# accord 40 fx CNC machining centre





#### **CNC** machining centre

Machining centre with modular composition of new generation for the production of windows, doors, stairs, solid wood elements and for all those processes that require high level machining, while maintaining supreme standards of accuracy and finish quality.

#### • TOTAL FREEDOM OF USE

powerful, reliable machining heads with 5 interpolating axes made for any use, even the most heavy duty.

#### • TOP QUALITY FINISH

machining with maximum precision on the entire machining area, thanks to the rigid mobile portal structure.

#### • THE HIGHEST LEVEL OF PRODUCTIVITY

the down-times are minimized, the replacement of the tool occurs in only 5 seconds with the device "Mach 5".

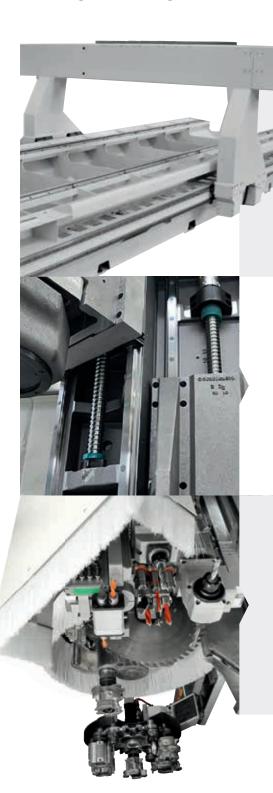
#### • FAST AND ACCURATE SET-UP OF THE TABLE

the motorized bars Matic and all supports of the table moving simultaneously with great precision.





technological advantages



#### NO VIBRATION EVEN HIGH SPEED

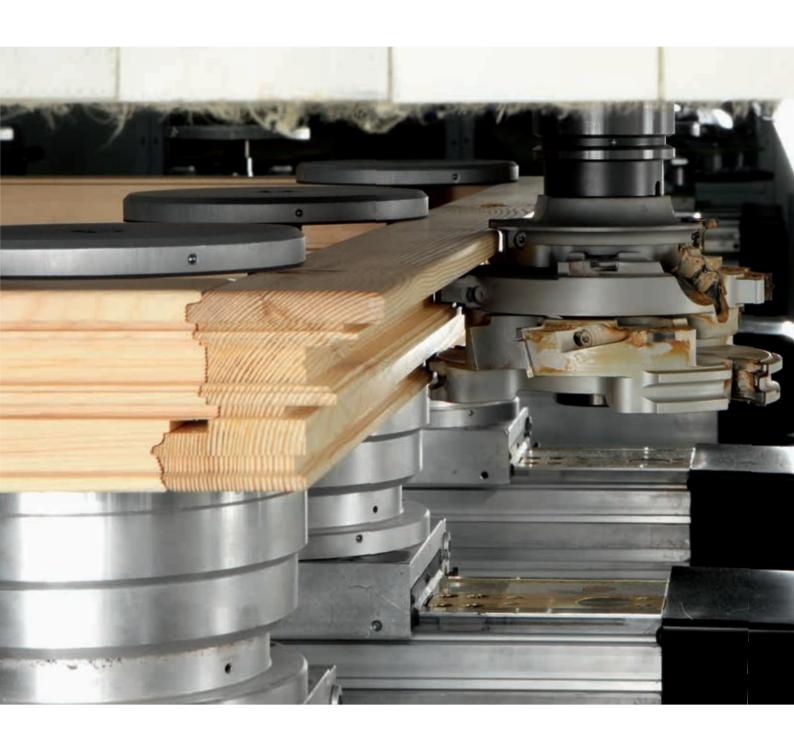
always the maximum precision even in the presence of large areas of work, thanks to the rigid mobile portal structure moved by a double motor.

### MACHINING HEADS WITH TWIN INDEPENDENT Z AXIS

allowing fast alternating of the units present during machining and when possible tool changes in masked time.

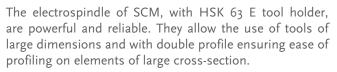
## MACHINING HEADS CAN BE CONFIGURED FOR DIFFERENT PRODUCTION REQUIREMENTS

Accord 40 fx allows all types of machining to be performed, from power routing with 5 interpolating axes to high-capacity boring and the machining of door and window frames with the exclusive "BRC" unit.



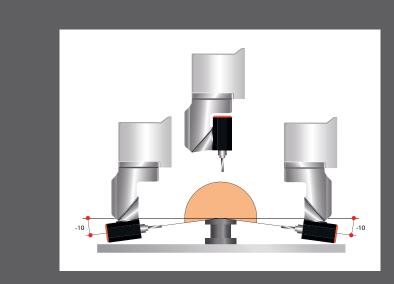
machining head: main routing unit







A whole range of machining heads with 3 to 5 interpolating axes able to carry out all machining operations required of a machining centre.







Clean working environment with the conveyor helping to eliminate shavings and sawdust.

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

#### machining head: BRC multi-function unit

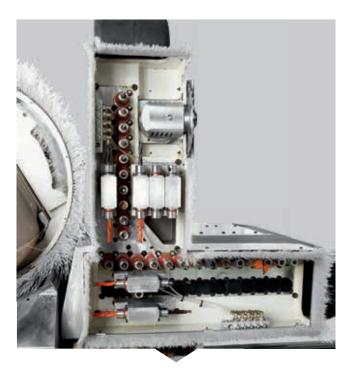
Cutting, routing and boring both vertically and horizontally, without needing the tool changer, using the BRC unit. Fast and precise for all accessory machining, for making a door or window frame there is a single secondary unit using an independent Z axis and dedicated inverter.







machining head: auxiliary unit for boring and routing





The optimum solution to all boring requirements is found in the wide range of modules available for the Accord fx, with from 14 to 50 independent spindles.

Longitudinal and transversal cuts can be made with the blade unit built into the boring head with 0-90° rotation.

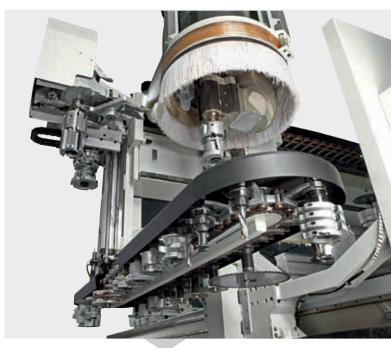
Faster operation, more tools available with the PB TC additional routing unit, power 8.5 kW and a 6-location Rapid tool changer.



#### tool magazines



"Mach 5" in only 5 seconds replaces the tool drastically reducing down-times.



The machine is always equipped for any machining using the TRC chain magazine with 48 locations available for large and double-profile tools.

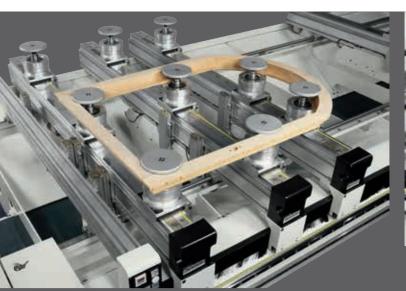


Accord fx has solutions suitable for any production, such as the Rapid 12 on-board even allowing tool changes in masked time, which can be combined with additional magazines such as the Rapid 16 or 24.



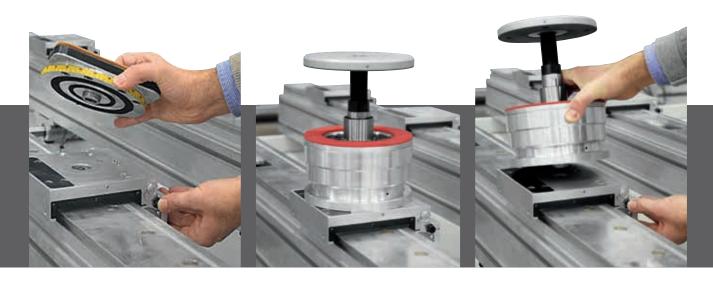
To have the most tools available, the rack magazine may have up to 12 locations, used by all the items present on the machining head.

# accord 40 fx MATIC worktable



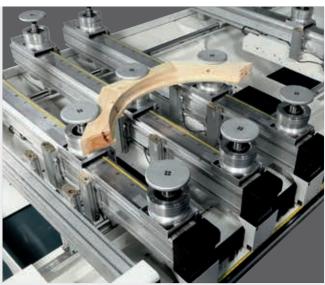


Matic is the fully automatic worktable ideal for machining solid wood. Complete set-up in seconds, all bars and supports moving simultaneously, each driven by an independent motor. The many technical devices give this table lasting safety and reliability.

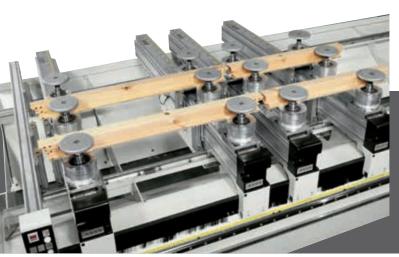


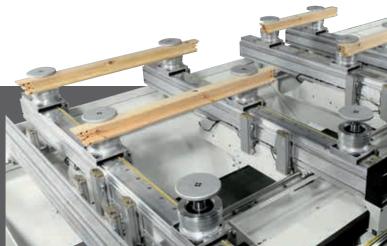
Switching from clamps to suction cups and vice versa is fast and practical. The quick coupling perfected by SCM allows operators to switch at the press of a button, without the need for external tools.





Perfect for machining pre-finished/finished door and window frames, all supports having cleaning blowers which remove all shavings from the sliding zone and on the workpiece hold-down base during clamp changes.





Workpiece loading and unloading is easy and ergonomic. They are automatically carried to the machining zone to prevent any kind of collision thanks to total worktable management.

#### worktable with manual and guided movement





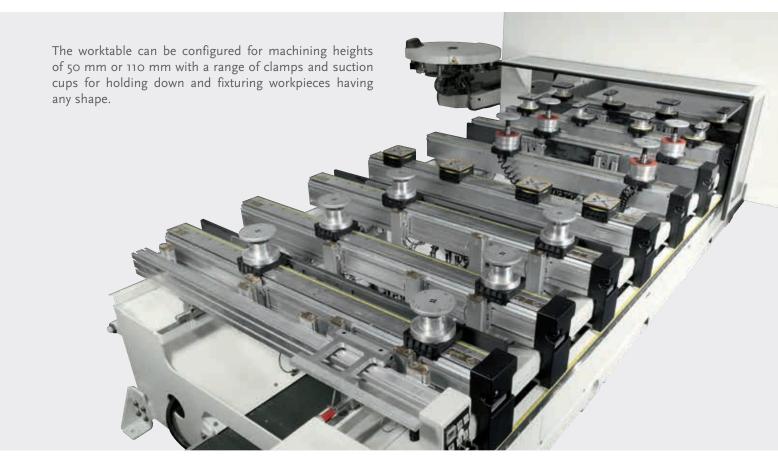
The worktable with manual movement is available in the "Start" and "Pilot" versions, allowing maximum freedom of use thanks to the quick coupling system for adding and removing clamps and suction cups to always guarantee optimum hold-down.



In the "Pilot" version positioning is guided and controlled by the workpiece program. Magnetic sensors detect the correct position of all components, eliminating the risk of collision.



Fast operations that do not require any further checks; the display on the mobile console shows the position for each element and provides a real-time view of all movements until the correct position is reached.







All versions of SCM worktables use common accessories The H110 worktable allows maximum freedom of movement and always offer ideal hold-down to provide top quality with tools and even use of "double-profile" tools. finishing even with heavy duty stock removal.

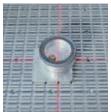
#### multi-function worktable

The exclusive SCM multi-function worktable allows the use of a whole range of accessories designed to meet all workpiece support and hold-down requirements. The MPS system is extremely practical to use.









Fixturing operations are practical and easy. The exclusive aluminium profile has grooves and holes specially designed for optimum positioning of any type of support. This work is even faster using the laser pointer which shows the precise point where the suction cups must be placed.



The directly machined worktable guarantees lasting absolute precision and perfect flatness thanks to its high level of rigidity. Also ideal for machining plastics, resins and light alloys.

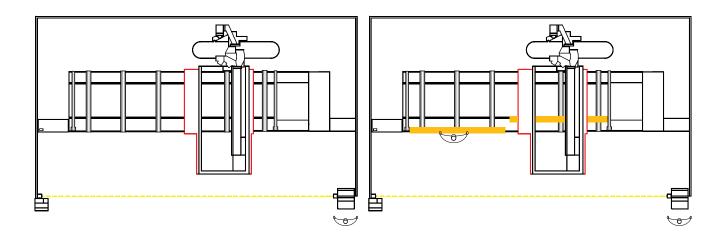


# safety systems "Pro Speed" and "Pro Space"

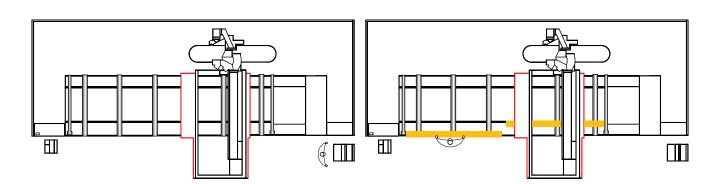
Accord 40 fx allows you to select the safety system most suitable for the customer's requirements, in terms of available space and production methods.

The systems have no floor sensor, which means the

machine offers 100% loading access without any obstacles, and the possibility to exploit the entire length of the table for pendular machining operations; the utmost freedom of movement in absolute safety.



"Pro Speed" safety system: the loading area is marked off by a photocell that informs the control system of any possible operator access; the sensors on the mobile portal will only stop the machine in the event of contact. The machine can be used at its top feed speed (90m/min.) when the operator is outside the loading area.



"Pro Space" safety system: the loading area is completely free, to minimise the space occupied from front to back; the sensors on the mobile portal will only stop the machine in the event of contact. The machine can be used at a feed speed of 25m/min.

#### xilog maestro **software**:

the Scm group new CAD/CAM, powerful and user-friendly.

#### XILOG MAESTRO power and simplicity.

Xilog Maestro is the new powerful programming software dedicated to **SCM** machining centres.

Developed in the Windows® environment, it includes all the features and performance that allow easy, intuitive and effective programming even for people unfamiliar with Personal Computers or those using a machining centre for the first time.

- 3D graphics editor for workpiece, geometries, machining and worktables
- CAD mode geometries drawing functions
- Programming machining operations on angled faces
- Import DXF files: all formats with layer and geometries recognition
- Import Xilog Plus XXL and PGM files
- Macro writing via editor or scripting
- Additional software modules (optional) for door and window frames
- Production times calculation
- Teleservice



CNC machining centre		
Axes		
X-Y axes speed	m/min	90
Workpiece passage	mm	350
Electro-spindle		
3- and 4-axis electro-spindles power	kW	8,5 - 12 - 13
Max. rotation	RpM	24000
5-axis electro-spindles power	kW	11 - 13 - 15
Max. rotation	RpM	24000
On-board tool magazine	n° pos.	12
Rear tool magazine	n° pos.	16 - 24 - 48
Lateral tool magazine	n° pos.	8 - 10 - 12
BRC		
Power	kW	3
Max. rotation	RpM	18000
3-axis additional electro-spindle		
Power	kW	8,5
On-board tool magazine	n° pos.	6
Boring head		
Spindles	n°	da 14 a 50
Power	kW	3
Rotation	RpM	2000 - 8000
Installation		
Suction opening diameter	mm	1 x 100 - 1 x 250
Suction air speed	m/sec	25
Suction air consumption	m3/hr	1 x 1300 - 1 x 4400
Compressed air consumption	NL/min	170 - 300
Machine weight	Kg	6000 - 9000

#### ACCORD 40 FX + ACCORD 40 FXM

machining area

BARS TABLE		MULTI-FUNCTION TABLE	
machining area X	machining area Y	machining area X	machining area Y
3680	1680	3650	1600
5020	1680	4970	1600
6360	1680	6170	1600
3680	1905	3650	1840
5020	1905	4970	1840
6360	1905	6170	1840
		3650	2120
		4970	2120
		6170	2120

# THE STRONGEST WOOD 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

# SCM GROUP, A HIGHLY SKILLED TEAM EXPERT IN INDUSTRIAL

#### **INDUSTRIAL MACHINERY**

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



Cms

WOODWORKING TECHNOLOGIES

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



equipment and components for machining the widest range of materials.

## **MACHINES AND COMPONENTS**

#### **INDUSTRIAL COMPONENTS**

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



SPINDLES AND TECHNOLOGICAL COMPONENTS



ELECTRIC PANELS

**C**steelmec

METALWORK

**C**scmfonderie

CAST IRON







via Casale 450 - 47826 Villa Verucchio, Rimini - Italy tel. +39 0541 674111 - fax +39 0541 674274 housing@scmgroup.com www.scmwood.com

