

pro evolution

CNC machining cell for windows and doors



PERFECT JOINT



FOR EXCELLENT PERFORMANCE



RELIABILITY AND ACCURACY
IN WINDOWS AND DOORS
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

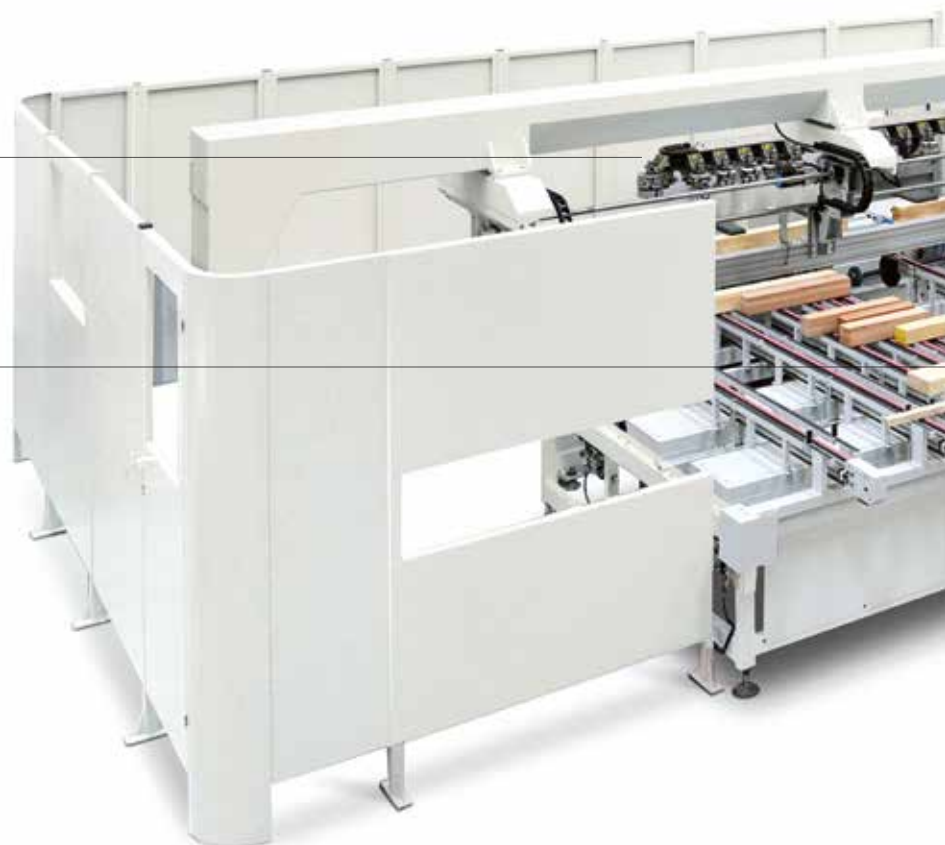
TECHNOLOGICAL ADVANTAGES



Chain tools store
Production flexibility.



Worktable
Maximum efficiency.



Work-pieces loading system
Total working autonomy.

olution

pro evolution
CNC machining cell for windows and doors



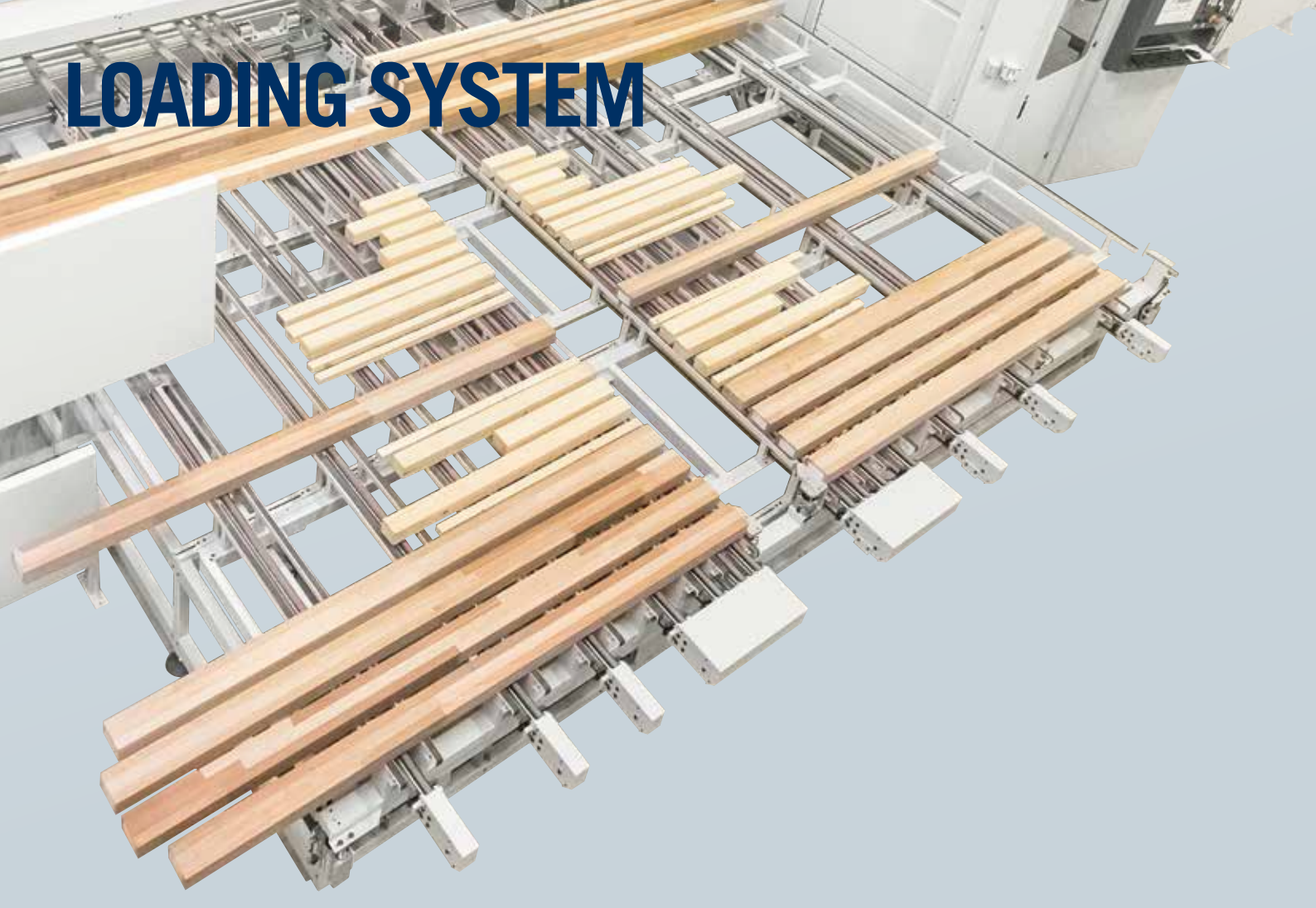
*Operating units
to work in
"splitting" mode
Excellent
finishing.*



*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.

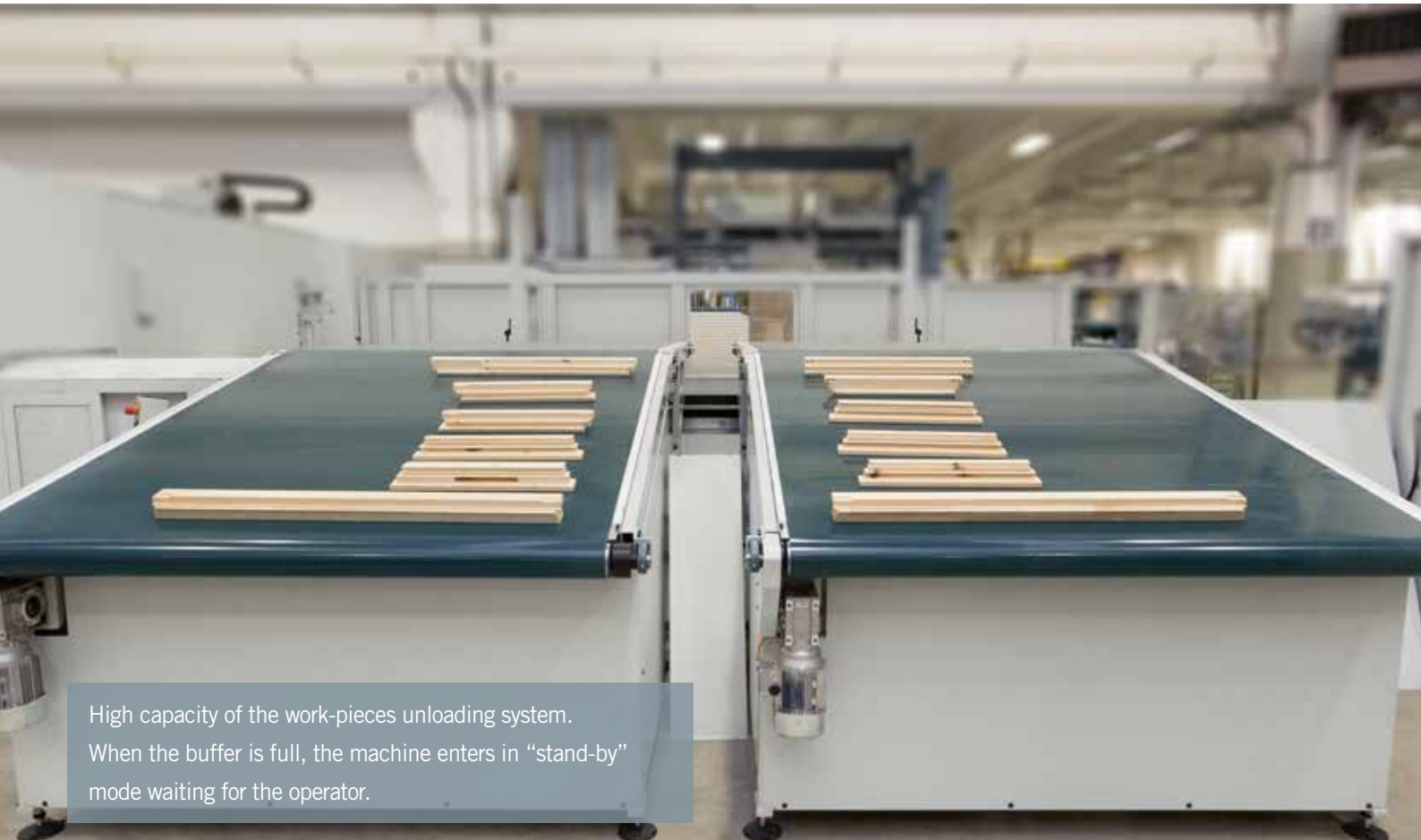


Work-piece dimensions check by laser device that guarantees the entire control of the working process, to avoid any operator's error.

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 windows and doors 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.

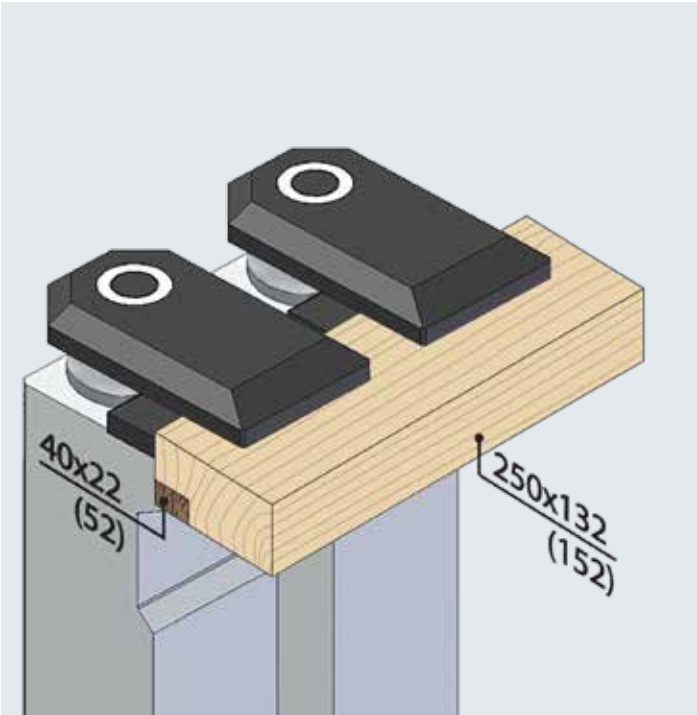


WORKTABLE



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.

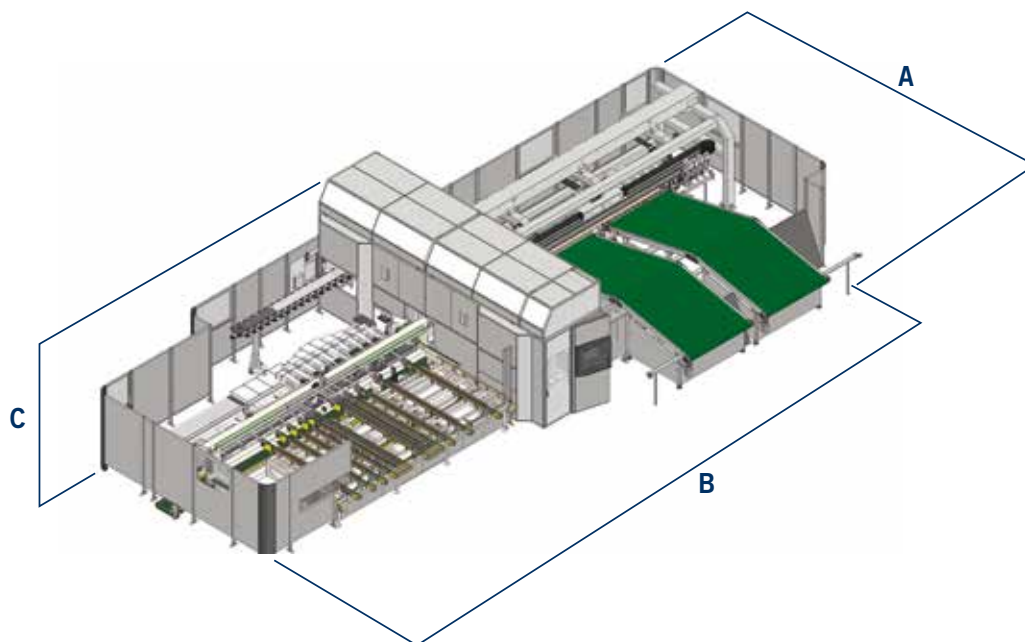


OVERALL DIMENSIONS AND LAYOUT

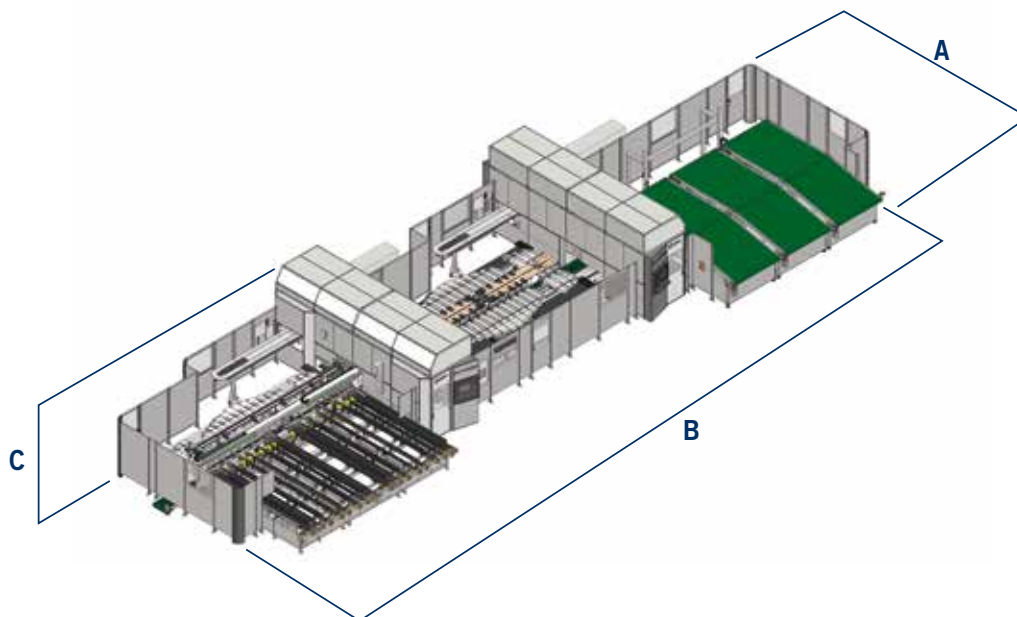
		A	B	C
pro evolution 1-37	mm	8310	12770	3150 (*)
pro evolution 1-60	mm	8310	17350	3150 (*)
pro evolution 2-37	mm	8310	19410	3150 (*)
pro evolution 2-60	mm	8310	26930	3150 (*)

(*) 3000 mm if there is no upper coverage

pro evolution 1



pro evolution 2



pro evolution		1-37 / 2-37	1-60 / 2-60
WORK-PIECE DIMENSIONS			
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)
AXES			
X-Y-Z axes max. speed	m/min		100-110-30
OPERATING UNITS			
Electrospindle motor power	kW		20
Max. electrospindle rotation speed	rpm		18000
Electrospindle tool-holder			HSK 63E
TOOLS STORE			
Standard (option)	positions		24 (42)



**COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV
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.

WE'LL GO THE EXTRA MILE FOR YOU



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!**

 <p>SERVICE AND MAINTENANCE</p> <ul style="list-style-type: none"> • Remote support • Scheduled maintenance contracts • Warranty extension 	 <p>TRAINING SERVICE</p> <ul style="list-style-type: none"> • Courses for machine operators • Software and programming courses • Training in production start-up
 <p>SPARE PARTS</p> <ul style="list-style-type: none"> • Recommended spare parts list • E-shop • Interactive spare-parts catalogues • Repairs on electronic parts, glue tanks and electro-spindles 	 <p>DIGITAL SERVICES</p> <ul style="list-style-type: none"> • 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

CONTACT

SCM SERVICE

via Emilia 77 - 47921 Rimini - Italy
 tel. +39 0541 700100
 scmsservice@scmgroup.com
 www.scmwood.com

SCM SPAREPARTS

Via Casale, 450 - 47826 - Villa Verucchio (RN) - Italy
 tel. +39 0541 674111
 spareparts@scmgroup.com
 www.scmwood.com



THE STRONGEST WOOD TECHNOLOGIES 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 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



SCM GROUP SPA

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



00L0528766D