## accord 500 / accord 600

CNC machining centres for routing and drilling







ACCORDING TO WOOD

CNC machining centres for routing and drilling

## **YOUR TIME MACHINES** TO THE FUTURE





#### **FREEDOM**



Reduced overall dimensions and easy access to the work table for the operator, thanks to the PRO-SPACE solution, without perimeter safety protections.

#### **PRODUCTIVITY**



**Considerably reduced cycle time** with the exclusive **BRC-S unit,** that is even more flexible and compact, for all drilling, routing and grooving operations.

#### **QUALITY**



**Perfect finishing** even at high machining speeds with the new 17 kW-**KPX 5-axis** routing unit.

Strength and precision in the most demanding stages of machining, thanks to the gantry structure with closed frame and dual engine on the X-axis.

#### accord 500 / accord 600

CNC machining centres for routing and drilling

#### **INNOVATION**



The exclusive, innovative and integrated CADDY 35 tool changer increases the amount of tools on board the machine, but with no extra space requirements.

Maximum integration with Cargo system for the automatic loading and unloading of panels.

#### **CLEAN**



Maximum dust extraction efficiency and cleanliness of the environment thanks to the chip deflector device automatically positioned according to the ongoing machining.

#### **SMART MANAGEMENT**



Optimized and simplified programming with Maestro power TMS (Tool Management System): the software identifies and selects the tools according to the machining to be executed.

Maximum ergonomics in any condition with Maestro easyLoad that allows the operator to easily load and unload work pieces.

# **TECHNICAL FEATURES OVERVIEW**

TECHNOLOGICAL ADVANTAGES



#### accord 500 / accord 600

CNC machining centres for routing and drilling





granted by a bumpers system.

**KPX 5-axis operating unit** with 17kW electrospindle.



**BRC-S operating unit** for grooving, routing and drilling both vertically and horizontally.

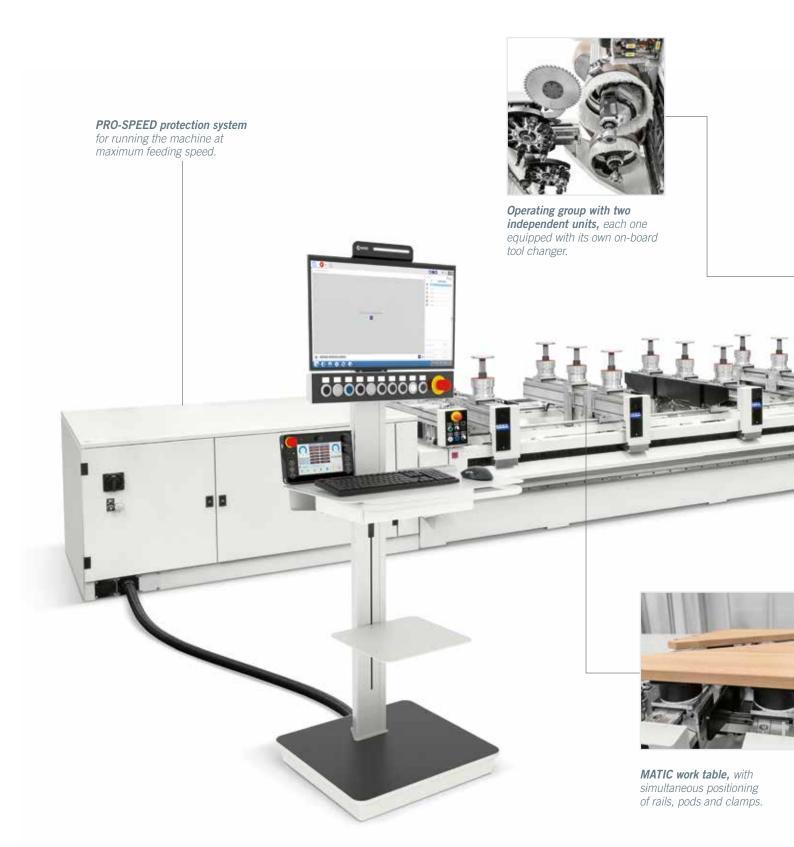


CADDY 35 tool changer, integrated in the machine footprint.

FAST 16 on-board linear tool changer located on board the mobile gantry to optimize tool changes. A dedicated pick-up for large diameter saw-blades is available.

# **TECHNICAL FEATURES OVERVIEW**

TECHNOLOGICAL ADVANTAGES



#### accord 500 / accord 600

CNC machining centres for routing and drilling



Coaxial integrated chip deflector device for maximum cleaning during machining when heavy material removal is required.





High performance drilling units with RO.AX. (Rotoaxial Spindle Technology) spindles with high rotation speed, up to 8000 rpm.



TRC 32 chain tool changer, located on the rear side of the mobile gantry, allows for tool changing on both operating units.



CADDY 35 tool changer, integrated in the machine footprint.

## SAFETY SYSTEMS

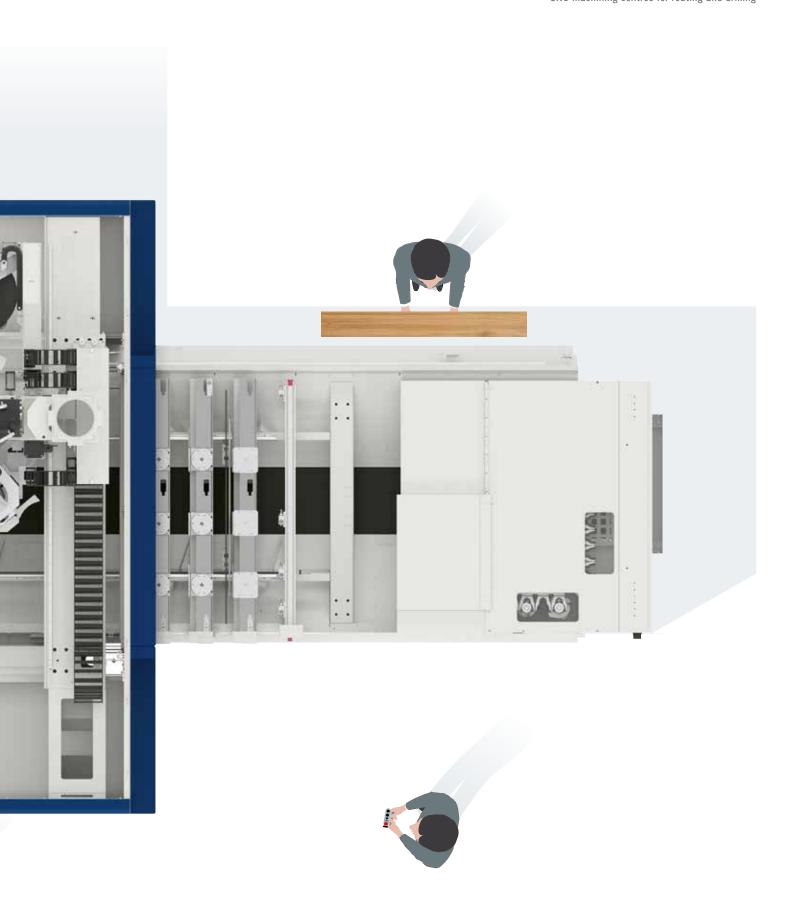




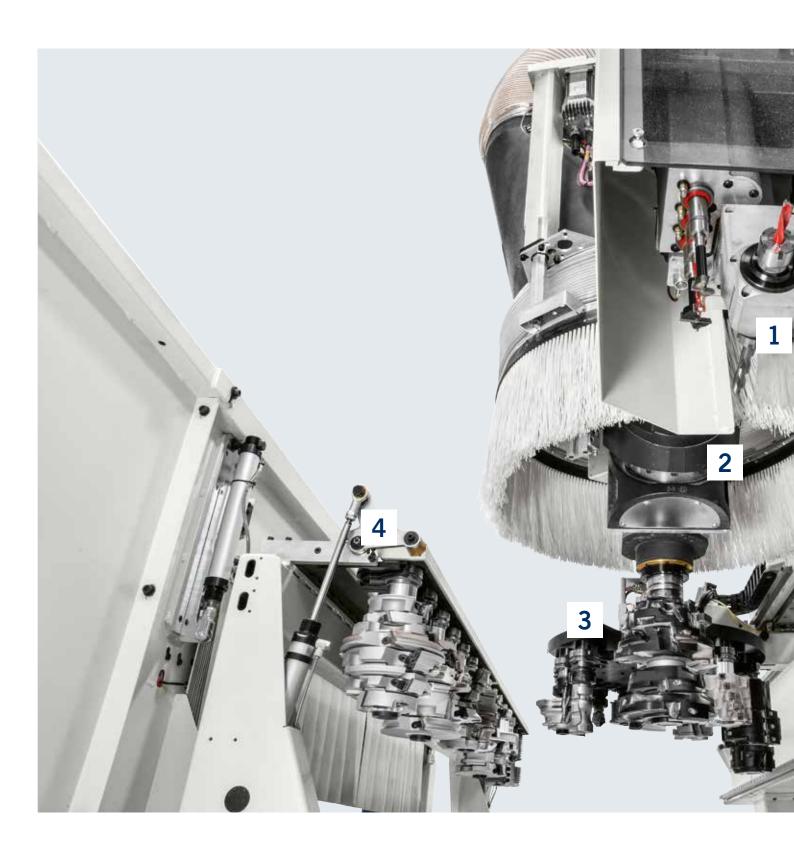
The loading zone is completely free, in order to optimize the space occupied by the machine. The absence of perimeter protections allows access to the work table from all sides of the machine.



## accord 500 / accord 600 CNC machining centres for routing and drilling



# **OPERATING UNIT** accord 500



#### accord 500 / accord 600

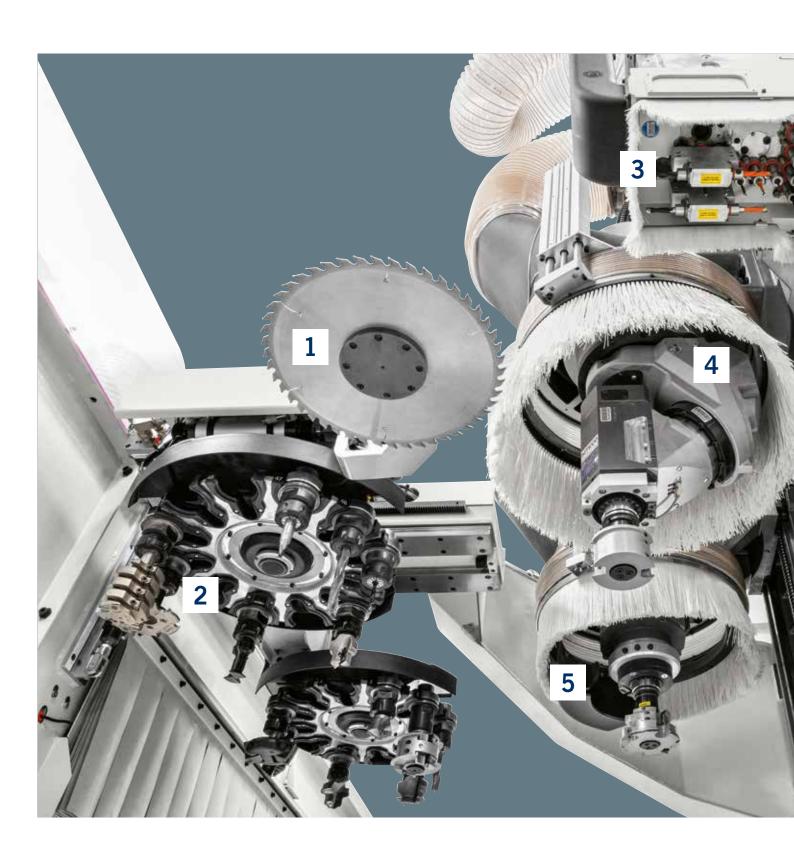
CNC machining centres for routing and drilling



- The BRC-S unit allows to quickly and reliably perform all additional machining typical of window and door elements, such as grooving, drilling for dowels and horizontal routing. The 0-360° rotation, managed by Numerical Control, allows to perform the operations on each side of the work piece.
- The KPX 5-axis unit with the 17 kW electrospindle enables the machine to increase the level of productivity, while maintaining high quality of finishing even at high processing speeds. The unique TTS (Total Torque System) by SCM mechanically locks the rotating axis in vertical position, increasing system stiffness.
- WELOCE 16 on-board tool changer, located on the operating unit, for tool changes in hidden time. A dedicated pick-up for large diameter saw-blades is available.
- FAST 16 on-board linear tool changer located on the mobile gantry to optimize tool changes.

  A dedicated pick-up for large diameter saw-blades is available.

# **OPERATING UNIT** accord 600



#### accord 500 / accord 600

CNC machining centres for routing and drilling



- Pick-up for saw-blade, located above the on-board tool changer, allows to house a large diameter saw-blade, up to 400 mm, in addition to the other tools. Thus, its footprint does not limit the capacity of the tool changer.
- The 12-position "VELOCE" independent tool changers, each at the disposal of its own operating unit, allow for tool changing in hidden time.
- High performance drilling units with RO.AX. (Rotoaxial Spindle Technology) spindles with high rotation speed, up to 8000 rpm.
- The JQX 5-axis electrospindle, with direct drive and up to 13,5 kW power, ensures total absence of vibrations even with large material removals at high speeds.
- **3-axis rear routing unit,** up to 21 kW power: always maximum power and machining speed in any conditions.



**SHORTEST TIME FOR TOOL CHANGES:** unique set-up with double electrospindle and double tool changer. While one head is machining the work piece, the second one is preparing the tool for the next machining operation.

Both tool changer and "cabinet" at disposal of the other tool changers on board the machine: CADDY 35 can house tools of large sizes and dimensions, loadable by the operator even during the machining, in hidden time and in complete safety.





**Maestro** power TMS



CNC machining centres for routing and drilling



#### UP TO 102 TOOLS AVAILABLE ON BOARD

make the machine the best in its class!

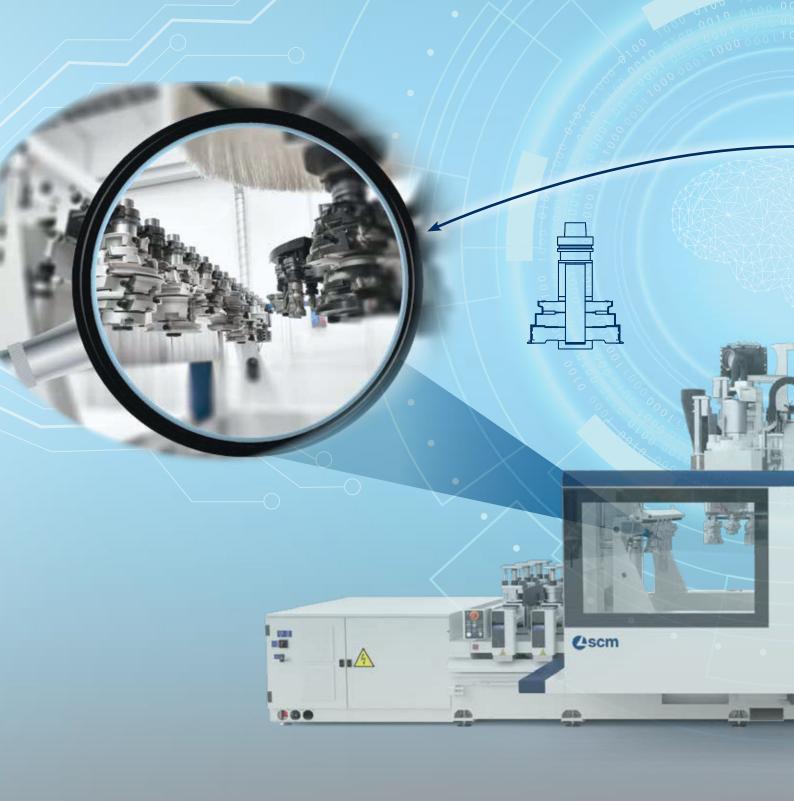




**High capacity of tools** always available thanks to the 32-position **TRC rear tool changer.** 

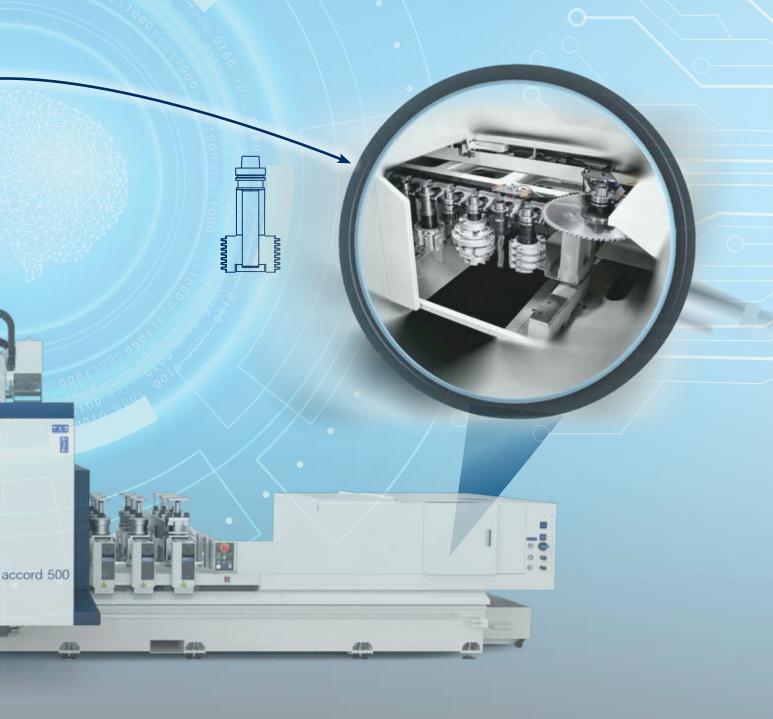
# **SMART MANAGEMENT**

# **GET THE BEST OF YOUR TIME**



# Maestro power TMS

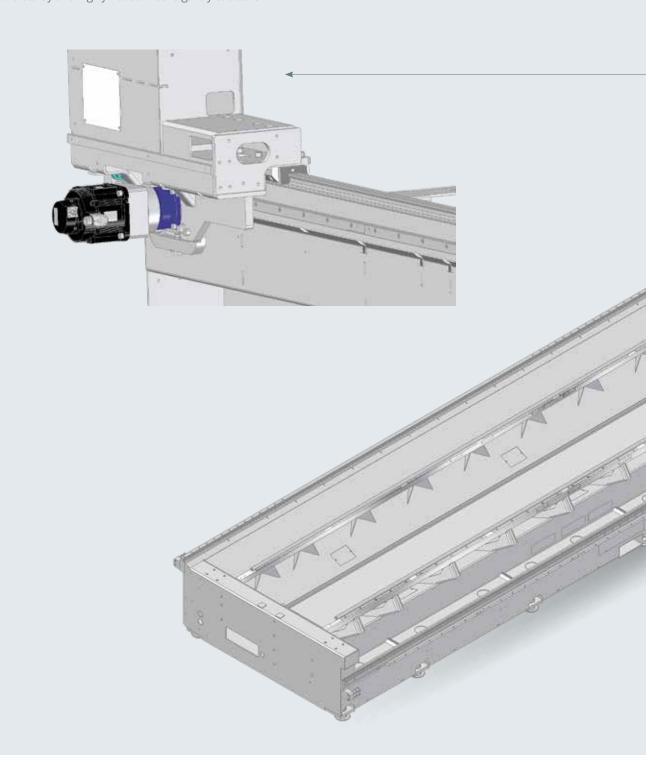
Optimized programming with Maestro power TMS that maximizes the tool changers capacity and their management. The operator will no longer waste time searching for the most suitable tool - the software will find and indicate its right position.

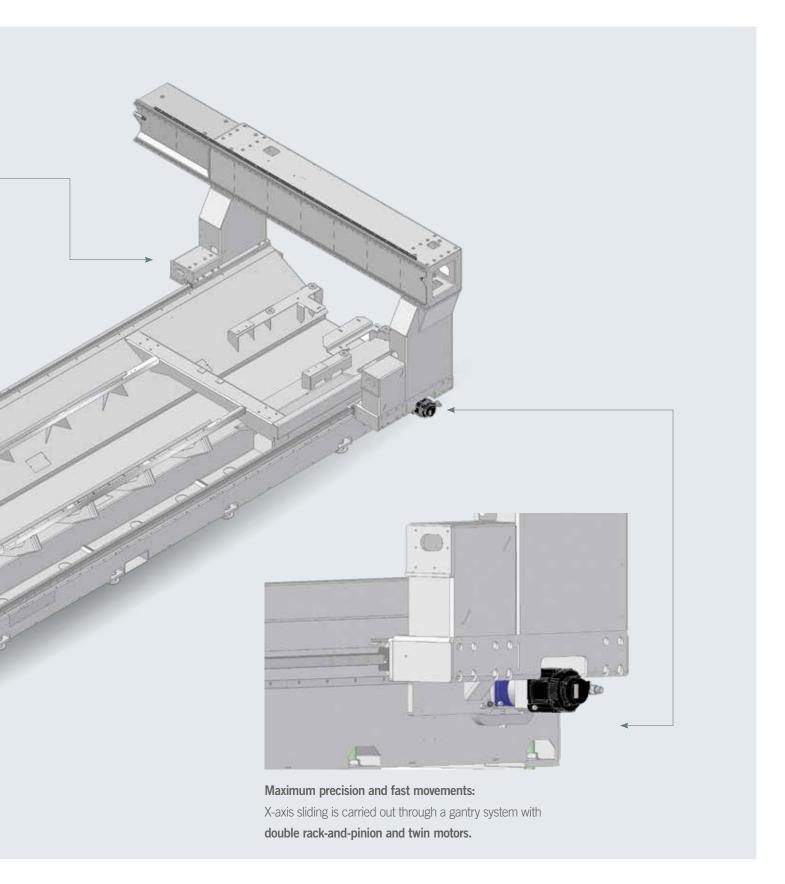


# **ARCHITECTURE**

#### **MOBILE GANTRY STRUCTURE**

**Maximum finish quality, accuracy and productivity:** accord 500 and accord 600 are designed with a sturdy and highly ribbed mobile gantry structure.







#### **SMART MANAGEMENT**

### Maestro easyLoad

Ergonomics and easy programming with Maestro easyLoad, which allows easy and dynamic loading and unloading of the work pieces.

## accord 500 / accord 600 CNC machining centres for routing and drilling

Simple and quick replacement of clamps and pods by pressing a button, through the exclusive rapid locking device.







MULTRIGRIP (H83) and PROFIGRIP (H145) locking clamps to process elements of different thickness by using double-profile tools, from 45 to 105 mm and from 60 to 120 mm respectively, without any need of manual adjustments.



## **SMART MANAGEMENT**

# **PRODUCING HAS**

EASY...

#### **PRODUCTIVITY**

Automatic positioning of 2 work pieces according to the machining to be executed



# Maestro easyLoad

# NEVER BEEN THAT

# .. AND COMFORTABLE

#### **ERGONOMICS**

The operator can easily and ergonomically load and unload the work pieces



# CARGO Patented automatic loading and unloading system

#### PENDULUM MACHINING FOR HIGHEST PRODUCTIVITY OF DOORS AND PANELS

Fully automated solution that does not require operator supervision.







Two stations; one for loading and one for unloading, easily accessible even with a forklift truck.



Maximum positioning accuracy on the work table thanks to the panel pre-alignment system directly on the loading stack.



Unrivalled ease of use; machine and Cargo system managed directly with Maestro active.



Cargo's flexible arm allows the continuous loading and unloading of workpieces in masked time, while the machine carries out the processing in the opposite area.



**No problem with dust or shavings** thanks to the conveying belt equipped with both a dust extraction hood and a collecting box.





#### accord 500 / accord 600

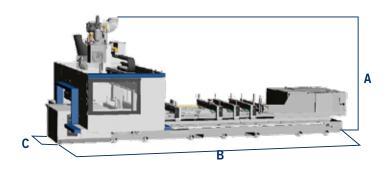
CNC machining centres for routing and drilling

# OVERALL DIMENSIONS

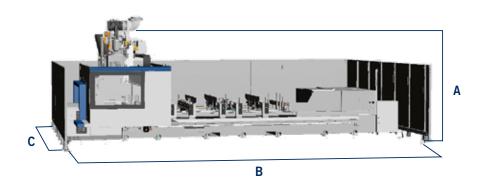
		Α	В		С	
			PRO-SPACE	PRO-SPEED	PRO-SPACE	PRO-SPEED
ACCORD 500						
Working area 3715 x 1600	mm	2990	7830*	8560	5050*	5300
Working area 5515 x 1600	mm	2990	9630*	10360	5050*	5300
Working area 6715 x 1600	mm	2990	10830*	11560	5050*	5300
ACCORD 600						
Working area 3715 x 1600	mm	3020	-	9310	-	6030
Working area 5515 x 1600	mm	3020	-	11110	-	6030
Working area 6715 x 1600	mm	3020	-	12310	-	6030

<sup>\*</sup> It includes the operating area

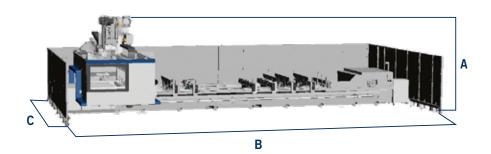
accord 500 PRO-SPACE



accord 500 PRO-SPEED



accord 600 PRO-SPEED





# Maestro Digital Systems

SMART SOFTWARE AND DIGITAL SERVICES TO ENHANCE PRODUCTIVITY OF WOODWORKING AND FURNITURE INDUSTRIES.



routing

drilling

cutting

SCM accompanies woodworking companies throughout their whole process combining machines with matching software solutions and digital services, with a constant strive to enhance company productivity.

The software solutions powered by SCM are developed to optimize machine usage as well as the entire process, providing integration with the different software existing in the company.





# THE SOFTWARE THAT SIMPLIFIES THE

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

**WORK** 

necessary to design the parts, tools management and the relative machining operations.

All the procedures are contained in a perfectly integrated and high performance software.

#### SUITE



#### Maestro pro view

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.



#### Maestro 3D

The module integrated in the Maestro suite is designed to program three dimensional objects on 5-axis machining centres.



#### Maestro apps

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



#### Maestro msl connector

Connector for third-parties with design software.



#### Maestro Power TMS - Tool Management System

It is the innovative software studied by SCM that simplifies and optimizes tool management. It provides for loading the required tools on the on-board tool changers according to the programs the machine will execute.



#### Maestro EasyLoad

Ergonomics and easy programming with Maestro easyLoad, which allows easy and dynamic loading and unloading of the work pieces.



#### **Factory**

#### A REVOLUTIONARY APPROACH TO INTERACT WITH YOUR SCM MACHINE

#### **FULL CONTROL OF PRODUCTION PERFORMANCES**

The creation of customisable reports by operator, shift, program, forecast period (and much more) allows to monitor, optimise and improve the performance.

#### FULL MACHINE AWARENESS AND KNOWLEDGE MANAGEMENT SYSTEM

Recording of maintenance, training and other events, tracing all the activities in a database. The operator's know-how is also stored and made available to other people inside the organisation thanks to the possibility to comment and document all production events or notifications.

#### ORGANIZE YOUR PRODUCTION

Creation of different users with different roles and authorisations (e.g.: operator, maintainer, administrator, ...). Possibility of defining the work shifts on the machine and then detect activities, productivity and events that occurred in each shift.

#### TOTAL QUALITY OF THE FINISHED PRODUCT

The quality of finished piece is no longer put at risk by worn tools. The new Maestro active Tool Life Determination system sends notification messages as the tool reaches its end of life and recommends its replacement at the most appropriate time.

#### **TOOLS? NO PROBLEM!**

Maestro active guides the operator during the tool change phase, taking into account the programs to be executed.

# A WORLD OF SERVICES FOR GREATER EFFICIENCY

#### Maestro connect

#### CONNECT YOUR MACHINE AND GAIN ACCESS TO A WORLD OF SERVICES

Connecting your machine through Maestro connect will let you subscribe a program of fastevolving services. You will access a wide range of benefits that even go beyond the machine experience and will support and assist you through the whole life-cycle of your machine.

#### FASTER SERVICE INTERVENTION AND PROBLEM RESOLUTION

Maestro connect provides real time data and Health Records of the Machine also to SCM Service drastically reducing its troubleshooting time.

#### **WORKING ALWAYS IN PERFECT CONDITIONS**

Maestro Connect can provide a full kit of sophisticated sensor devices to detect and warn the operator in case of alarming conditions of the machine.



#### **DIGITAL SERVICES**

#### **SMART MAINTENANCE:** DOWN TIME REDUCTION

Maestro connect reduces maintenance downtime thanks to:

- Automatic maintenance notifications and scheduling, to prevent failures and work in the best conditions of use
- Direct connection to SCM Service thanks to an automatic ticket opening function

#### **SMART MACHINE:** ANYTIME, ANYWHERE AWARENESS

Connecting your SCM machine also means having your machine always at hand. Immediate instant notifications in case of alarms or downtimes allow customers to immediately take an action thus optimizing his productivity.

#### **SMART MANAGEMENT:** PRODUCTION PERFORMANCE OPTIMIZATION

Reports and KPIs allow further analysis thus increasing Customer Knowledge about his performance and results.

#### **SMART PARTS:** FAST PARTS REPLENISHMENT

Repairs are scheduled proactively since the system provides Spare Parts suggestions and a direct Integration with Smart Parts e-shop.

#### SMART LEARNING: EXECUTE WORK AND RECEIVE PROBLEM SOLVING SUPPORT

Maestro connect provides an intuitive Problem Solving Management System to help the operator to self solve any issue..

#### **SMARTECH:** FASTER AUGMENTED SUPPORT

Maestro connect allows augmented reality support by means of Smartech: the head-wearable computers with wireless connectivity that will bring the interaction between customer and SCM service to a higher level.

#### **SMART WARRANTY:** YOUR MACHINE ALWAYS IN PERFECT CONDITIONS

Together with scheduled maintenance contracts, you can take care of your asset by doubling the warranty from 1 year to 2 years\* for complete peace of mind!

\* please read the complete contract to understand terms and conditions.

## **TECHNICAL DATA**

#### accord 500 / accord 600

CNC machining centres for routing and drilling

		accord 500	accord 600	
AXES				
Vectorial speed X-Y axes "PRO-SPACE" (max.)	m/mm	84	4	
Vectorial speed X-Y axes "PRO-SPEED" (max.)	m/mm	12	20	
Z-axis panel passage (max.)	mm	30	00	
OPERATING UNIT				
3/4 axes				
Electrospindle power (max.)	kW (hp)	21 (28,5)		
Rotation speed (max.)	rpm	24.000		
5 axes				
Electrospindle power (max.)	kW (hp)	17 (23)	13,5 (18,4)	
Rotation speed (max.)	rpm	24.000	24.000	
DRILLING UNIT				
Independent vertical spindles (up to)	n.	18	18	
Independent horizontal spindles (up to)	n.	8	8	
Rotation speed (max.)	rpm	8.000	8.000	
Integrated blade	Ø	125	125	
TOOL CHANGERS				
TRB side tool changer	n.	11	11	
CADDY side tool changer	n.	35	35	
RAPID rear circular tool changer	n.	16	16	
TRC rear chain tool changer	n.	32	32	
FAST linear tool changer	n.	16	-	
VELOCE on-board circular tool changer	n.	16	12+12	
INSTALLATION				
Machine weight	kg	6.000 / 8.000		
Exhaust air consumption (max.)	m3/h	5.450		
Compressed air consumption (average)	NI/min	35	0	



COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV = ISO 9001=

# THE USE OF POWER ONLY WHEN IT IS REQUIRED

Sav€nergy allows making things operate only when they are really necessary. It means the machine automatically enters "stand-by" mode when there are no panels to be machined.

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.

Maximum noise levels measured according to the operating conditions established by EN 848-3:2012 Acoustic pressure in process (routing) 81 dbA (measured according to EN ISO 11202:2010, uncertainty K=4 dB) Acoustic power in process (routing) 98 dbA measured according to EN ISO 3746:2010, uncertainty K=4 dB)

Even if there is a correlation between above mentioned "conventional" noise emission values and average levels of personal exposure over eight hours of operators, these last also depend on the real operating conditions, duration of exposure, acoustic conditions of the working environment and presence of further noise sources, this means the number of machines and other adjacent processes.





SCM OFFERS A FULL RANGE OF **HIGHLY SPECIALISED SERVICES** WITH A QUALITY AND RELIABILITY THAT STEM FROM 70 YEARS OF EXPERIENCE IN THE INDUSTRY.

From installation and production start-up to services and maintenance. From training to the supply of specific original spare parts: **we provide solutions designed around you!** 

CONTACT

**SCM SERVICE** 

via Emilia 77 - 47921 Rimini - Italy tel. +39 0541 700100 scmservice@scmgroup.com www.scmwood.com **SCM SPAREPARTS** 

Via Emilia, 61 - 47921 - Rimini - Italy tel. +39 0541 674111 spareparts@scmgroup.com www.scmwood.com





# WE'LL GO THE EXTRA MILE FOR YOU





#### **SERVICE AND MAINTENANCE**

- Remote support
- Scheduled maintenance contracts
- Warranty extension



#### TRAINING SERVICE

- Courses for machine operators
- Software and programming courses
- Training in production start-up



#### **SPARE PARTS**

- Recommended spare parts list
- E-shop
- Interactive spare-parts catalogues
- Repairs on electronic parts, glue tanks and electro-spindles



#### **DIGITAL SERVICES**

- Maestro Connect IoT platform to be constantly connected with your machines
- Smartech assistance with augmented reality
- My Scm portal opening of service ticket and single point of access to the apps and Services tools

# THE STRONGEST WOOD ARE IN OUR DNA

#### SCM. A HERITAGE OF SKILLS IN A UNIQUE BRAND

70 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.

**70** years history

3 main production sites in Italy

**300.000** square metres of production space

20.000 machines manufactured per year

90% export

20 foreign branches

400 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

#### SCM GROUP, A HIGHLY SKILLED TEAM EXPERT IN INDUSTRIAL MACHINES

#### **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 equipment and components for machining the widest range of materials.

#### AND COMPONENTS

#### **INDUSTRIAL COMPONENTS**

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





**4**steelmec



SPINDLES AND TECHNOLOGICAL COMPONENTS

**ELECTRIC PANELS** 

METALWORK

CAST IRON







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