

# pro evolution

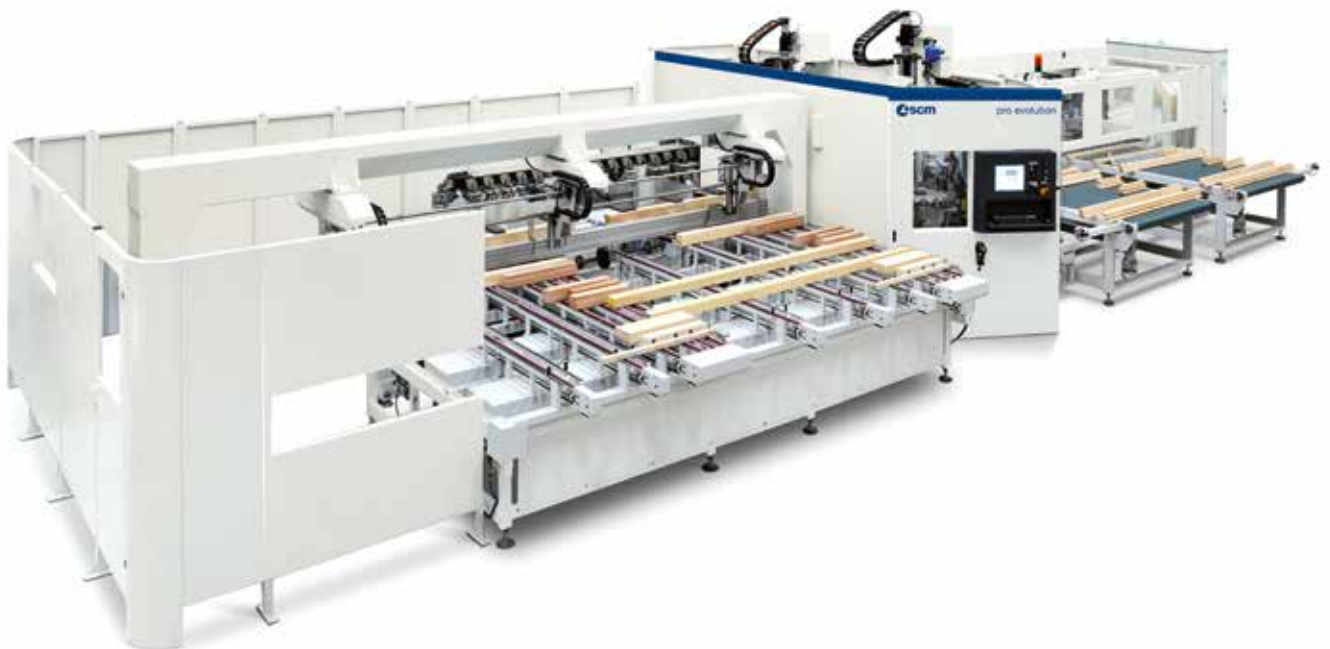
CNC machining cell for doors and windows



# PERFECT JOINT



# FOR EXCELLENT PERFORMANCE



RELIABILITY AND ACCURACY  
IN DOORS AND WINDOWS  
PROCESSING

## INNOVATION



### **Fully automatic production**

The wide area of loading and unloading systems reduces the operator interventions during loading and unloading operations.

## QUALITY



### **Superior finishing**

High accuracy and excellent finish quality thanks to the ability of the two operating units to work in "splitting" mode.

## PRECISION



### **Optimal locking of the work-piece**

Worktable equipped with specially designed clamps, individually programmable, for the best holding of the work-piece during the machining of all sides.

## VERSATILITY



### **Maximum flexibility**

The capacity of the tools stores and the wide centre-to-centre distance, enable the machine to be always ready for any operation, reducing time for tooling.

## RAPIDITY



### **High productivity**

Cutting, profiling and separation of the work-piece in a single step with the unit dedicated to the glazing bead recovery system that increases the machine performance.

## EFFICIENCY



### **No possibility of error**

Automated system with work-pieces dimensions check and tools control.

# TECHNICAL FEATURES OVERVIEW

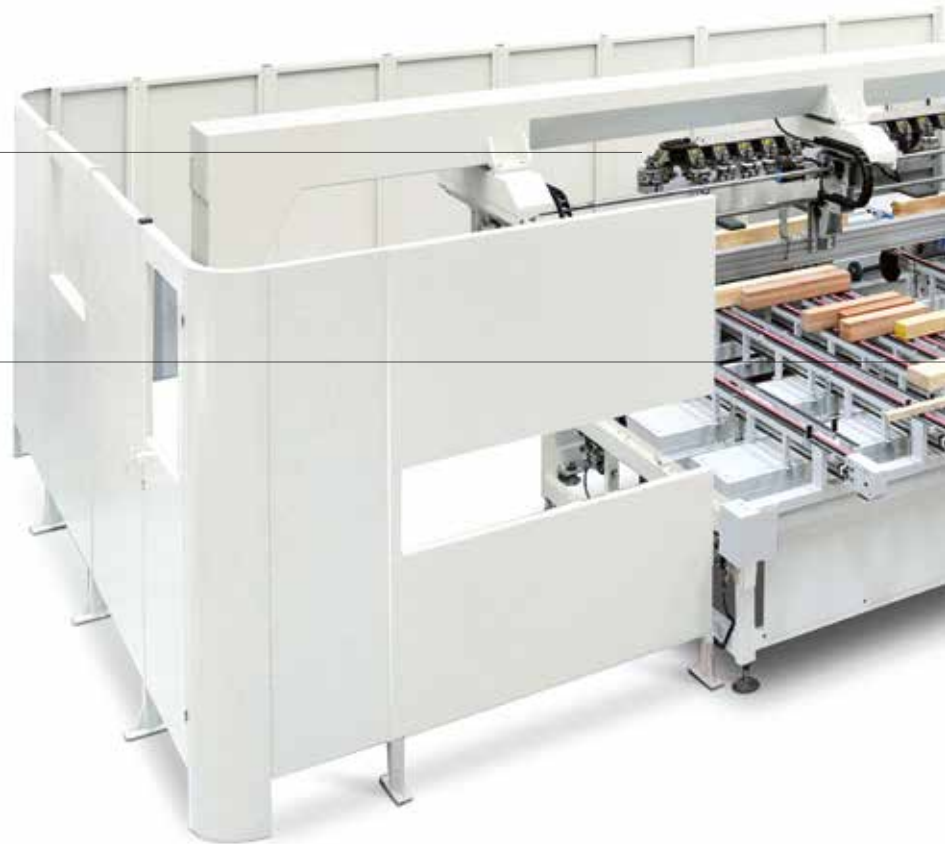
TECHNOLOGICAL ADVANTAGES



*Chain tools store*  
Production flexibility.



*Worktable*  
Maximum efficiency.



*Work-pieces loading system*  
Total working autonomy.



# olution

**pro evolution**  
CNC machining cell for doors and windows



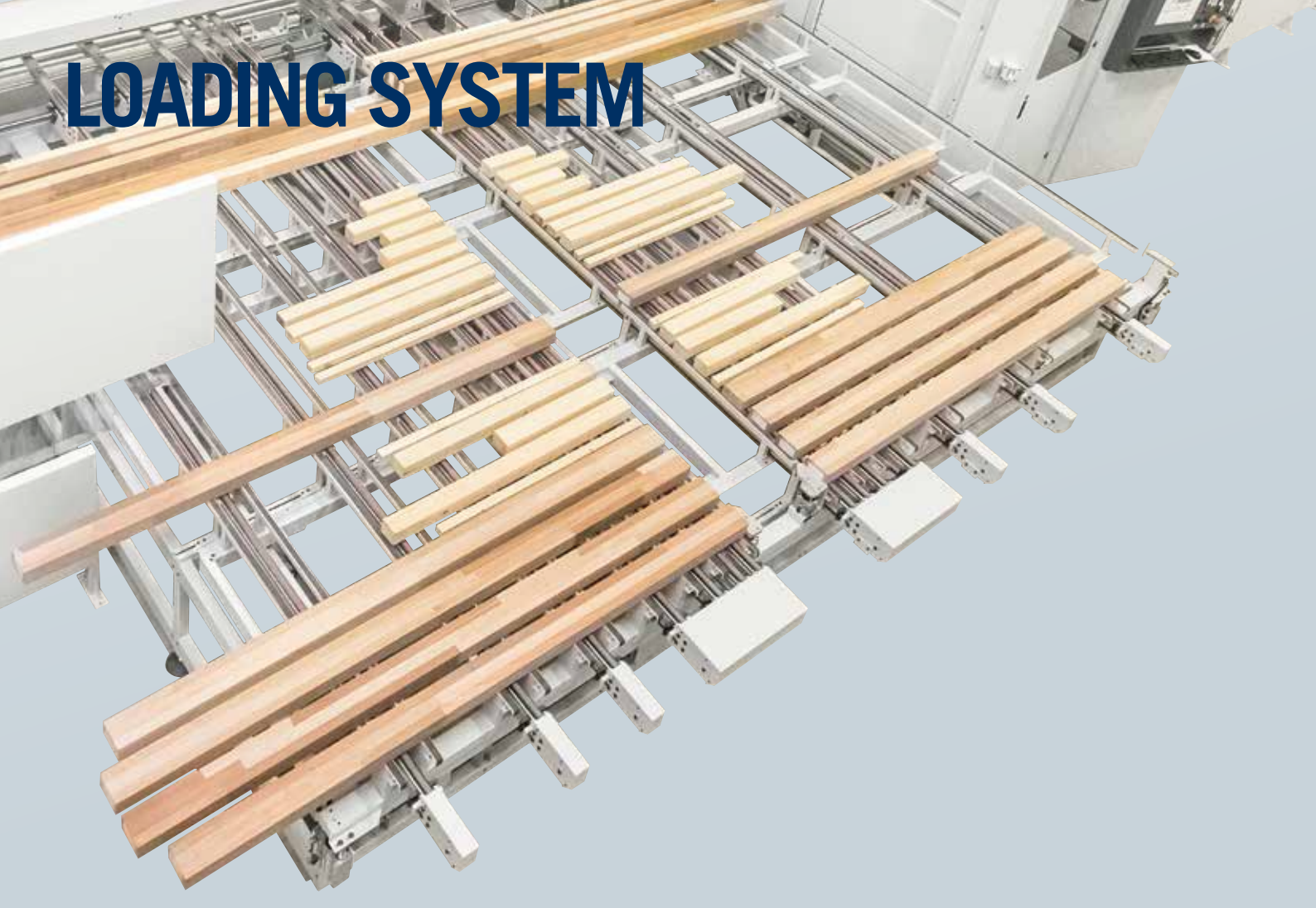
*Operating units  
to work in  
"splitting" mode  
Excellent  
finishing.*



*Work-pieces  
unloading system  
High capacity.*

*Protection coverage  
Clean and safe work  
environment.*

# LOADING SYSTEM



## FULLY AUTOMATIC PRODUCTION

Maximum flexibility: it is possible to process sequences of totally different work-pieces.

The loading system allows to position up to 32 pieces without requiring the constant presence of the operator.



Bar-code reader for the label scanning, which identifies dimensions and machining to be performed on the work-piece.





Central reference stop for the work-pieces positioning on the loading system.



The centering devices ensure the correct work-pieces alignment on the worktable.

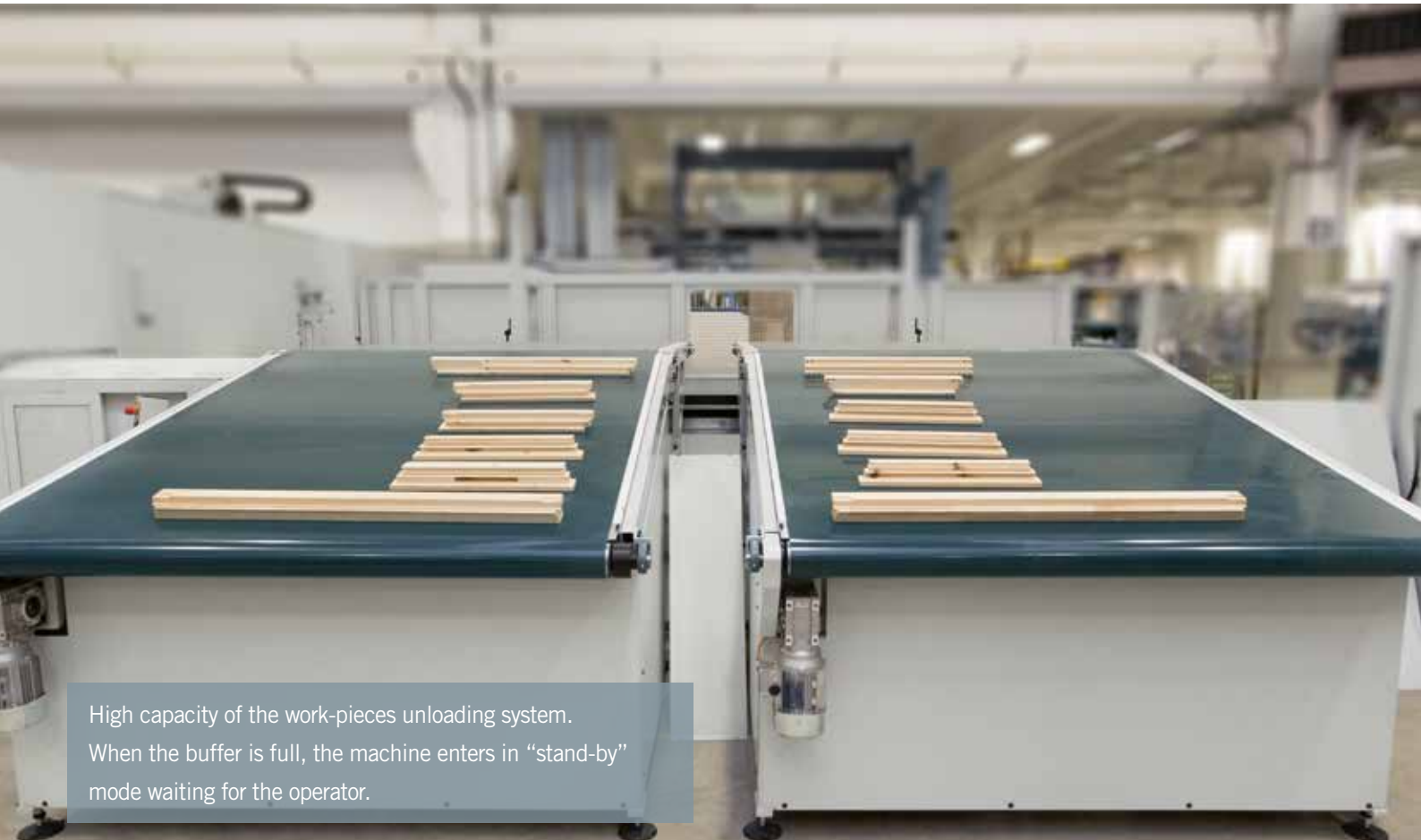


Work-piece dimensions check by laser device that guarantees the entire control of the working process, to avoid any operator's error.

# UNLOADING SYSTEM



Laser device for marking work-pieces.



High capacity of the work-pieces unloading system.  
When the buffer is full, the machine enters in “stand-by”  
mode waiting for the operator.





# STRUCTURE



The entire cover of the work area with the protection coverage ensures total operator's safety, sawdust capture and soundproofing of the machine.



Internal camera to verify the work area.



Maximum cleaning of the work environment thanks to the motorized belt for the shavings collection over the entire length of the cell.



*pro evolution 2*: machine configured with two bridges



# OPERATING UNITS



## **SUPERIOR FINISH QUALITY**

High accuracy of the operating units: routing electospindles with 4 and 5 axes.

Synchronous electospindles, maximum torque even at the lowest rpm, HSK 63E tool-holder, brakes on the rotary axes, vibrations sensor and liquid cooling.



The 5-axis electospindle allows to carry out any type of machining, for a complete production flexibility.

Excellent finishing on the work-piece and reduced execution times thanks to the ability of the two operating units to work in “splitting” mode, with 229 mm centre-to-centre distance. The suction hood with pneumatic insertion optimises the shavings extraction in the work area.



The multifunction unit is composed of two spindles, for the machining on the upper face of the work-piece, and a group dedicated to the glazing bead recovery system for upper side moulding, cutting and nailing operations.





# TOOLS STORE



## MAXIMUM VERSATILITY

Chain tools store with 24 and 42 positions, developed for managing heavy and large tools, ideal for doors and windows processing.



Total reliability with the Baluff tool recognition device. The tool life monitoring function records the meters processed by each tool for optimal management of the life of the knives.

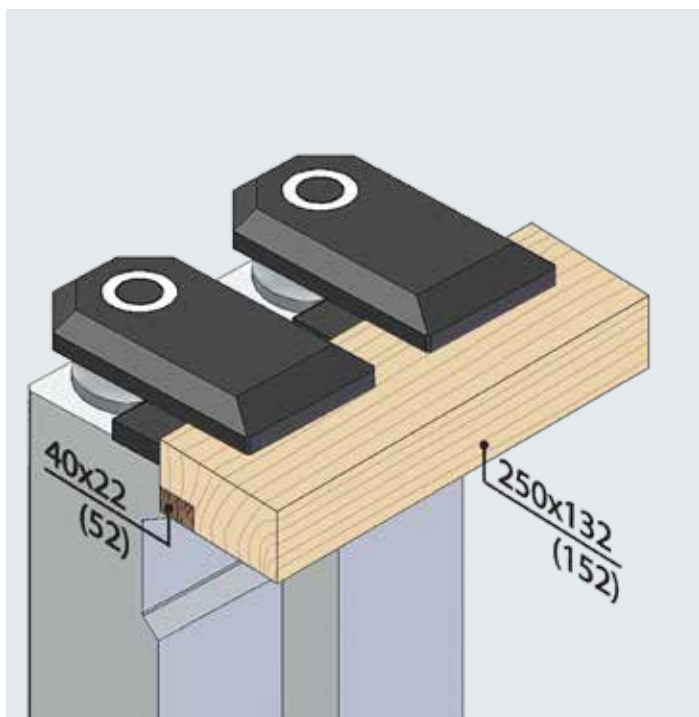


# WORKTABLE



## OPTIMAL LOCKING OF THE WORK-PIECE

Worktable equipped with specially designed clamps, individually programmable, for the best holding of the work-piece during the machining of all sides. The clamps include stop levers for the correct alignment of the work-pieces.



Minimum and maximum work-piece section that can be process by the machine.





For *pro evolution 1* the work-piece repositioning on the worktable is executed by means of a picker.  
For *pro evolution 2* the work-piece repositioning is direct between the two worktables.

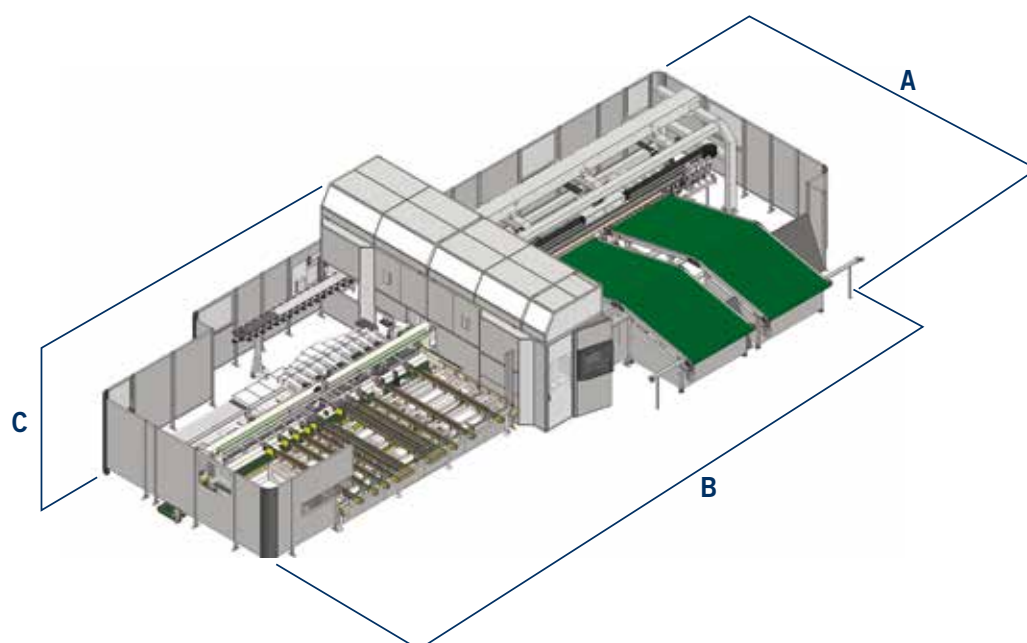


# OVERALL DIMENSIONS AND LAYOUT

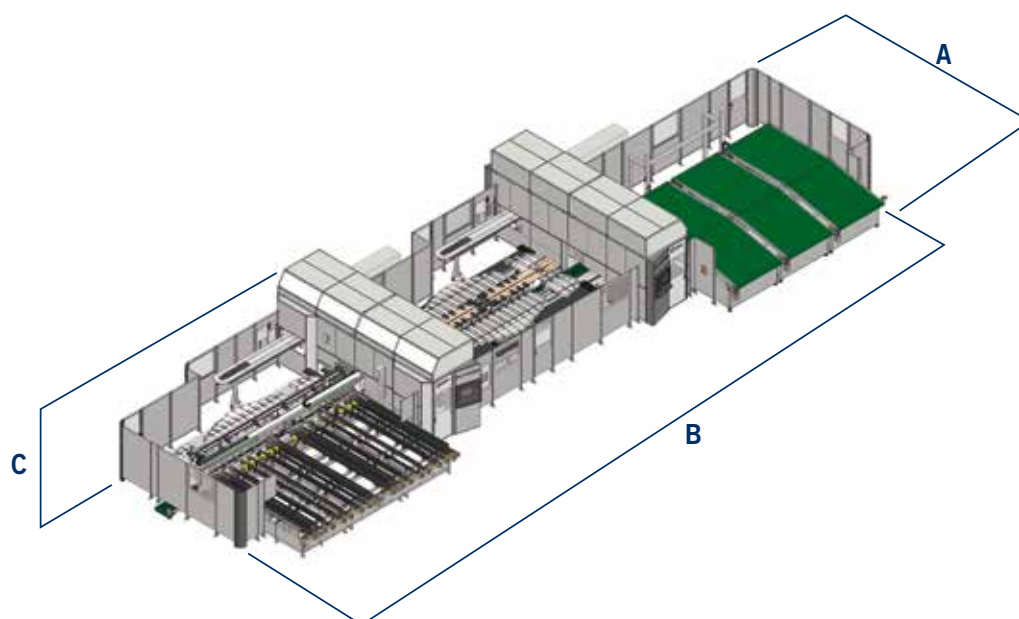
		A	B	C
pro evolution 1-37	mm	8310	12770	3150 (*)
pro evolution 1-60	mm	8310	17350	3150 (*)
pro evolution 2-37	mm	8310	19410	3150 (*)
pro evolution 2-60	mm	8310	26930	3150 (*)

(\*) 3000 mm if there is no upper coverage

*pro evolution 1*



*pro evolution 2*



pro evolution		1-37 / 2-37	1-60 / 2-60
<b>WORK-PIECE DIMENSIONS</b>			
Max. work-piece length	mm	1 x 3700 2 x 1600	1 x 6000 2 x 2600
Min. work-piece length	mm		190
Max. work-piece width	mm		250
Min. work-piece width	mm		40
Max. work-piece thickness (option)	mm		132 (162)
Min. work-piece thickness (option)	mm		22 (52)
<b>AXES</b>			
X-Y-Z axes max. speed	m/min		100-110-30
<b>OPERATING UNITS</b>			
Electrospindle motor power	kW		20
Max. electrospindle rotation speed	rpm		18000
Electrospindle tool-holder			HSK 63E
<b>TOOLS STORE</b>			
Standard (option)	positions		24 (42)



**COMPANY WITH  
QUALITY SYSTEM  
CERTIFIED BY DNV GL  
= ISO 9001 =**

*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 EN848-3E

Acoustic pressure in process (routing) 88,3 db(A) (measured according to UNI EN ISO 11202/97, uncertainty K = 4 dB)

Acoustic power in process (routing) 100,2 db(A) (measured according to ISO 3746/95, 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.



# PROMPT AND EXPERT TECHNICAL SUPPORT THROUGH A NETWORK OF 1000 TECHNICIANS AND AN INVENTORY OF 36,000 SPARE PARTS.

HIGHLY SPECIALISED TECHNICIANS, EFFICIENT MANAGEMENT AND 6 SPARE PARTS BRANCHES AROUND THE WORLD GUARANTEE A CLOSE, SAFE AND EFFECTIVE TECHNICAL SUPPORT.

## SERVICE

SCM provides a service that goes beyond the purchase, to guarantee the long term performance of your technological production system and peace of mind for your business.

### A COMPLETE RANGE OF AFTER-SALES SERVICES

- installation and start-up of machines, cells, lines and systems
- tailored training programs
- telephone support to reduce times and costs when machines are not working
- preventive maintenance programs to guarantee long term performance
- complete renovation of machines and plants to renew the added value of the investments
- custom upgrading to update machines and plants and meet new production requirements

## SPARE PARTS

SCM Group can count on 140 spare parts professionals worldwide to meet any request with real time shipments.



### 36,000 SPARE PARTS

Our spare parts inventory, with a value of 12 million euros, covers every single machine



### SPARE PARTS GUARANTEED

We guarantee also hard to find parts, with 3,5 million euros invested in "critical" spare parts.



### IMMEDIATE AVAILABILITY

Over 90% of orders received are carried out the same day thanks to the huge inventory available.



### 6 BRANCHES AROUND THE WORLD

The spare parts service can count on worldwide support (Rimini, Singapore, Shenzhen, Moscow, Atlanta, São Bento do Sul)



### 500 SHIPMENTS A DAY



# 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

**20.000** machines manufactured per year

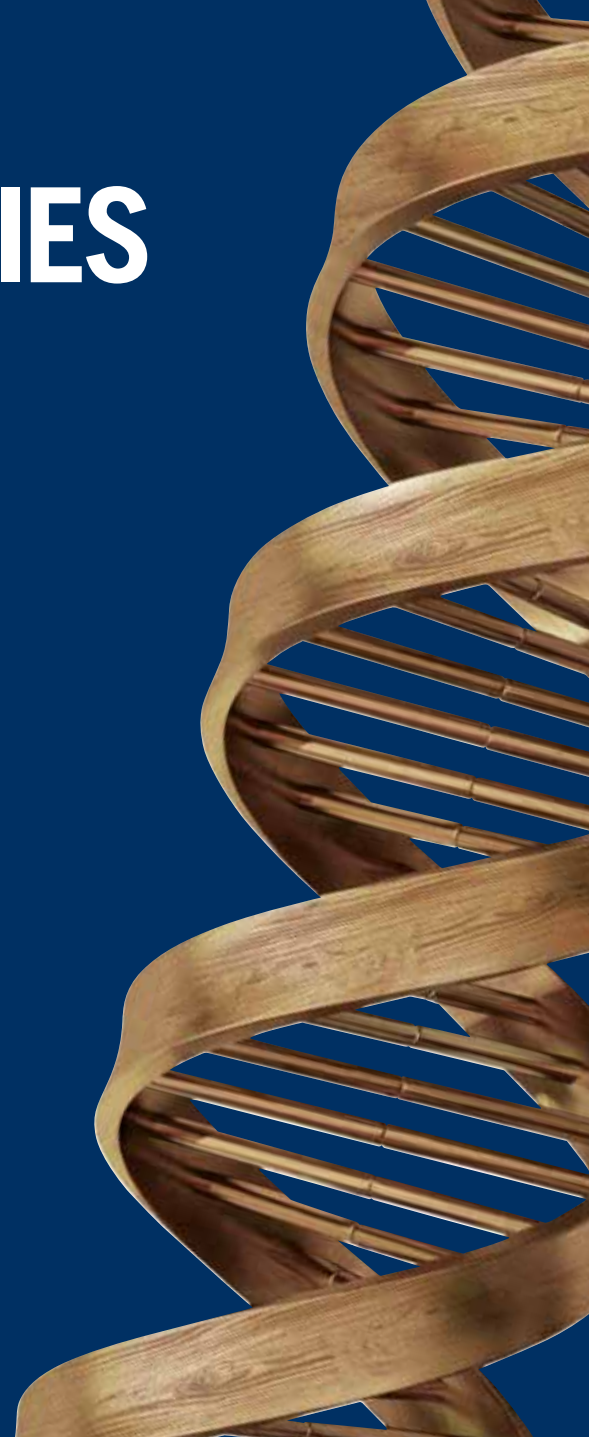
**90%** export

**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 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.



SPINDLES AND TECHNOLOGICAL COMPONENTS



ELECTRIC PANELS



METALWORK



CAST IRON



*is more*





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