

# WOODWORKING TECHNOLOGY



a brand of **scm** **group**



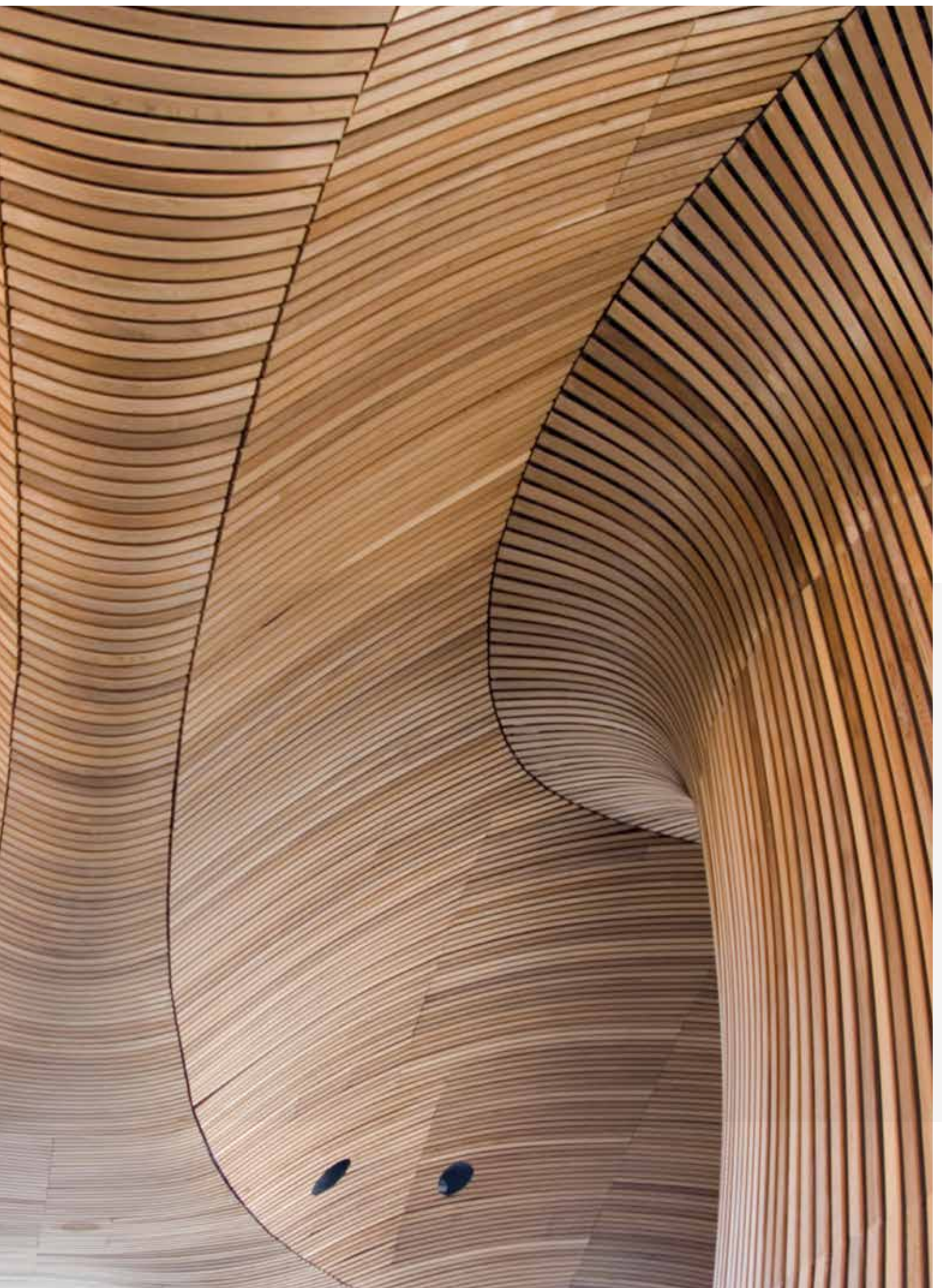
## **SINCE 1952 WE HAVE BEEN FIRM LEADERS IN THE MANUFACTURE OF MACHINES, SYSTEMS AND SERVICES FOR THE WOODWORKING INDUSTRY**

Since 1952, **SCM** is the world-leading producer of machinery and systems, as well as service provider, for the woodworking industry. Our 3 major production centres in Italy boast a record annual production output of over 20,000 machines, supported by the largest distribution network in the industry and an excellent after-sales service.

Its state-of-the-art woodworking technologies and applications are able to respond to all market needs, both within an industrial context and in that of the craftsman, both for machining panels and processing of solid wood.

As from today, SCM is the reference brand in the field of woodworking machinery and that of the specific technologies developed by the historical brands, who now give their respective names to each of the machines.











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## 1952

The history of SCM dates back to 1952 when **Nicola Gemmani** and **Lanfranco Aureli** produced their first **woodworking machine**, designed by Giuseppe Gemmani, Nicola's son.

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## 1976

**SCM** develops the first solid wood **machining centres and door and window systems** and quickly takes on a leading role.

# FOR OVER 65 YEARS, SCM HAS BEEN AT THE FOREFRONT OF THE INDUSTRIAL REVOLUTION IN THE WOODWORKING SECTOR

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## 1985

**SCM** takes over **Morbidelli**, a move that is followed by the takeover of other prestigious companies such as **Stefani, Gabbiani, Dmc, Superfici** and others, until its **panel machining processes** are complete and it again takes on a **leading role**.

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## 1992

**SCM** then takes over **Routech** and in the years that follow, it develops a series of **technologies for machining wooden elements** for the construction industry.

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## 2009

The company **launches its industrial** consolidation and development plan. **SCM** reorganises, implementing Lean Manufacturing strategies in its entire production process to obtain the highest levels of quality and efficiency.

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## 2017

**SCM** becomes the Group's reference brand for the **woodworking sector**.







## ALONGSIDE ALL SECTORS IN THE WOODWORKING INDUSTRY

SCM offers a wide range of machines to satisfy all the stages in secondary woodworking processing.

This ranges from domestic, office and contract furniture to the world of structural architecture, such as beams and partitions as well as finishings, such as joinery, floors and stairs and onto specialised sectors, like chairs and eye wear.

All over the world where there is woodwork, there is SCM.







# M

**Maestro**  
Digital Systems



# MAESTRO DIGITAL SYSTEMS

**Smart software and Digital Services to enhance productivity of woodworking industries.**

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.

Work simple. Work digital



## SOFTWARE

### Simple, smart and open.

Maestro software are tailored on the machine technology as well as on the entire process.

All Maestro software share a common mission: **easy to use** - so that any operator can easily and confidently learn and use the software - **smart** - with algorithms and computing modules aiming at the best possible result - **open**, in order to integrate existing software, and provide customer the coverage of all his process.

Work simple.





## DIGITAL SERVICES

Transforming the way it delivers services to its customers through digital technologies and particularly, the IoT platform that collects and analyses data coming from the machine, **SCM created a world of services enabled by Maestro connect.**

Meaning that connecting an SCM machine through Maestro connect will let customer subscribe a program of fast-evolving services and 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 the machine.

Work digital



## **SERVICE** OVER 500 TECHNICIANS BY YOUR SIDE

- Installation and start-up
- Training programmes on site at the SCM Campus and remotely using the e-learning platform
- Remote assistance, support via augmented reality and remote monitoring
- Preventive maintenance programmes and inspection visits
- Checks and alterations to machinery on site due to a change in production needs
- Updating obsolete products
- Warranty extension into a second year





## SPARE PART SERVICE QUALITY ASSURANCE

130 operators and a significant warehouse at your disposal.

- 36,000 different codes to serve machinery of all ages;
- 1 central warehouse at the headquarters in Rimini and 5 bases around the world fully integrated at IT level and controlled by a shipping optimisation software to reduce waiting times;
- 98% of orders available in stock;
- spare parts guaranteed thanks to a scrupulous control process and validation via our internal quality laboratory;
- availability to draw up recommended spare parts lists based on client needs, to reduce down time to a minimum;
- access to the E-shop with price and spare parts warehouse availability shown in the machinery manual or directly from the Maestro connect platform.





## A VAST HERITAGE OF SKILLS IN A SINGLE BRAND

2017 saw the start of the company's rebranding, making SCM the world's leading name in the sector for secondary woodworking machinery and for those specific technologies that originated from the historical brands, who have now given their names to today's machines.

Today SCM is an important industrial company dedicated entirely to woodworking technologies in which the most advanced principles of **Lean Production** have been applied **to guarantee the highest levels of quality control and significant savings in terms of time and costs.**

WOODWORKING TECHNOLOGIES	ORIGINAL BRANDS
CNC - MACHINING CENTRES FOR DRILLING AND ROUTING	MORBIDELLI
CNC - NESTING MACHINING CENTRES FOR DRILLING AND ROUTING	SCM
CNC - MACHINING CENTRES FOR SOLID WOOD ROUTING AND DRILLING	SCM, BALESTRINI
CNC - MACHINING CENTRES FOR TIMBER CONSTRUCTION	ROUTECH
CNC - MACHINING CENTRES FOR DRILLING, ROUTING AND EDGEBANDING	MORBIDELLI
EDGE BANDERS AND SIZING EDGE BANDERS	STEFANI, SCM
BEAM SAWS	GABBIANI, SCM
DRILLING SOLUTIONS	MORBIDELLI, SCM
AUTOMATION SYSTEMS	MAHROS
THROUGHFEED MOULDERS	SCM
SYSTEMS FOR DOORS AND WINDOWS	SCM
TENONERS, MORTISERS AND DOUBLE SIDED SHAPERS	BALESTRINI
MACHINES AND SYSTEMS FOR SQUARING, TENONING AND PROFILING	CELASCHI
WIDE BELT SANDERS	DMC, SCM
FINISHING SYSTEMS	SUPERFICI
PRESSES	SERGIANI, SCM
ASSEMBLY	CPC
PACKAGING	CPC
JOINERY MACHINES	SCM, MINIMAX, FORMULA
INTEGRATED SYSTEMS AND LINES	



# CNC MACHINING CENTRES

**The most comprehensive range for housing, furniture, contract and special products.**

SCM's wide range of CNC machining centres is a keypoint in its worldwide market range, as it meets all panel and solid wood machining requirements for the furniture, building and special product sectors.

## CNC - MACHINING CENTRES FOR DRILLING AND ROUTING



## CNC - NESTING MACHINING CENTRES FOR DRILLING AND ROUTING



## CNC - MACHINING CENTRES FOR SOLID WOOD ROUTING AND DRILLING



## CNC - MACHINING CENTRES FOR TIMBER CONSTRUCTION



## CNC - MACHINING CENTRES FOR DRILLING, ROUTING AND EDGE BANDING







## CNC MACHINING CENTRES FOR DRILLING AND ROUTING

**Highly modular machining centres** that can solve any woodworking problem and satisfy all the requirements of furniture manufacturers.

**Solutions that combine quality and technology** thanks to machining centres that can be configured to comply with customers' specific requirements.





**SUPERIOR TECHNOLOGY AND QUALITY:  
JQX AND PRISMA ELECTROSPINDLES**

Maximum flexibility and excellent machining quality: at the 5-axis disposal with the "JQX" (Just Quality eXtreme) and "Prisma" electrospindles, that guarantee completely vibration-free machining even with huge material removal at high speeds.

**NO IDLE TIME:  
FAST AND RAPID TOOL CHANGERS**

The on-board FAST 14 and RAPID tool changers ensure faster changes in just a few seconds between the machining operations.

**PERFECT DRILLING:  
RO.AX SPINDLES**

Zero play during machining with the new RO.AX technology (Rotoaxial spindle technology), the most efficient spindle on the market, with rotation speeds up to 8000 RPM.

Reliable and flexible, it requires reduced maintenance (every 1000 machining hours).

**MINIMUM OVERALL DIMENSIONS, MAXIMUM  
SAFETY AND FLEXIBILITY:**

**PRO-SPACE PROTECTIONS**

Completely free loading area to minimize the space occupied.

The absence of perimeter protections allows access to the worktable from all the sides of the machine.

**NO SET-UP TIMES:  
TV FLEXMATIC AND TV MATIC WORKTABLES**

The requested configuration is performed with precision in just a few seconds, without any risk of collision between the tool and the worktable.

**TOTAL FREEDOM AND HIGH PRODUCTIVITY:  
PRO-SPEED PROTECTIONS**

They allow the machine to be used at the maximum feed speed.

Thanks to the front photocell barrier, when the operator enters the loading area, the speed is automatically reduced and then restored when the operator leaves the loading area.



## CNC NESTING MACHINING CENTRES FOR DRILLING AND ROUTING

CNC machining centres that are **ideal for nesting processing** and are specifically designed for manufacturers who need to produce in batches or in single orders. Also available in “cell” version with lifting device and unloading belt.







#### **FLEXIBILITY AND PRECISION: MULTI-FUNCTION WORKTABLE**

Extremely stiff aluminium worktable designed to maintain long-term planarity despite repeated stresses and environmental factors, such as temperature and humidity; moreover, the integrated vacuum system is ideal for a direct and optimal workpiece clamping.

#### **FREEDOM AT 360°: "PRO-SPACE" PROTECTIONS**

Minimum overall dimensions, maximum flexibility and ergonomics: the absence of perimeter protections allows access to the worktable from all the sides of the machine.

#### **TOTAL ABSENCE OF VIBRATIONS: MOBILE GANTRY STRUCTURE**

Unrivalled performance thanks to the stiff structure of the mobile gantry that allows for high machining speeds, whilst ensuring precision and excellent finishing quality across the whole working area.

#### **PERFECT DRILLING: RO.AX SPINDLES**

Zero play during machining with the new RO.AX technology (Rotoaxial spindle technology), the most efficient spindle on the market, with rotation speeds up to 8000 RPM.

Reliable and flexible, it requires reduced maintenance (every 1000 machining hours).

#### **PRECISION AND FLEXIBILITY: 5-AXES ELECTROSPINDLES**

Excellent machining quality and maximum flexibility in every condition, with 5-axes routing units available across the whole range of machining centres.



## CNC MACHINING CENTRES FOR SOLID WOOD ROUTING AND DRILLING

To meet the specific needs of windows, doors and stairs production and solid wood machining in general, SCM has designed accord, a wide range of machining centres with a mobile gantry structure and bars or multi-function worktable.

**The versatility of accord machines offers reliable, high performance technological solutions** that can satisfy the requirements of an increasingly demanding market.







#### **PERFECT FINISH QUALITY**

The architecture with fixed table and mobile gantry structure, consisting of a sturdy construction equipped with front and rear sliding guides, ensures maximum accuracy and finish quality over the entire work area.

#### **HIGH PRODUCTIVITY**

State of the art processes to guarantee the best production standards, such as machining head with twin routing units, fast tool changers and high power electrospindles.

#### **RAPID AND PRECISE SET-UP**

The MATIC bars worktable with direct transmission system and independent drive units, assures the complete set-up in seconds. Simple and quick replacement of clamps and suction cups through the exclusive rapid locking device.

#### **RELIABLE TECHNOLOGY**

The SCM aluminium multi-function worktable guarantees perfect lasting planarity. The direct integrated vacuum system allows the optimum work-piece hold down and the T-grooves are ideal for fitting of any type of mechanical locking equipment.

#### **ERGONOMIC AND SAFE**

The PRO-SPEED safety system with photocells and bumper protections, combines the safe access to the worktable and the maximum speed during machining.

#### **INTELLIGENT PROGRAMMING**

Simple and intuitive programming, thanks to the software that includes modules for different applications.



## CNC MACHINING CENTRES FOR SOLID WOOD ROUTING AND DRILLING

The **balestrini** technology includes high performance machining centres with numeric control, ideal for specific applications such as chairs, tables, curved cabinet doors, furniture and design objects. Compact size, heavy-duty structure and multi-purpose operating units ensure maximum accuracy and freedom when processing complex shaped elements.







#### **EASY SET-UP AND FLEXIBILITY**

The machine architecture features mobile worktables that can be fitted with clamping modules to produce any type of element.

#### **FAST MACHINING**

Fast machining cycles thanks to Revolver operating units, featuring up to 4 electrospindles, each one equipped for specific operations and always ready for use.

#### **TOP OF THE RANGE**

**Balestrini cube** features two operating units with independent strokes, working like two real 5-axis machining centres and performing all operations on the six sides of the element in a very short time.

#### **INTELLIGENT PROGRAMMING**

**SMART PRO** is an extremely advanced CAD/CAM system that can be used to create and manage the machining operations simply and reliably. The software includes various functions, such as simulation, collisions check, optimisation of the tool paths and machining macros.





## CNC MACHINING CENTRES FOR TIMBER CONSTRUCTION

Thanks to its continuous technological innovation, SCM leads the timber construction industry **with hi-tech CNC machining centres** that are specifically designed for processing structural beams, X-lam/CLT wall panels and insulating panels.





The use of wood for the construction of large structures such as private, residential and public buildings is growing constantly across the world. Well-known companies of the sector have selected our **oikos x, area, pmt and routech rx CNC machining centres** for their flexibility, precision and speed, to create their projects.



#### PERFECT QUALITY THANKS TO HIGH PERFORMANCE STRUCTURES

Powerful and extremely robust machine structures are designed to be equipped with the latest generation of machining units, to ensure optimum finish quality and constant precision over time.

#### 6-AXIS TECHNOLOGY FOR MAXIMUM FLEXIBILITY

The 6-axis machining unit of the oikos x machining centre allows to process every side of the component easily with each tool and with no rotation or repositioning required. Moreover, oikos x can achieve high productivity levels thanks to the optimised and interpolated movements of the axes.

#### MACHINING A WIDE RANGE OF MATERIALS

The full range of machining operations is possible on a wide variety of materials used in sustainable building projects: GluLam and LVL beams; large CLT wall panels; modular CLT components; curved beams; panels of OSB, gypsum, fibre cement; multi-layer and insulating panels.

#### REDUCED PRODUCTION TIME AND COST

**Maestro beam&wall** is a software developed by SCM; it can be easily interfaced with industry's leading CAD programs used by customers, thanks to the import of BTL files, the most common format in the sector of timber construction. The **nesting function** has provided an innovation in machining wall panels, with the intelligent management of very complex projects; material optimization, time and cost reduction are the main production advantages.

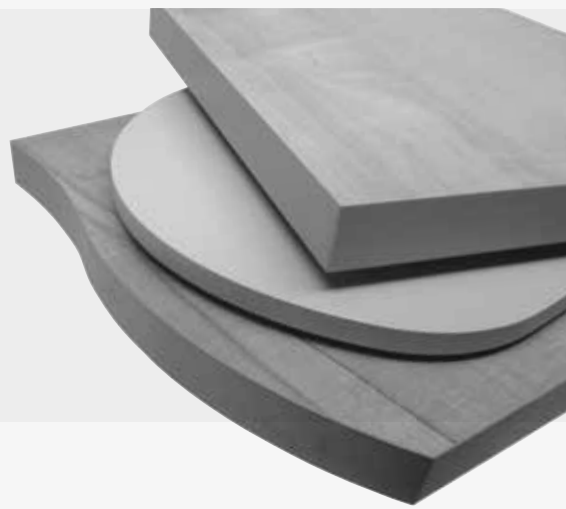
#### MAXIMUM ORDERS PROFITABILITY

Maestro beam&wall also includes the simulation software which enables machining programs to be tested in advance – visualising production operations in 3-D; eliminating errors, collisions and downtime, and allowing calculation of production time, cost and project profitability.



## CNC MACHINING CENTRES FOR DRILLING, ROUTING AND EDGEBANDING

Universal machining centres designed to satisfy any drilling, routing and edgebanding requirement. **The perfect solution for “just in time” production and for making panels that are ready for assembly.** Another top level technological response for satisfying and customising the many requests from today's furniture industry.







#### **SUPERIOR QUALITY: "H80" EDGEBANDING UNIT**

One of the highest performing edgebanding units in its category, it can apply edges up to 84 mm high for panels up to 80 mm thick.

#### **PERFECT DRILLING: RO.AX SPINDLES**

Zero play during machining with the new RO.AX technology (Rotoaxial spindle technology), the most efficient spindle on the market, with rotation speeds up to 8000 RPM. Reliable and flexible, it requires reduced maintenance (every 1000 machining hours).

#### **ZERO DEFECTS: "SBRINDLE" DEVICE**

The SBRINDLE device, which reads the position of the edge on-the-fly, ensures maximum quality even when joining difficult components.

#### **TOTAL CUSTOMISATION: TV FLEXMATIC AND TV MATIC RAILS WORKTABLES**

Extremely versatile, wide range of configurations, no compromise in terms of performance and very fast set-up times, with no risks of collisions between the tool and the worktable.

#### **3D WORKTABLE: "HE-PODS"**

Unique on the market, it can lift workpieces in order to get best use of the worktable dimensions and to process multiple parts with a single positioning and less tool changes.

#### **EFFECTIVE VERSATILITY: AUTOMATIC CHANGE OF THE PRESSURE DEVICE**

Device to automatically change the pressure roller with a 3-position storage also within the same program. The use of this device allows the application of edges of different material or thickness, even on the same panel.



# EDGE BANDERS AND SIZING EDGE BANDERS

SCM edge banders and sizing edge banders are acclaimed the world over and one of the Group's main strengths. Thanks to its **stefani** and **olimpic** models, SCM can now cover all edge banding needs in the panel machining processes for the furniture industry, from small to large companies.

## AUTOMATIC EDGE BANDERS



## SIZING EDGE BANDERS



## FLEXIBLE EDGE BANDING CELLS



## SHAPED PANEL PROCESS







## AUTOMATIC EDGE BANDERS

Thanks to the **olimpic** and **stefani** edge banders, SCM is able to cover all edge banding needs, from small artisans to large industrial companies, guaranteeing precise machining, reliability and efficiency.



### GUARANTEED INVESTMENT

customers can choose from a wide and versatile range of set-ups that allow the investment to be planned in complete safety and ensure quick returns.

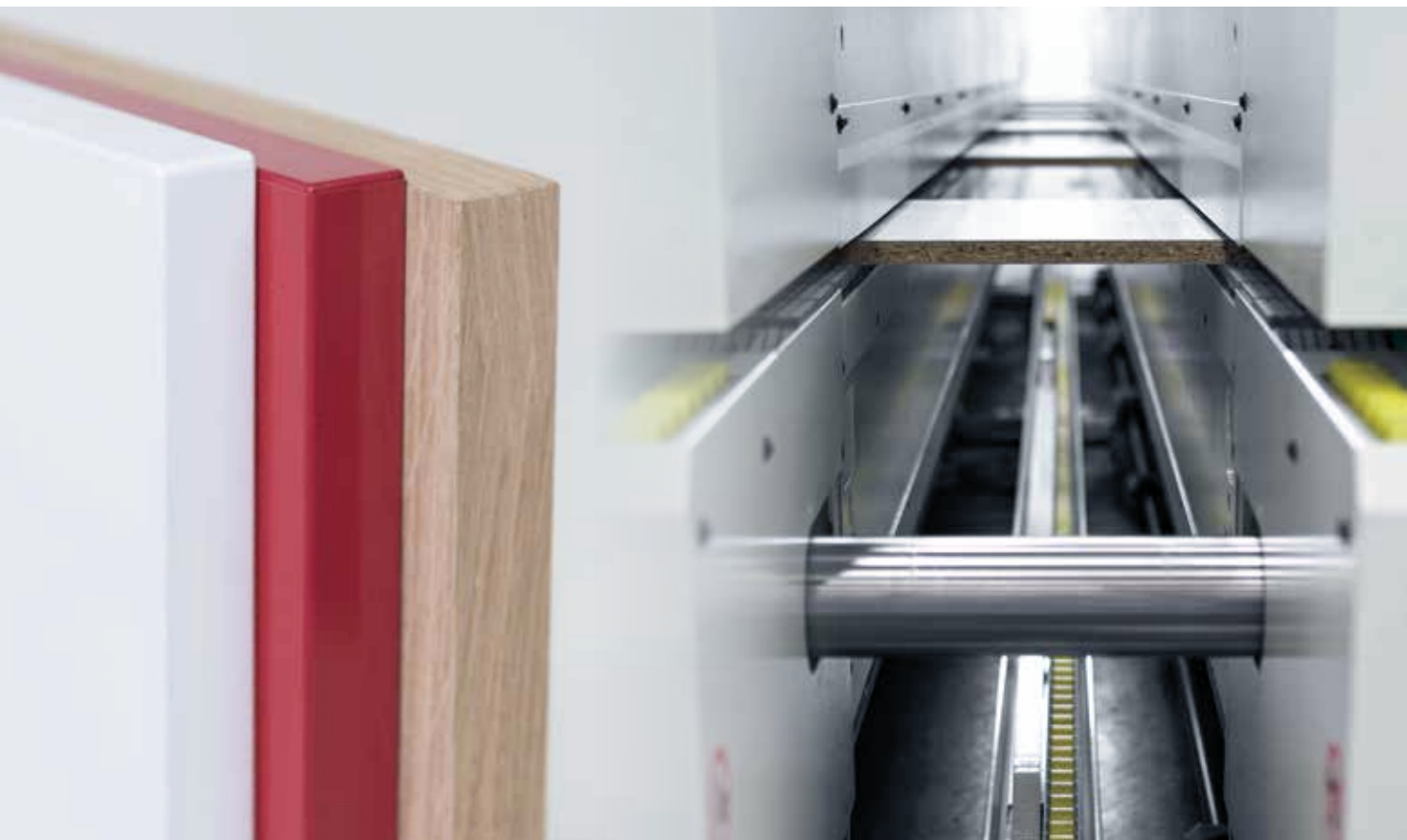
### EASY TO USE

with a realistic machining preview, thanks to the operator interface with 3D virtual preview and the exclusive operating logic based on "what to do" rather than "how to do it".

### ADDED VALUE

with the intelligent and innovative use of the glue, that can be selected and changed in terms of type, colour, supply format and dosage.





## SIZING EDGE BANDERS

The range of SCM sizing edge banders allows for intensive and constantly efficient productions with medium to large batches, that are perfectly integrated in different industrial contexts.



**PLANNING HIGH PRODUCTIVITY VOLUMES**  
thanks to the panel sizing and edge banding with half-line or complete line architecture and automation integration for the flat handling of the panel.

**MAXIMUM EFFICIENCY AND ERGONOMICS**  
are guaranteed with the supervised production, integrated in the company network, along with latest generation applications.

### NO DESIGN LIMITS

A set of innovative technologies allow for materials and contemporary shapes to be machined with the highest quality standards







## FLEXIBLE EDGE BANDING CELLS

Intensive production with medium and small batches up to Batch 1, that can be effectively and cost-effectively adapted to every production situation.



### MAXIMUM CUSTOMISATION

an entire range of solutions for production levels from 400 panels/shift upwards, optimised based on the space available or the size of the panel being machined.

### INFINITE CONFIGURATIONS

from simple panel return to the operator up to independent cell with automatic robot loading. The configuration possibilities are practically unlimited and adaptable to different production situations and dimensions.

### EFFECTIVE PRODUCTION

is ensured by multiple functions available such as the automatic quality control, parallelism and sizing machining, when not machining in nesting mode and the real time management of the glue type and colour.





## EDGE BANDING PROCESS OF THE SHAPED PANEL

SCM's acknowledged solutions for machining shaped panels, allow customers to model new shapes and perspectives with unprecedented levels of ease and quality.



### SOFTFORMING PROCESS

SCM's leadership in this process is confirmed by the extremely fast set-up times and application precision even with the most demanding materials and the possibility of machining complex shapes on all sides of the panel.



### DIRECT POSTFORMING/POSTFORMING

With this process SCM offers the possibility of producing perfectly finished components with no glue leaks, to guarantee protection against humidity and steam.



### THE PROCESS FOR DOORS

The technology designed to machine edged doors, available for various production capacities or batch dimensions, ensures the easy production of indoor doors, both sliding and hinged.



## BEAM SAWS

SCM beam saws ensure the highest cutting performance thanks to the Group's vast and constantly developing technological know-how.

This wide range of beam saws satisfies the requirements of companies with high production volumes and those looking for a made to measure solution.

### AUTOMATIC SINGLE-BLADE BEAM SAWS

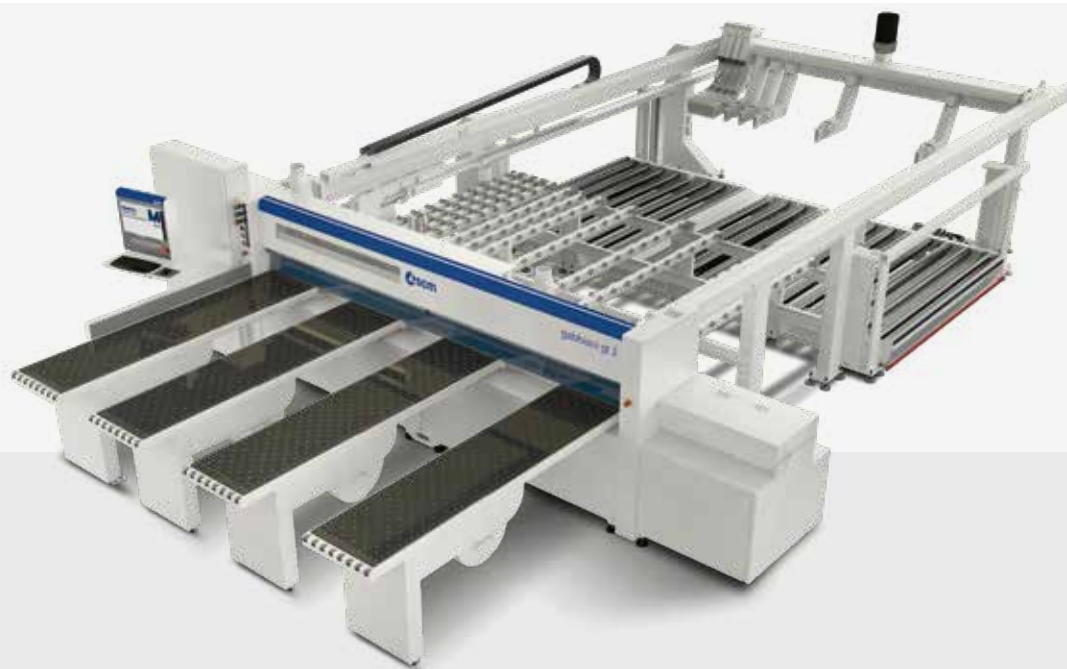
### ANGULAR PLANTS

### CROSS CUTTING BEAM SAWS

### FLEXIBLE PANEL SIZING CELLS







**LINEAR GUIDES WITH RECIRCULATING BALL SCREW: MAXIMUM LINEARITY AND MINIMUM FRICTION**

Increased production capacity with the considerable speeds that can be reached during the feed and return stroke (up to 170 m/min). The centralised lubrication is monitored by the control to ensure a total lack of maintenance.

**SAW-SET: TOOL CHANGING HAS NEVER BEEN SO EASY**

In a few seconds the "SAW-SET" device carries out fast and precise tools adjustment due to the electronic setting, allowing an intuitive use of the machine and a productivity increase.

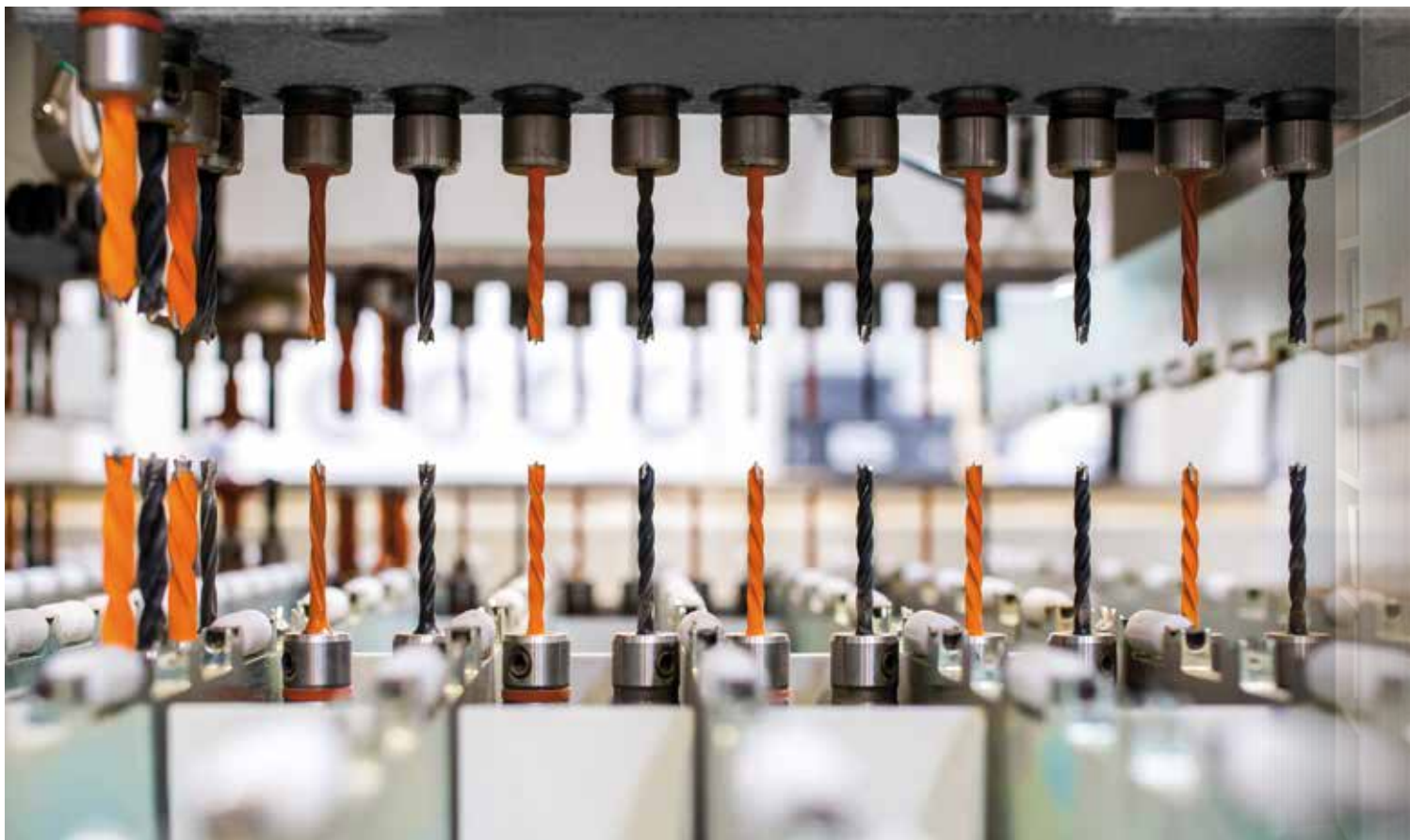
**FLEXCUT: MORE CUTS IN LESS TIME**

The high performance levels are ensured by the two completely independent pushers. The machine cycle times are drastically reduced thanks to the simultaneous machining of various bars with differentiated cuts. The extreme flexibility is provided by two grippers installed on the mobile unit, one of which that can be excluded, guaranteeing a vast range of the widths of strips that can be clamped.

**LOADING PLATFORM: WHEN STURDINESS AND PRECISION MAKE THE DIFFERENCE**

The lifting system, as well as exploiting the loading capacity to the maximum with any material and format, also guarantees a constantly parallel lifting of panels stacks. This ensures that there are no machine down times to achieve maximum productivity.





## DRILLING SOLUTIONS

SCM offers a wide range of solutions in the drilling sphere, **from batch-1 process to a large versatile production.**

This stage of the furniture construction process requires efficient, versatile and robust products that operate with high precision and reduced cycle time.

### AUTOMATIC DRILLING MACHINES



### CNC DRILLING CENTRES



### SEMI-AUTOMATIC DRILLING MACHINES





**PERFECT JOINTS:  
AUTOMATIC READING OF THE WORKPIECE  
LENGTH**

Any discrepancy between the actual length of the panel and the length set is corrected by the highly precise reading laser allowing for a perfect alignment.

**PERFECT DRILLING AND REDUCED  
MAINTENANCE:  
RO.AX SPINDLES**

Zero play during machining with the new RO.AX technology (Rotoaxial spindle technology), the most efficient spindle on the market. Reliable and flexible, it requires reduced maintenance (every 1000 machining hours).

**CONTINUOUS MACHINING CYCLES:  
NO SET-UP TIMES**

Very short machining cycles and no idle time for the set-up operations. No need of manual interventions to set up the machine between two machining batches.

**MAXIMUM PRODUCTIVITY:  
HIGH LEVEL OF ELECTRONIC AUTOMATION**

High productivity and extremely reduced set-up times thanks to the automatic handling and the supports equipped with independent positioning axes.

**OPTIMISATION AND CYCLE TIME REDUCTION:  
SHAPED FIXING CLAMPS**

The unique design of these clamps allows the machining even in the clamping zone, in positions inside their area, improving the process cycle.





# AUTOMATION SYSTEM

Flexible, modular and easy to configure automation systems

- **FEEDING THROUGH ARTICULATED INDUSTRIAL ROBOTS**

Ideal for cutting, edgebanding, square-edgebanding, drilling and sorting.



- **COLLABORATIVE PROCESSING ISLANDS**

Operator and collaborative robot cooperate side by side sharing the work area safely.  
Ideal for final assembly and surface finishing.







- **FLEXIBLE INTERCONNECTIONS** between machining cells and assembly islands with autonomous mobile robots (AMR). Management and optimisation of the process logistics.



- **FLEXSTORE**  
Boards automatic storage system; producing “to order” in real time at competitive costs.





## THROUGHFEED MOULDERS

SCM offers a wide range of throughfeed moulders.

Advanced technological solutions to produce window elements, doors, moulds for furniture, yacht fittings and garden furniture that **guarantee flexibility and productivity for small and large production batches.**







#### INCREASED PRODUCTIVITY

The SET-UP system allows the operator to change tools and perform adjustments in just a few seconds, making set-up time up to twenty times faster.

#### HIGH VARIETY OF PROFILES

The HSK technology allows downtimes reduction and finishing quality improvement, with the best ergonomics for the operator.

#### CUSTOMISED COMPOSITIONS

Eight possible configurations thanks to two right vertical spindles, two upper horizontal spindles, with and without the universal spindle.

#### EASE OF USE

The new electronic control MOBILE PC makes machine programming intuitive. Clear and precise information are always available, thanks to detailed reports.





# SYSTEMS FOR DOORS AND WINDOWS

Thanks to its **long-standing experience in door and window machining technologies and complete process know-how**, SCM is a unique technological partner for both small to medium-sized companies and large industrial groups with a wide range of customised solutions that meet all the production requirements.

## MACHINING CELLS FOR DOORS & WINDOWS



## ANGULAR MACHINING CENTRES FOR DOORS AND WINDOWS



## DOORS AND WINDOWS INTEGRATED LINES





#### FULLY AUTOMATIC PRODUCTION

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

#### MAXIMUM VERSATILITY

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

#### SUPERIOR FINISH QUALITY

High precision and excellent finish quality thanks to the ability of the two operating groups to work in splitting mode.

#### HIGH PRODUCTIVITY

Cutting, profiling and separation of the work-piece in a single step with the unit dedicated the strip recovery systems that increases the machine performance.

#### OPTIMAL LOCKING OF THE WORK-PIECE

Worktable equipped with exclusive clamps, with single programming, for the best holding of the work-piece during the machining of all sides.

#### NO POSSIBILITY OF ERROR

Full automated system with incoming work-pieces size control and installed tools control.





## TENONERS, MORTISERS AND DOUBLE SIDED SHAPERS

The **balestrini** tenoners, mortisers and double sided shapers are sectorial machines ideal for the production of chairs, tables and kitchen doors.

The wide range includes manual, semiautomatic and automatic machines, to meet all the requirements of the market: from small companies to large industrial groups.







#### **MAXIMUM PRODUCTIVITY**

The balestrini tenoners, mortisers and double sided shapers meet any production requirement, from batch one to mass production.

#### **NUMEROUS OPERATIONS POSSIBLE**

Tenoning, mortising, cutting off, drilling and shaping has never been so simple and effective.

#### **PERFECT MACHINING QUALITY**

The anti-splintering cycle controlled by NC allows high speed machining, ensuring an excellent finish quality of the element.

#### **EASY TO USE**

The balestrini machines are fitted with a single software platform, SMART PRO, with a user-friendly operator interface, for an intuitive and quick programming, thanks also to the default macros.



## MACHINES AND SYSTEMS FOR SQUARING, TENONING AND PROFILING

Thanks to the combination of know-how and innovation in the field of squaring and profiling technology, SCM covers all requirements for flooring, coating, stairs, doors manufacture and panel machining in the furniture industry by offering a **complete range of customised and technologically advanced solutions**.

### DOUBLE-SIDED SQUARING AND TENONING MACHINES



### PROFILING MACHINES FOR FLOORING







State of the art technology and flexibility are some of the key success factors of the **celaschi** profiling and squaring-tenoning machines, designed for companies requiring perfect machining quality along with high productivity levels or looking for a special custom-made solution.



#### **HIGH PRODUCTIVITY RATES**

both in stand-alone and in high-productivity in-line integrated version, with the workpiece transport system allowing feed speed up to 200 m/min.

#### **UNPARALLELED FLEXIBILITY**

thanks to the quick positioning of the mobile beam and operating units, the automatic tool store and the "Pyramid" software function that allows processing of variable stacks with a single set-up.

#### **LONG-TERM EFFICIENCY AND RELIABILITY**

thanks to the highest quality of materials, the accuracy of coupling and the automatic lubrication.

#### **FLUID AND PRECISE MOVEMENT**

even with demanding machining conditions. Total absence of vibrations and correct hold-down of the workpiece with adjustable pressure beams according to density, dimensions and profile.

#### **MAXIMUM PROCESSING ACCURACY**

thanks to the high-speed, air or liquid cooled, HSK electrospindles, fitted with special wheels with automatic wear compensation system.

#### **EXCEPTIONAL FINISH QUALITY**

on every type of material: solid wood, PVC, fibre cement, rock/glass wool, insulating material, gypsum, etc.

#### **UNLIMITED CONFIGURATIONS**

as the number and type of operating units can be selected based on the machining operations to execute: squaring, shaping, tenoning, profiling, sizing and grooving.



TOTAL TOUCH EXPERIENCE



# SURFACE TECHNOLOGIES

## A UNIQUE EXPERIENCE IN SURFACE TREATMENT.

The wide range of SCM and Superfici solutions for the most complex and customized surface treatment processes.

### WIDE BELT SANDERS

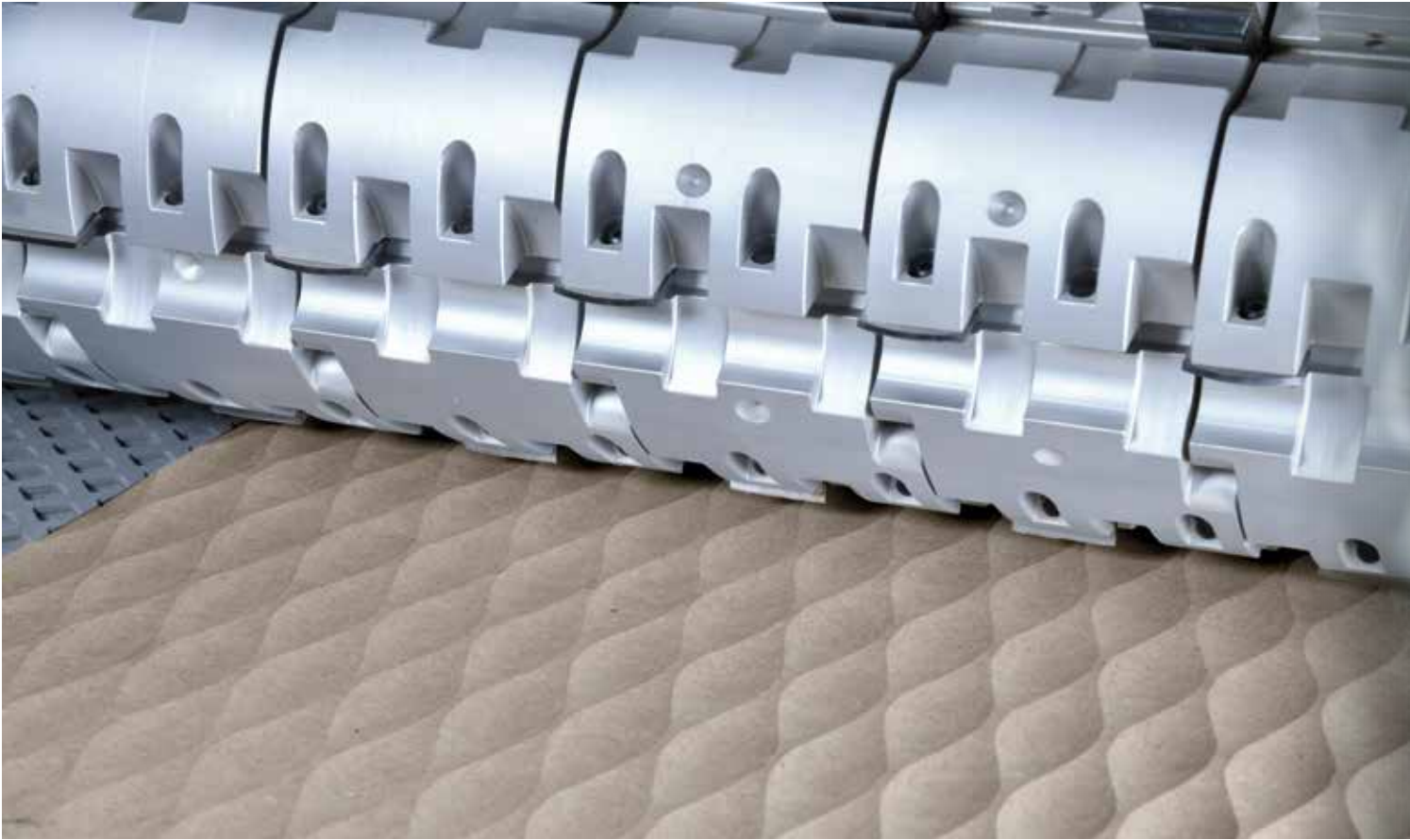


### FINISHING SYSTEMS



### PRESSES





# WIDE BELT SANDERS

SCM solutions with abrasive belts combine versatility, productivity and quality to achieve the highest levels of surface calibration, sanding and customization, creating attractive finishing effects.

SCM offers a wide range of solutions to meet the needs of both craftsmen and industrial scale companies that guarantee long-lasting reliability and performance.

## AUTOMATIC SANDING AND CALIBRATING MACHINES



## SANDING CALIBRATING LINES







#### **FROM THE MOST COMPACT AND VERSATILE TO THE WIDEST AND MOST POWERFUL**

The large number of models available meet every production requirement, from the narrowest and most compact machine model, with 650 mm working width, to the widest and high performance model with 2.200 mm working width, consisting of a sturdy supporting structure with high-power motors, up to 90 kW, to support even the most intensive workloads.

#### **SUPERFINISHING OF CROSSED-GRAINED WOODEN PARTS**

The Finesand orbital pad and the Planetary unit effectively remove the scratches on crossgrain caused by the longitudinal sanding belts. They are the ideal solution for the superfinishing process of face frames, kitchen cabinet doors,

passage doors and window frames or with any crossed grained components.

#### **EASY TO USE THANKS TO THE INTUITIVE SOFTWARE INTERFACE**

that makes the machine simple and safe to use, even for less experienced operators.

#### **"PWM" VARIABLE PRESSURE TECHNOLOGY FOR "EPICS" ELECTRONIC SECTIONAL PADS**

The innovative "PWM" system allows real time changing of the operating pressure on the "EPICS" electronic pad, adapting it to the different panel areas allowing the pad to perfectly sand also panels with uneven thickness.

#### **NO MACHINING LIMIT FOR BOTH PANEL SIDES**

thanks to the possibility of integrating a bottom bottom units structure, with a structure with a top units ones, to create a single machine solution. Both machines can be fitted with any working unit, to perform all possible operations.

#### **HIGHLY FLEXIBLE AND SEVERAL DIFFERENT CONFIGURATIONS**

The wide range of advanced technological solutions and modular structures, that can be fitted with up to 10 working units, allow a large number of configurations: from the most versatile and flexible to the most customised for specific applications.



## A UNIQUE EXPERIENCE IN SURFACE TREATMENTS

SCM's surface treatment technologies offer a wide range of surface processing products that can meet any production requirements. In particular the Superfici coating lines include complete spraying systems, automatic or robotic for both paints and adhesives, with vertical, linear or UV driers; complete roller or curtain coating lines; panel printing lines and coating systems for door/window frames and three-dimensional parts.

### • ROLLER COATING LINES FOR FINISHING FLAT PANELS

Complete solutions for roller coating with the highest precision, with advanced UV driers.



### • DIGITAL PRINTING

Finishing lines with integrated digital printing for highly customised decorations and finishes, even on small lots.

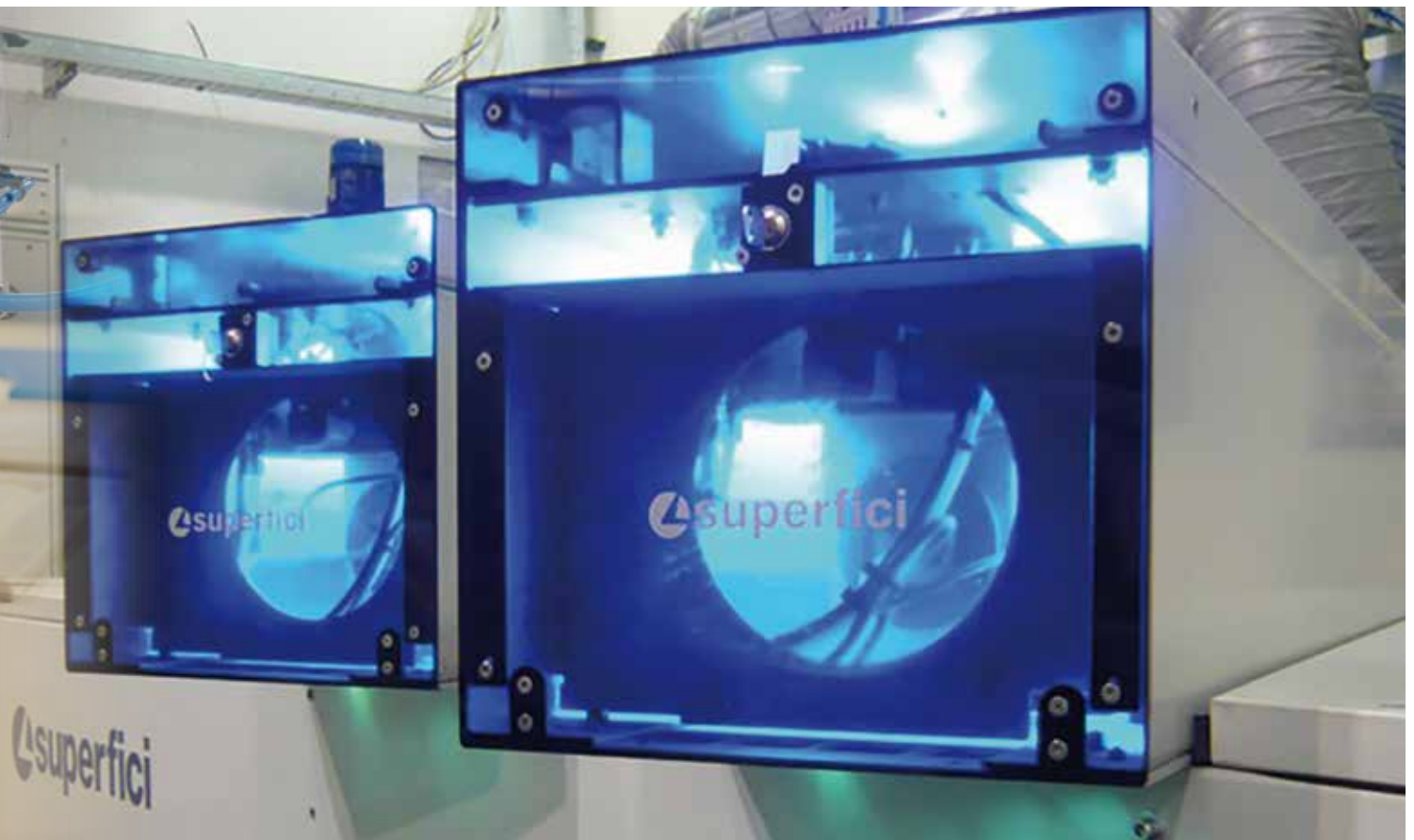


### • SPRAY PAINTING

Off-line paint spray machines or solutions integrated into fully automated lines, offering high production capacities and process flexibility.

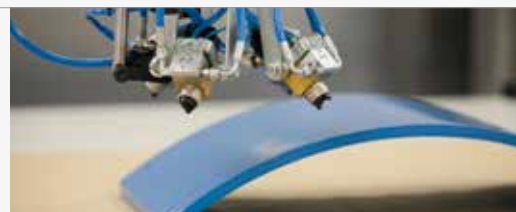






### • **SPRAYING ROBOTS**

Lines with Cartesian or anthropomorphic robots for the highest application flexibility.



### • **ADHESIVE APPLICATION SYSTEMS**

Solutions for applying adhesive spray to meet various production capacity requirements. The sophisticated robotic systems stand out.



### • **3D COATING**

Complete coating systems for three-dimensional parts and door/window frames with application by hand, reciprocator or robot, and air, infra-red or microwave drying.





# PRESSES

The high precision and production versatility scm sergiani presses are designed to meet the requirements of manufacturers producing laminated flat or moulded panels, doors, kitchen cabinet doors, solid wood flooring, edge glued beam panels and multi-layered panels.

## MANUAL AND AUTOMATIC HOT AND COLD PRESSES

## MEMBRANE PRESSES

## VACUUM BOX PRESSES

## EDGE GLUED BEAM PANELS PRESSES

## LAMELLAR PANELS PRESSES

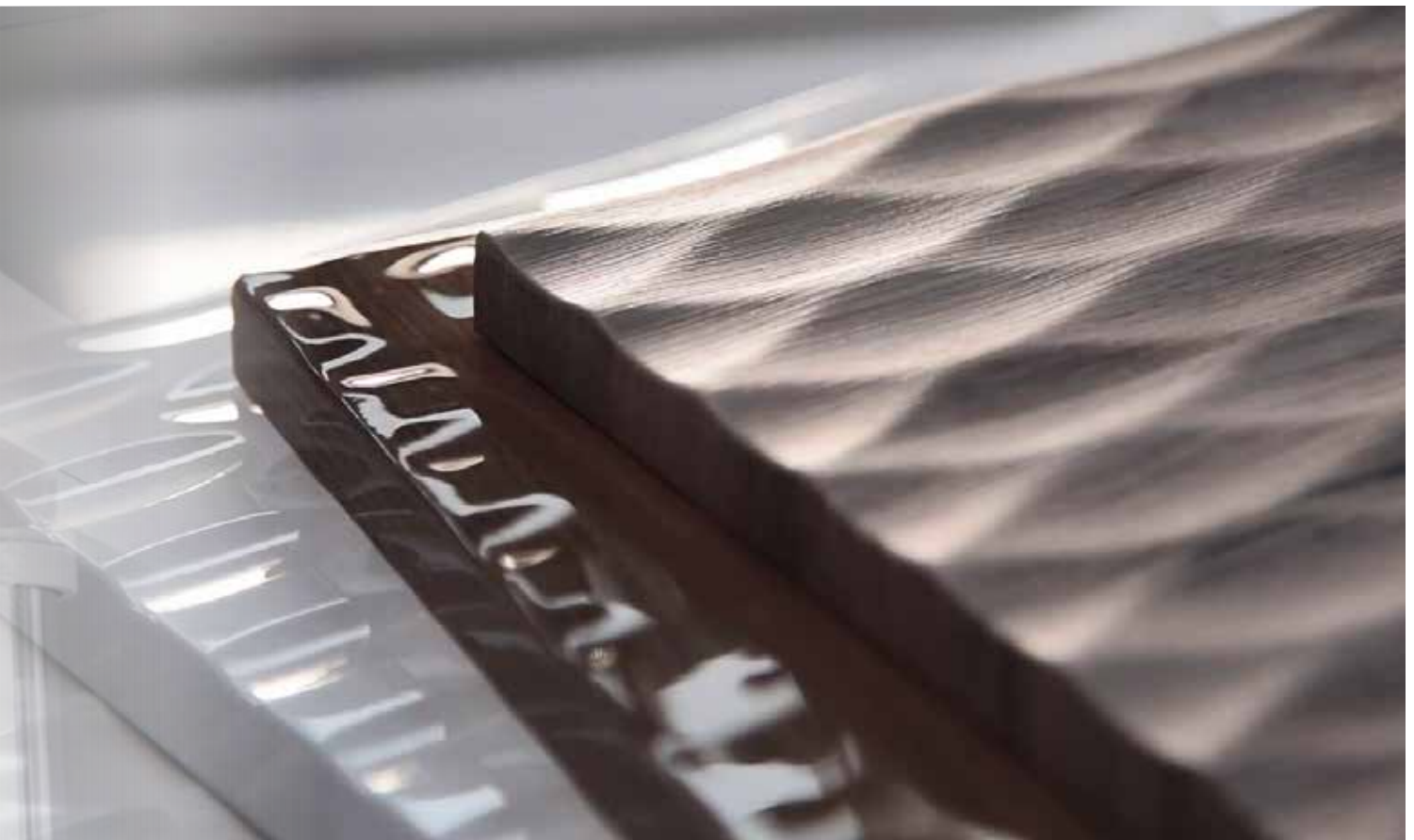
## BENDING PRESSES

## EMBOSSING PRESSES

## AUTOMATIC THROUGH-FEED PRESSES







#### **SUPPORTING STRUCTURE**

To guarantee the highest level of resistance and rigidity in each processing phase.

#### **HIGH VERSATILITY**

Production line solutions to be configured according to customer needs.

#### **ELECTRONIC CONTROL OF ALL MACHINE FUNCTIONS**

Via digital operator control panel with Siemens touch screen.

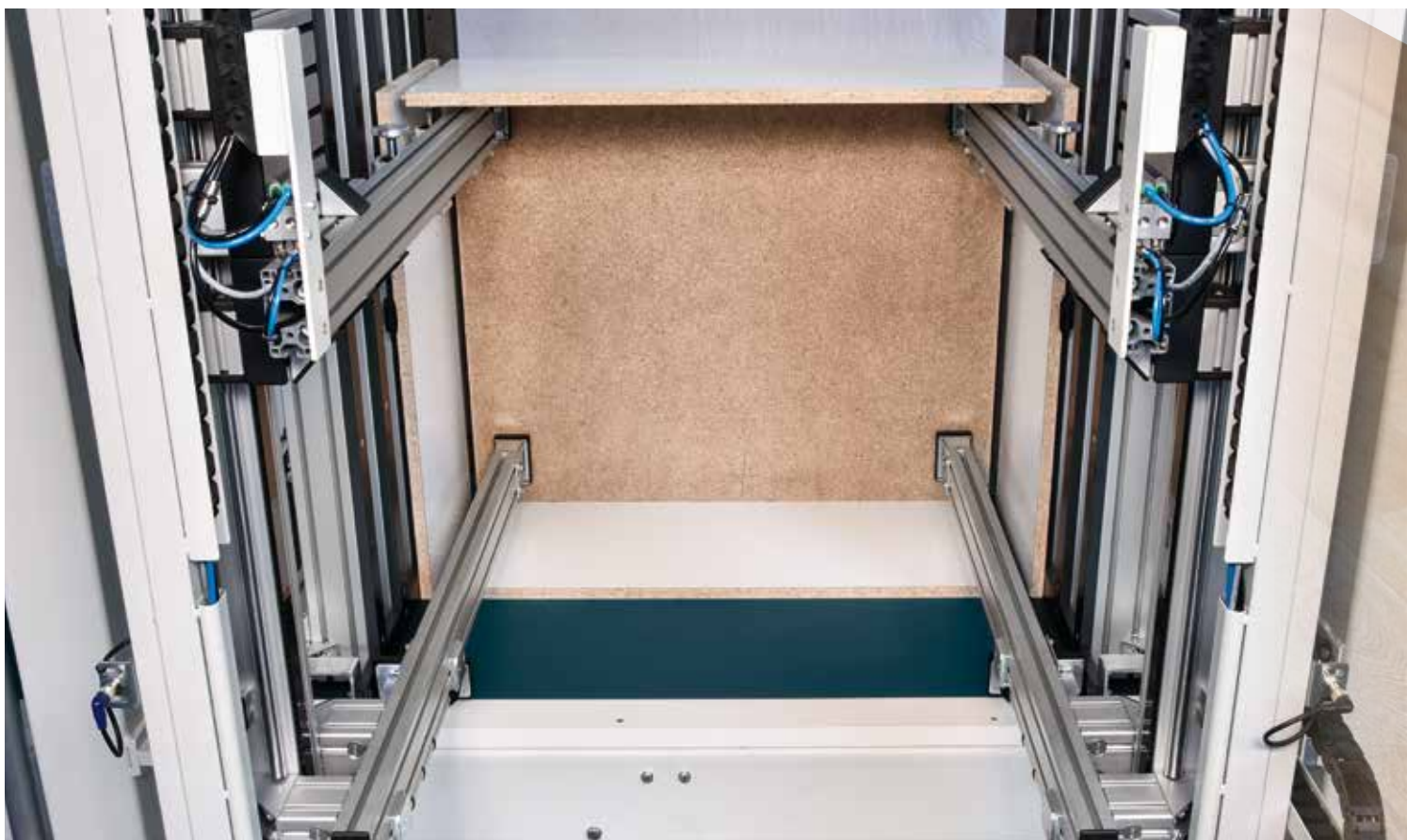
#### **INTEGRATED SYSTEMS FOR HIGH PRODUCTIVITY**

Panel composition lines with different automation solutions, from traditional configurations up to **completely automatic plants without line operators**. The in-line machines are programmed, managed and controlled by SCM software in order to schedule production and batches programs, e.g. based on the final customer order. Possibility of using barcodes.

#### **"BATCH 1" PRODUCTION LINES**

With two or more parallel multi-daylight presses that are fed, loaded, unloaded and controlled by SCM software.

The pressure, pressing time and temperature can be set for each panel or group of panels, depending on the dimensions and features of the panels to produce.



# ASSEMBLY

SCM offers a complete range of clamps for furniture cabinets, doors and windows assembly, starting from all of their individual components. SCM solutions are ideal for both craft woodworking and industrial processes. Turn-key assembly lines in partnership with a single supplier that always meet customer needs and ensure reliability and ease of use while maximising productivity.

## CLAMPS FOR FURNITURE



## CLAMPS FOR DOORS AND WINDOWS







#### **EASY TO PROGRAM AND USE**

thanks to the user friendly and intuitive touch screen interface that is ergonomically positioned for the operator.

#### **PERFECT 45° AND 90° JOINTS FRAME ASSEMBLY WITH ZERO SET-UP TIME**

Possibility to adjust the pressure cycles for the different type of joints, directly from the program.

#### **LARGE VOLUMES EFFICIENCY FOR SMALL BATCHES**

Possibility of processing small batches whilst maintaining the same productivity of large productions, thanks to the product's dimensions self-learning system.

#### **HIGHLY FLEXIBLE AND MODULAR ASSEMBLY LINES**

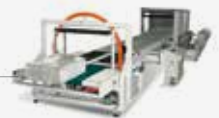
Wide selection of solutions to manage assembled furniture cabinets considering production requirements and available space.



# PACKAGING

End-of-line machines and packaging systems for cardboard, stretch film and shrink wrapping polythene (PE). SCM develops tailor made packaging solutions that are ideal for all kinds of products offering optimal protection and minimising transport damages. The automatic packaging process maintains the flexibility of the manual packaging but, at the same time, increases productivity and final quality.

## AUTOMATIC POLYTHENE STRETCHWRAP PACKAGING SOLUTIONS



## AUTOMATIC POLYTHENE SHRINKWRAP PACKAGING SOLUTIONS



## AUTOMATIC CARDBOARD BOX PACKAGING SOLUTIONS







#### **COMPATIBILITY WITH "FEFCO" CONFIGURATIONS**

Automatic solutions for different configurations of cardboard boxes (packaging models from the "FEFCO" international standard catalogue) for disassembled furniture or single cabinets doors.

#### **SOLUTIONS DESIGNED TO BE INTEGRATED DURING THE WHOLE PRODUCTION PROCESS**

Possibility of integration in fully automatic production lines with 3D product recognition, automatic cut of the flat right-sized box, box forming and palletizing.

#### **PRODUCTIVITY, FLEXIBILITY, CONVENIENCE**

High productivity rate also with different size products (batch one), optimisation of required operators number.





# JOINERY MACHINES



SCM joinery machines are the result of continuous development and the sum of the many skills acquired by the Group over the years.

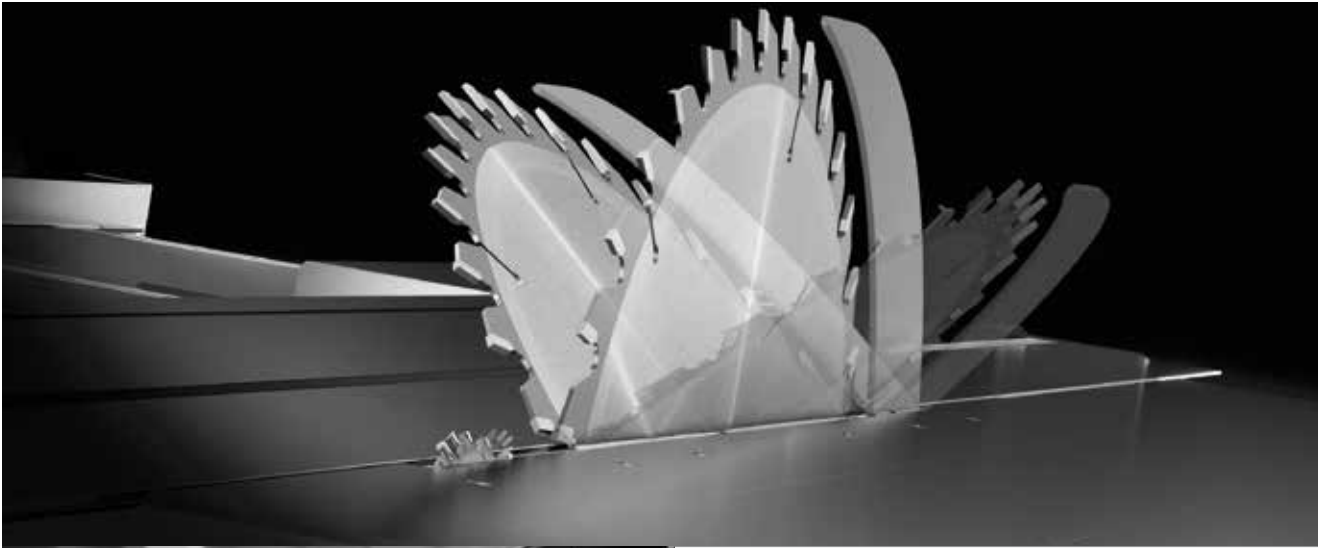
<b>SLIDING TABLE SAWS</b>	
<b>SPINDLE MOULDERS</b>	
<b>PLANERS</b>	
<b>THROUGHFEED MOULDERS</b>	
<b>MULTIBLADE RIP SAWS</b>	
<b>SAW-SPLINDLE MOULDER COMBINED MACHINES</b>	
<b>UNIVERSAL COMBINED MACHINES</b>	
<b>EDGE BANDERS</b>	
<b>SEMI-AUTOMATIC DRILLING MACHINES</b>	
<b>BAND SAWS</b>	





**Our range of machines is the largest on the market** and includes automatic and manual machines that stand out for their advanced technology and design, thereby allowing us to satisfy the needs of all our customers from craft carpenters creating highly customised products to large-scale industries.

<b>WOODTURNING LATHES</b>	
<b>TENONING MACHINES</b>	
<b>SANDERS / STRUCTURING MACHINES</b>	
<b>MANUAL ROUTERS</b>	
<b>RADIAL SAWS</b>	
<b>CUT-OFF SAWS</b>	
<b>FEEDERS</b>	
<b>DUST EXTRACTORS</b>	
<b>CLAMPS</b>	
<b>MORTISERS</b>	



### SQUARING

**Double blade tilting +/- 46°: cutting without compromise.**

The processing is safer and more comfortable as it is possible to **cut workpieces with no need to rotate or turn them over or to use shapes**, always safe-guarding the veneered side of the panel. The cuts in both tilting angles can be performed easily and without compromises, even on panels with a shaped and profiled surface.



### PLANING

**“Xylent” spiralknife cutterblock.**

The 3 spiralknives give an exceptional finish. Reduced noise during machining provides a more comfortable working environment. It also improves the dust extraction due to the production of very small chips. Each cutter has 4 tips which can be rotated into the cutting position when worn. Therefore increasing the production life of the cutter block before knives require replacement.



### ROUTING

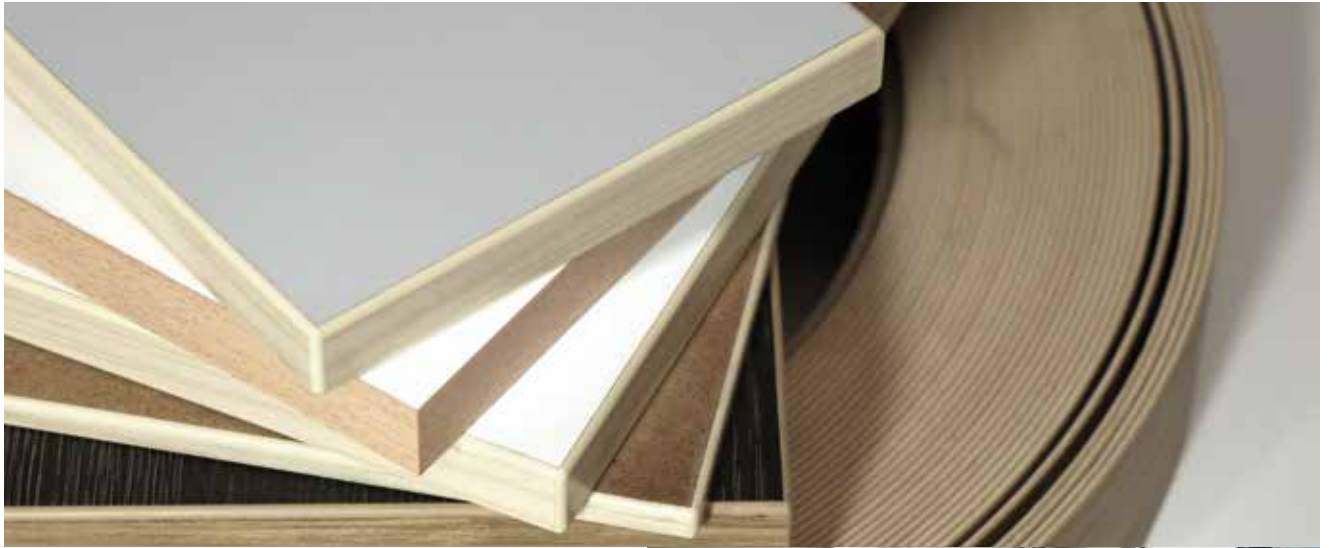
**Machining centre technology service for the woodworker.**

Absolute machining precision and absence of vibration due to the perfectly balanced structure of the electrospindle.

The electrospindle's direct drive **eliminates maintenance procedures common with conventional belt driven systems.**







## EDGE BANDING

### Unique level of quality for artisans.

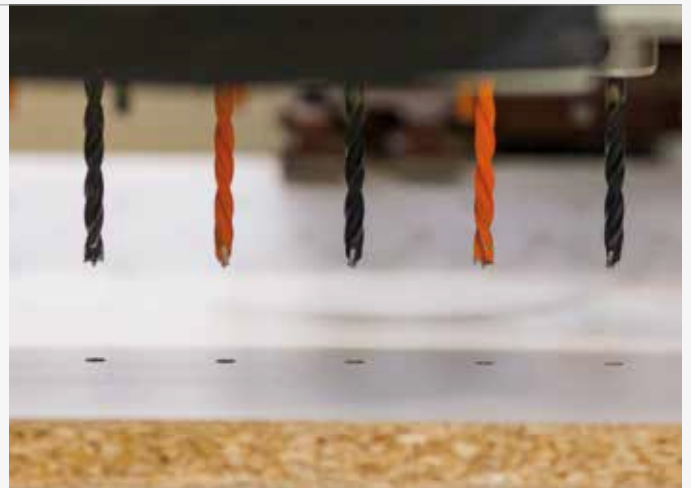
New combined end cutting-rounding unit with rigid structure for unique quality processing in its market segment. Replacing the end cutting unit does not increase the machine overall dimensions, allowing a substantial reduction of costs, compared with traditional solutions.



## DRILLING

### Effective.

The drilling head positioned above the panel allows a precise machining which can be verified in the panel assembly phase: **any differences in thickness are on the inside of the cabinet.**



## SANDING / RUSTICATION

### Quality and precision.

Two structuring units with independent mechanical adjustment for a superior quality weathered look.





# INTEGRATED SYSTEMS FOR THE WOODWORKING INDUSTRY

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## LEAN CELL

Integrated production and logistics for the 4.0 plant of the future.

Up to 500 pieces/shift with 2 operators.

Mass customisation and simple management.



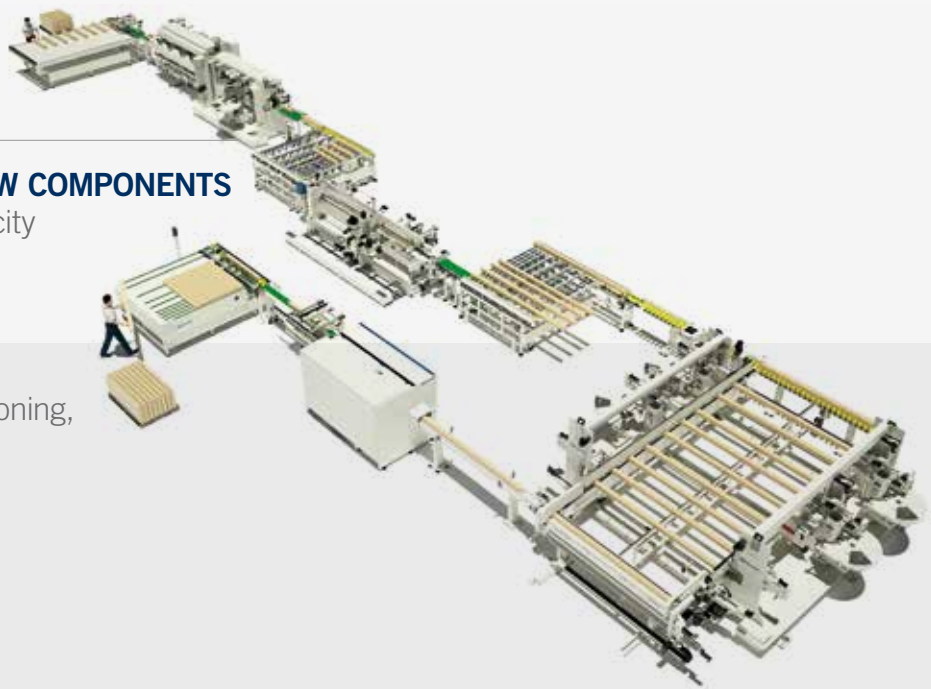




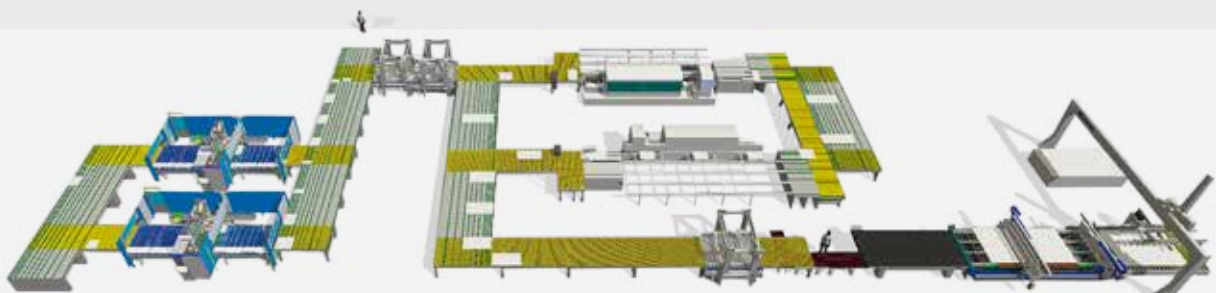
### PRODUCTION OF WINDOW COMPONENTS

with high production capacity  
and high level of flexibility.  
400 m<sup>2</sup>, 6 pieces/minute  
2 line operators.

All integrated functions:  
throughfeed moulding, tenoning,  
routing, profiling,  
surface precision finishing.



**FLEXIBLE “BATCH1”** plant to produce furniture components. 100 pieces/hour, 3 operators, 1800 m<sup>2</sup> of space. Italian technology to produce high quality furniture components.





## THE MOST ADVANCED SKILLS AND KNOW-HOW IN THE

A technological world leader in processing a wide variety of materials: wood, plastic, glass, stone, metal and composites.

The Group companies, operating throughout the world, are reliable partners of leading companies in various market sectors, including the furniture, construction, automotive.

## INDUSTRIAL MACHINES

Stand alone machines, integrated systems and services dedicated to the machining process of a wide range of materials.



Woodworking technologies



Technologies for machining composites, aluminium, plastic, glass, stone and metal

## SCM GROUP AT A GLANCE

**700**  
Million/Euro  
of consolidated  
turnover

**4.000**  
people  
in Italy and abroad

**3** main  
industrial  
centres

Presence in **5**  
continents  
direct and capillary

**7%**  
of turnover  
invested in  
R&D





## FIELDS OF MACHINERY AND INDUSTRIAL COMPONENTS

Scm Group coordinates, supports and develops a system of industrial excellence in 3 large highly specialized production centres employing more than 4.000 workers and operating in all 5 continents.

### INDUSTRIAL COMPONENTS

Technological components for machines and systems produced by the Group, third parties and the mechanics industry.

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**HITECO**

Electro-spindles and technological components

**Les**

Electrical panels

**steelmec**

Carpentry and mechanical processes

**scmfonderie**

Iron castings



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a brand of **scm**  **group**