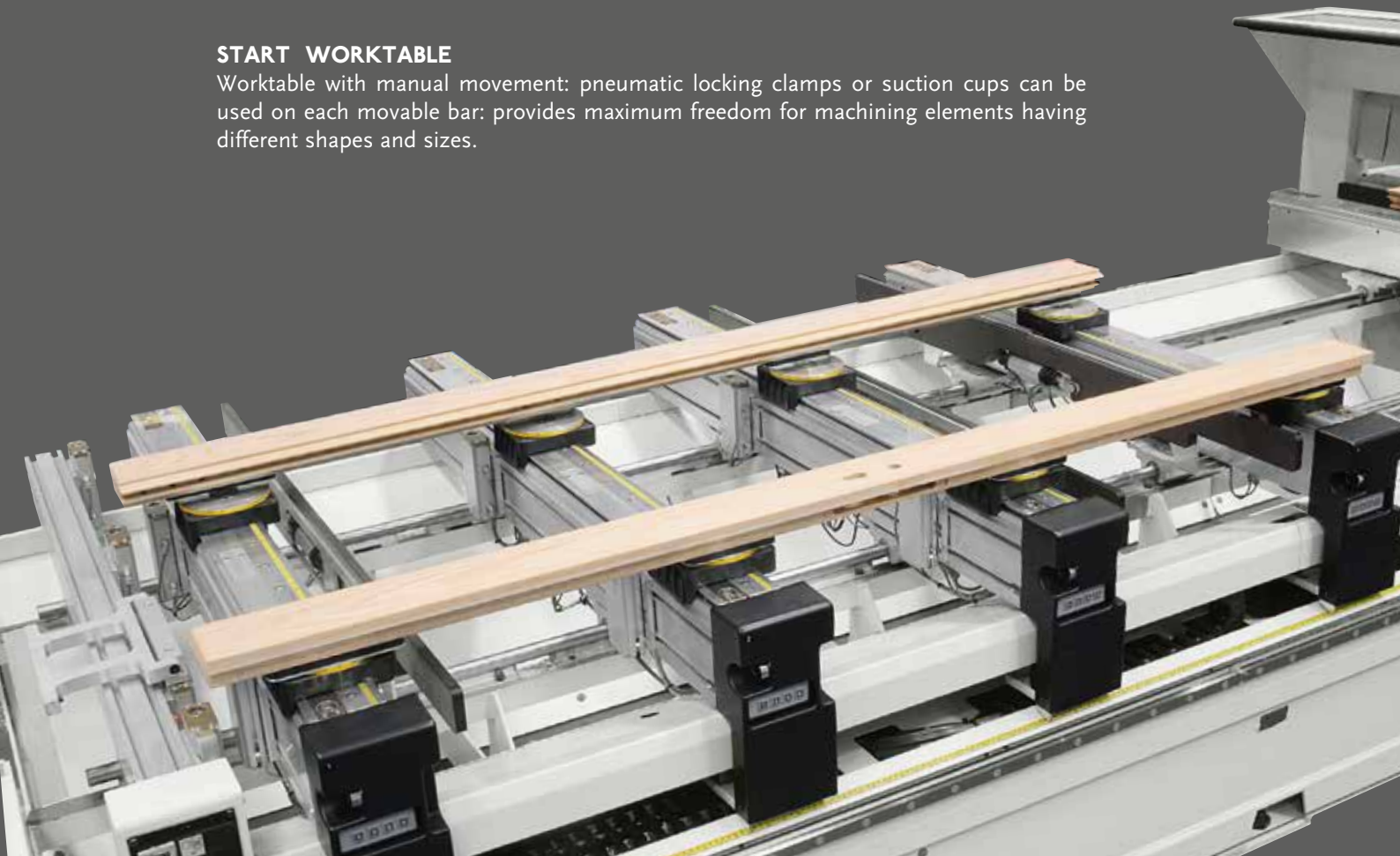
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worktables



START WORKTABLE

Worktable with manual movement: pneumatic locking clamps or suction cups can be used on each movable bar: provides maximum freedom for machining elements having different shapes and sizes.





The quick coupling and “tubeless” vacuum transmission system make the worktable freely configurable depending on the geometries of the workpieces to be machined.



PILOT WORKTABLE

Semi-automatic worktable: the operator is guided by the machine for worktable preparation. The position of the hold-down elements is shown on a colour touch-screen display on the “TecPad” remote console. **Positioning values are displayed and highlighted in real time** until the correct position is reached.

The risk of collisions is eliminated: special sensors detect any incorrect positioning and prevent the program from continuing.

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worktables

MULTI-FUNCTION WORKTABLE

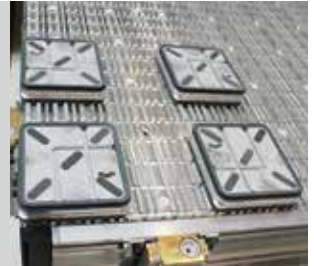
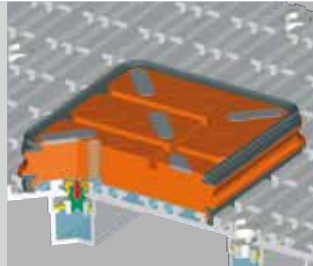
The aluminium structure, which does not deform despite changes in ambient factors such as temperature and humidity, guarantees lasting perfect planarity. For improved precision, the worktable is worked directly in the machine.

Also ideal for machining composites, plastics, resins and light alloys.

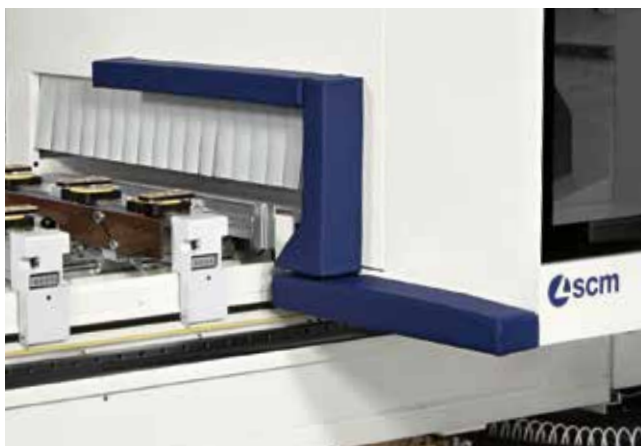


Workpieces to be machined can be held down in several ways:

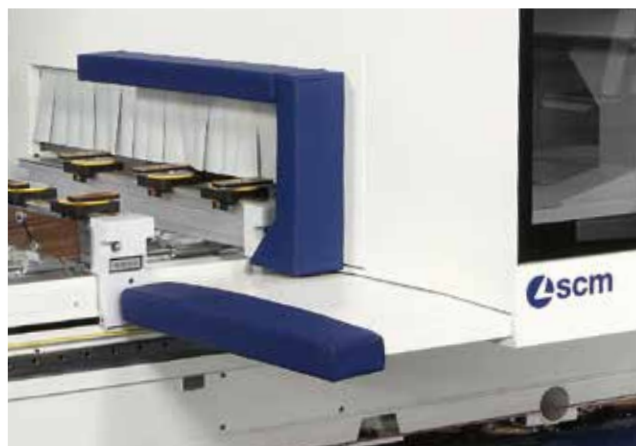
- **Nesting:** the vacuum system uses channels sized for the passage of a large volume of air, to guarantee direct, optimum workpiece hold-down.
- **MPS suction cups:** the network of holes and channels allows suction cups to be positioned and secured according to requirements; the laser pointer helps the operator with the set-up.
- **Jigs or fixing equipment:** the T-grooves allow any additional equipment not supplied by SCM to be secured in place.



safety systems



During workpiece loading/unloading



During machining

PROSPACE

The movable bumper system (exclusive to SCM), designed to minimise the machine footprint, guarantees maximum operator safety, with a **top speed of 25 m/min.**

The bumper's ON/OFF movement removes any limits on access to the worktable for set-up and workpiece loading/unloading.



PROSPEED

In addition to the bumpers there is a barrier made up of horizontal photocells which detect operator presence.

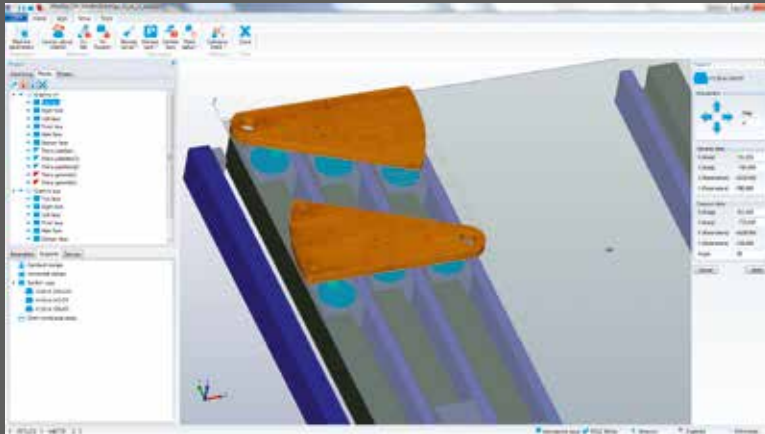
In this way, when the operator is outside the loading zone, the **machine's top speed goes up to 60 m/min.**, reducing cycle times and increasing productivity.

The machining head protection is equipped with compact bumpers, allowing the use of the whole machining area and the positioning of several pieces on the worktable at the same time.



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Software suite **Xilog Maestro**

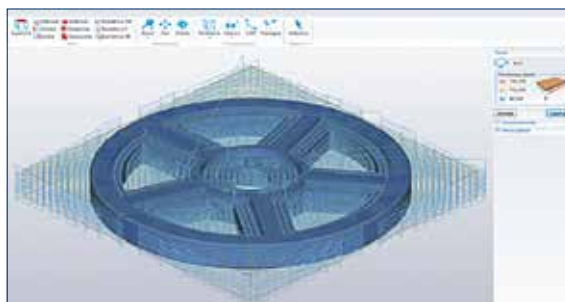
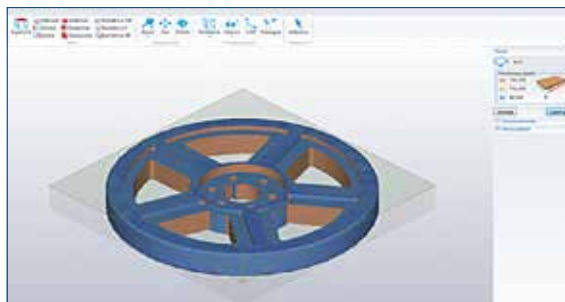


MAESTRO UNIQUE CREATIVITY

We provide the technical know-how so that you can free your creativity.

CAD/CAM programming software to design all the production processes. Developed in Windows® environment it ensures easy programming with an advanced, simple and intuitive sketching environment that features all the tools necessary to design the parts, their layout on the worktable, tools management and the relative machining operations. All the procedures are contained in a perfectly integrated and high performance software.

Advanced programming ensures great performance.

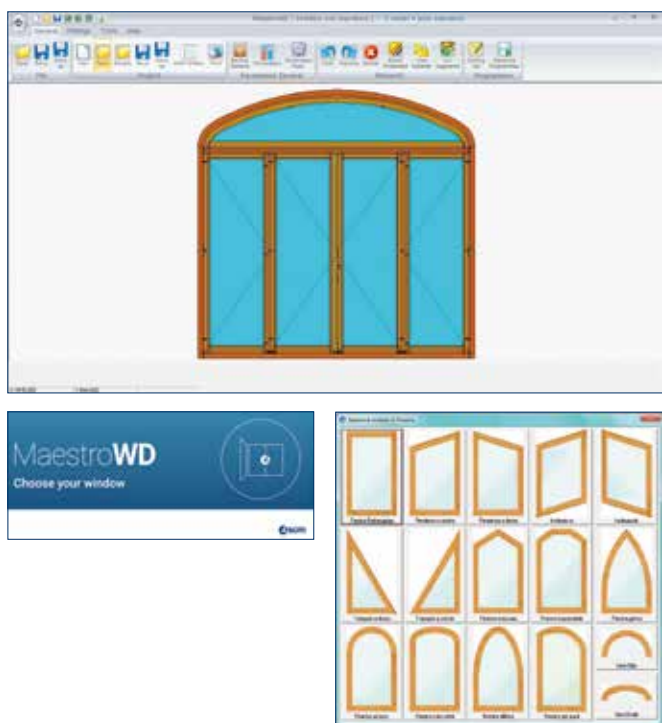


MAESTRO 3D UNIQUE IN THE CREATION OF 3D OBJECTS

The module integrated in the Xilog Maestro suite is designed to program three dimensional objects on 5-axis machining centres. It includes powerful CAD tools to manage extremely complex surfaces. The best solution for a wide range of 3 and 5-axes machining operations.

Any object, however complex, can be simply and quickly created.

A **UNIQUE** suite

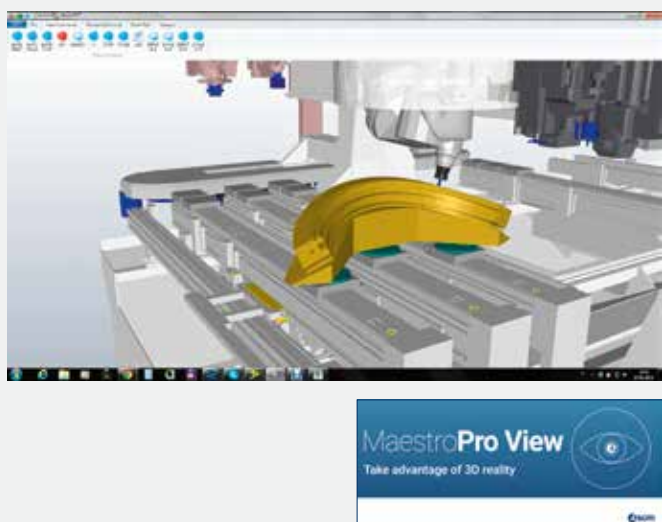


MAESTRO WD UNIQUE IN DESIGNING DOORS AND WINDOWS

The application included in the Xilog Maestro suite is designed for planning and programming each single part of linear and arc-shaped windows, doors and shutters. The user starts by defining the wall opening and selecting the model to be produced, then the software generates all the individual parts to be produced in the machine, with a state of the art graphic editor.

Maestro WD adds planning and programming to the functions used to manage the worktables and the macro-machining operations for door and window frames.

Door and window frames of any dimension and shape with the maximum ease and execution speed to achieve a customised product.



MAESTRO PRO VIEW UNIQUE 3D DISPLAY

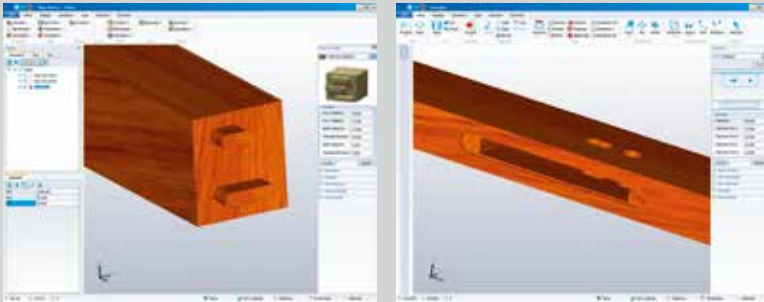
Maestro Pro View is a 3D simulator that allows users access to a three dimensional model of their machine in their office and view the operations that will be carried out during the production in advance on their PC.

- Real representation of the workpiece being machined and the machine parts
- Real representation of the material removed during machining
- Generation of collision control reports
- Prevention of any possible programming errors
- Generation of work cycle execution times reports.

Calculation of the production costs and greater production efficiency.

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Software suite **Xilog Maestro**



MAESTRO APPS UNIQUE KNOW-HOW

Maestro APPS is a library of programming functions that are always available and easy to use, developed by the SCM for the production of parts for doors, windows, stairs, furniture and furnishings.

A simple “click” allows users free access to the SCM technological know-how.

Save time during the workpiece planning and achieve a faster and more efficient production.



MAESTRO MSL CONNECTOR UNIQUE CONNECTION

Simple connection with external software houses.

The Xilog Maestro suite features the MSL Connector which allows external softwares to interface with all SCM machining centres and makes it easier to manage the machining strategies.

Their specialisations, our control.

The software-houses will no longer have to assume worktable management (workpieces positioning and hold-down, tool paths). SCM will provide the complete machine management.

Eliminates the customisation costs for the external software house, resulting in a considerable saving for the client.

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technical features

ACCORD 25 FX • ACCORD 25 FXM

technical data

NUMERIC CONTROL MACHINING CENTRE			
AXES	X-Y-Z axes speed	m/min	60 (25) - 60 - 30
MACHINING AREA X	Bars worktable	mm	3680 - 5020 - 6360
	Multi-function worktable	mm	3650 - 4970 - 6170
MACHINING AREA Y	Bars worktable	mm	1380 - 1680
	Multi-function worktable	mm	1320 - 1600 - 2120
WORKPIECE PASSAGE		mm	250
MACHINING HEAD	3- and 4-axis electrospindle power	kW	12 - 15
	5-axis electrospindle power	kW	12
	Max. rotation	rpm	24000
TOOL MAGAZINES	Rear tool magazine	n° pos	16 - 24 - 32
	Side tool magazine	n° pos	10 - 12
BORING UNIT	Vertical and horizontal spindles	n°	from 12 up to 30
	Max. rotation	rpm	8000
BRC	Tools for horizontal routing	n°	2
	Tools for horizontal boring	n°	4
	Tools for vertical boring	n°	3
	Blade diam.	mm	300
INSTALLATION	Main suction opening diameter	mm	1 x 250
	Additional suction opening diameter	mm	100
	Suction air consumption	m³/h	4400
	Compressed air consumption	NL/min	170 - 300
	Machine weight	Kg	6000 - 9000

SAVENERGY high performance and energy saving

- Optimum feed speed depending on the material and tool
- 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



SAVENERGY

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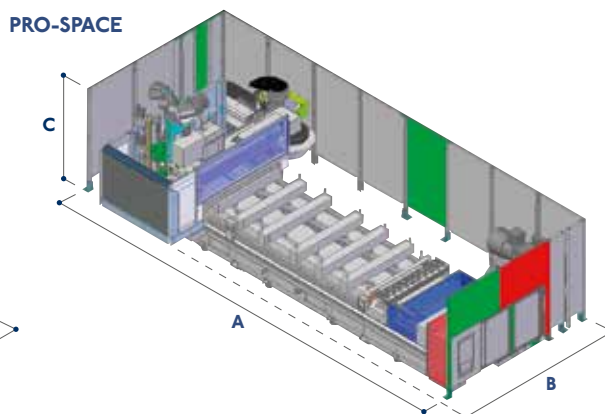
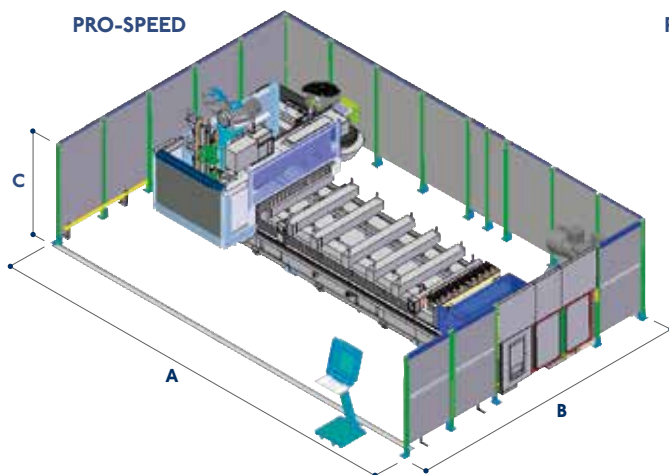
technical features

ACCORD 25 FX • ACCORD 25 FXM

overall dimensions

X-Y-Z machining area (mm)	A	3 and 4-axis machining head B*	5-axis machining head B*	C
ACCORD 25 FX PRO-SPEED				
3680 x 1380 x 250	7620	4500	4700	2850
5020 x 1380 x 250	8960	4500	4700	2850
6360 x 1380 x 250	10300	4500	4700	2850
3680 x 1680 x 250	7620	4800	5000	2850
5020 x 1680 x 250	8960	4800	5000	2850
6360 x 1680 x 250	10300	4800	5000	2850
ACCORD 25 FXM PRO-SPEED				
3650 x 1320 x 250	7620	4500	4700	2850
4970 x 1320 x 250	8960	4500	4700	2850
6170 x 1320 x 250	10300	4500	4700	2850
3650 x 1600 x 250	7620	4800	5000	2850
4970 x 1600 x 250	8960	4800	5000	2850
6170 x 1600 x 250	10300	4800	5000	2850
3650 x 2120 x 250	7620	5340	5540	2850
4970 x 2120 x 250	8960	5340	5540	2850
6170 x 2120 x 250	10300	5340	5540	2850
ACCORD 25 FX PRO-SPACE				
3680 x 1380 x 250	7620	3470	3670	2850
5020 x 1380 x 250	8960	3470	3670	2850
6360 x 1380 x 250	10300	3470	3670	2850
3680 x 1680 x 250	7620	3770	3970	2850
5020 x 1680 x 250	8960	3770	3970	2850
6360 x 1680 x 250	10300	3770	3970	2850
ACCORD 25 FXM PRO-SPACE				
3650 x 1320 x 250	7620	3470	3670	2850
4970 x 1320 x 250	8960	3470	3670	2850
6170 x 1320 x 250	10300	3470	3670	2850
3650 x 1600 x 250	7620	3770	3970	2850
4970 x 1600 x 250	8960	3770	3970	2850
6170 x 1600 x 250	10300	3770	3970	2850
3650 x 2120 x 250	7620	4310	4510	2850
4970 x 2120 x 250	8960	4310	4510	2850
6170 x 2120 x 250	10300	4310	4510 </td <td>2850</td>	2850

* with Rapid 24 the dimension B increases of 380 mm



THE STRONGEST WOOD TECHNOLOGIES ARE IN OUR DNA

SCM. A HERITAGE OF SKILLS IN A UNIQUE BRAND

Over 65 years of success gives SCM the centre stage in woodworking technology. This heritage results from bringing together the best know-how in machining and systems for wood-based manufacturing. SCM is present all over the world, brought to you by the widest distribution network in the industry.

65 years history

3 main production sites in Italy

300.000 square metres of production space

17.000 machines manufactured per year

90% export

20 foreign branches

350 agents and dealers

500 support technicians

500 registered patents

In SCM's DNA also strength and solidity of a great Group. The SCM Group is a world leader, manufacturing industrial equipment and components for machining the widest range of materials.

SCM GROUP, A HIGHLY SKILLED TEAM EXPERT IN INDUSTRIAL MACHINES AND COMPONENTS

INDUSTRIAL MACHINERY

Stand-alone machines, integrated systems and services dedicated to processing a wide range of materials.



WOODWORKING TECHNOLOGIES



TECHNOLOGIES FOR PROCESSING COMPOSITE MATERIALS, ALUMINIUM, PLASTIC, GLASS, STONE, METAL

INDUSTRIAL COMPONENTS

Technological components for the Group's machines and systems, for those of third-parties and the machinery industry.

HITECO

SPINDLES AND TECHNOLOGICAL COMPONENTS

Ees

ELECTRIC PANELS

steelmec

METALWORK

scmfonderie

CAST IRON



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.



is more



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