



Industrial Machinery and Components

# Technologies for Inorganic-Bonded Fiber Composites processing

IIBCC - November 2022





# THE FIGURES OF A SOLID AND RELIABLE GROUP



**750**

Million/Euro  
of consolidated  
turnover



**4,000**

people  
in Italy  
and abroad



**3**

main  
industrial  
centres



**5**

continents  
with a direct  
and capillary  
presence



**7%**

of turnover  
invested  
in R&D



## INDUSTRIAL MACHINERY

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

## INDUSTRIAL COMPONENTS

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



Electro-spindles and technological components



Electrical panels



Carpentry and mechanics processes



Iron castings

**GLASS**  
TECHNOLOGY

**WOOD**  
TECHNOLOGY

**PLASTIC**  
TECHNOLOGY

**ADVANCED  
MATERIALS**  
TECHNOLOGY

**STONE**  
TECHNOLOGY

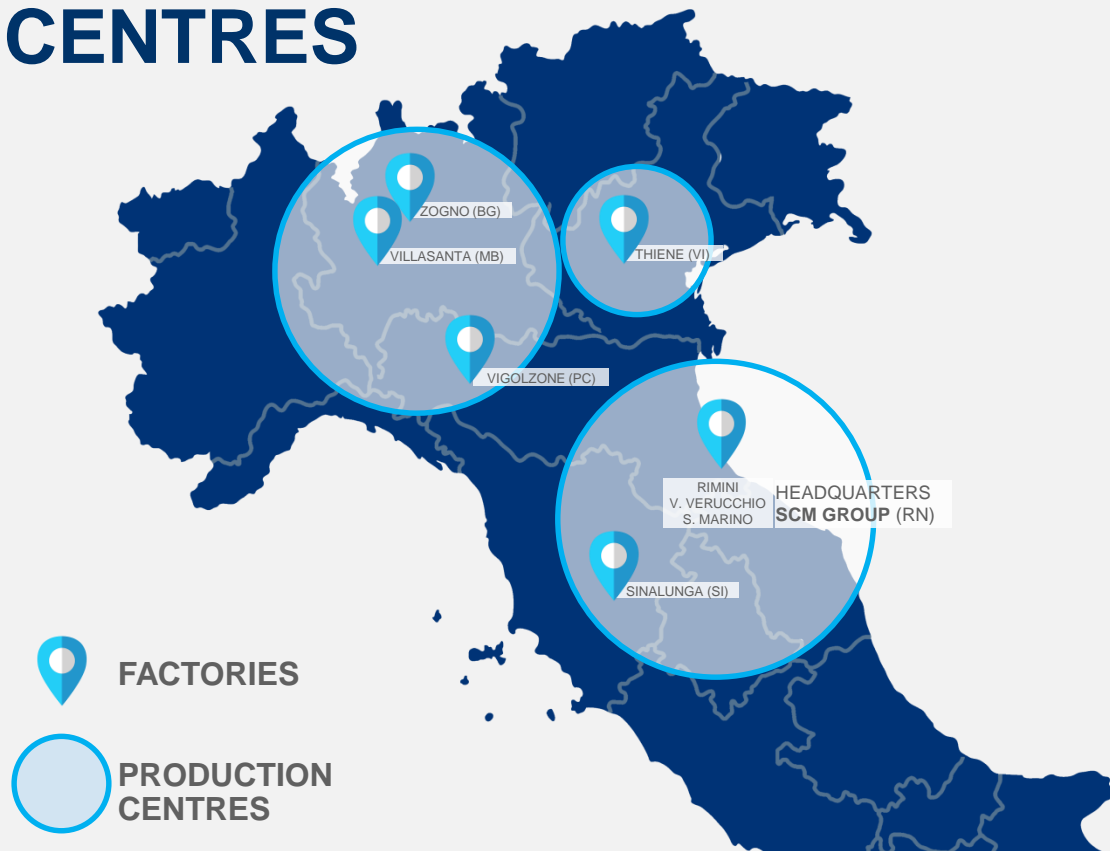
**METAL**  
TECHNOLOGY

# ADVANCED TECHNOLOGIES FOR MACHINING MATERIALS

Today, Scm Group is a **world leader in machining technologies for a wide range of materials.**

The companies in the Group have developed in-depth specialist skills in these sectors which have made them a reference point for all the most innovative and reliable technologies.

# BRANCHES AND PRODUCTION CENTRES



# CAPILLARY PRESENCE THROUGHOUT THE WORLD





# TECHNOLOGIES

# A VAST HERITAGE OF SKILLS IN A SINGLE BRAND

TECHNOLOGIES	ORIGINAL BRANDS
CNC MACHINING CENTRES	MORBIDELLI, SCM, ROUTECH, BALESTRINI
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 LINES AND SYSTEMS	



# SCM TECHNOLOGIES

SCM offers a wide range of machines to satisfy inorganic-bonded fiber composites material processing, such as:

- sizing of boards
- CNC machining of panels and walls
- planks squaring and profiling
- surface finishing with sanding and painting machines

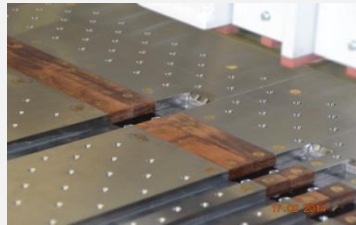
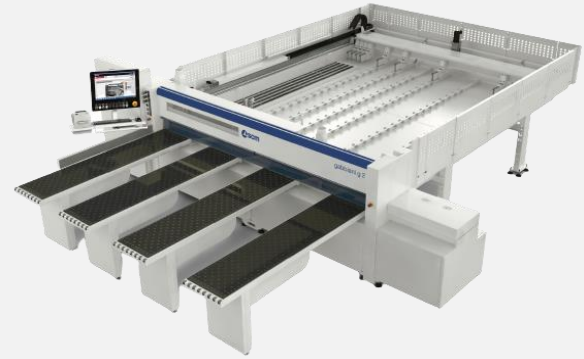
SCM can also supply and manage complete automatic lines thanks to its own handling automation systems and software.



# BEAM SAWS

**gabbiani g2** beam saw and **gabbiani a3** angular panel saw are designed for fibercement machining, ensuring maximum productivity and clean working space, thanks to:

- inverter for the blade peripheral speed management
- prismatic guides with recirculating ball screws
- automatic control of energy absorption
- closed rear working table for the best material support
- steel air floating tables for delicate and abrasive materials



	<b>gabbiani g2</b>
Cutting dimensions	3200/3800/4500 mm
Cutting depth	3200/3800/4300 mm
Blade projection	up to 128 mm
Variable sawcarriage speed	0–50 or 0–170 m/min
Variable pusher speed	0–70 or 0–100 m/min
Sawblade motor (S6 - 40%)	7,5 / 11 / 15 / 18 kW

# CNC MACHINING CENTRES FOR ROUTING AND DRILLING

**accord 25 fxm** is a machining centre equipped with high-performance multi-function aluminum worktable, for a highly flexible production regardless of the form and that requires high standards of accuracy.

Ideal solution to machine wood, plastic, resins, light alloy and fiber-cement panels with nesting technology.

## ADVANTAGES

- Rigid mobile gantry for maximum precision
- 5-axis working unit designed and made for maximum performance in minimum space
- On-board tool-change for downtimes reduction
- Pendulum machining for higher productivity
- Sav€nergy, for high performance and energy saving.



	<b>accord 25 fxm</b>
X-axis working area	3650 – 6170 mm
Y-axis working area	1320 – 2120 mm
Component passage	up to 250 mm
Electro-spindle	8,5 – 15 kW
Tool changer positions	10 - 56

# CNC MACHINING CENTRES FOR WALLS

**area** is the innovative CNC machining centre with a mobile bridge structure and modular composition to process structural walls, thanks to a worktable up to 4.5 m wide and 50 m long.

## ADVANTAGES

- Easy access to the worktable thanks to sliding tracks with a low vertical profile and reduced floor requirement
- Stress-free machining of very thick elements with the specially designed 5-axis machining head
- Special bellows on the sliding parts of the machine to prevent machine wear caused by abrasive material
- Total integration of Maestro beam&wall software with the most common CAD design tools.



	<b>area</b>
X-axis working area	up to 50 m
Y-axis working area	from 3.2 to 4.5 m
Machining head power	up to 30 kW
Sawblade diameter	up to 1020 mm
Machining thickness	up to 360 mm

# MACHINES AND SYSTEMS FOR SQUARING, AND PROFILING

**celaschi p60** is an extremely versatile double-end tenoner suitable for many kind of materials such as solid wood, PVC, fiber-cement, rock/glass wool and insulating material.

**celaschi p60** is characterized by high performances and reliability even in the most demanding applications, making it perfectly integrable into high productivity lines.

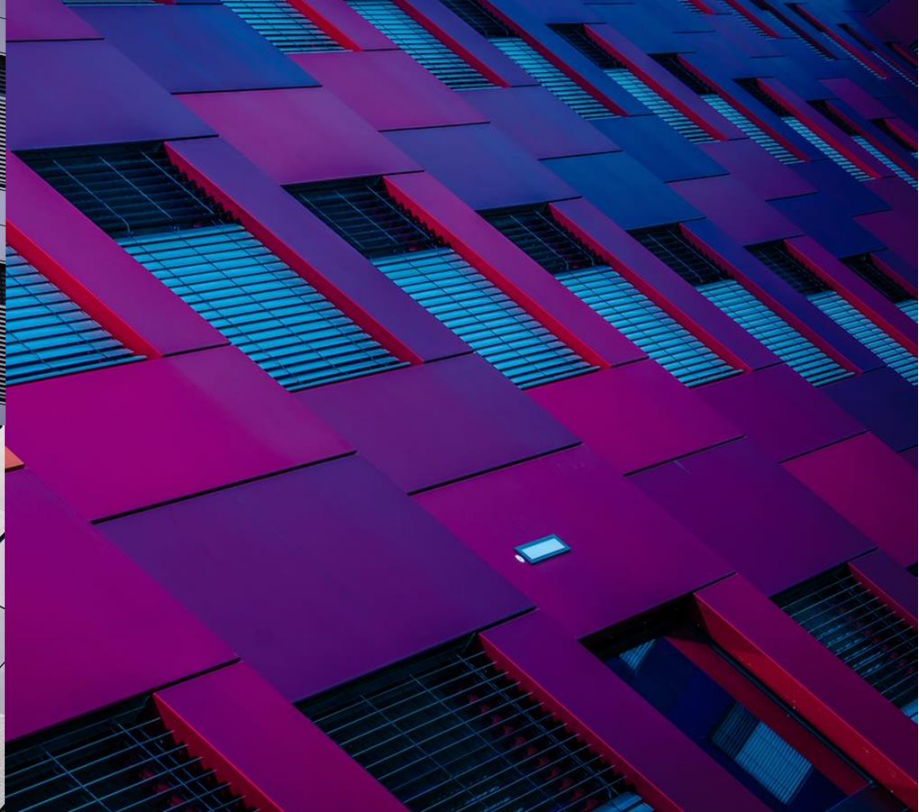
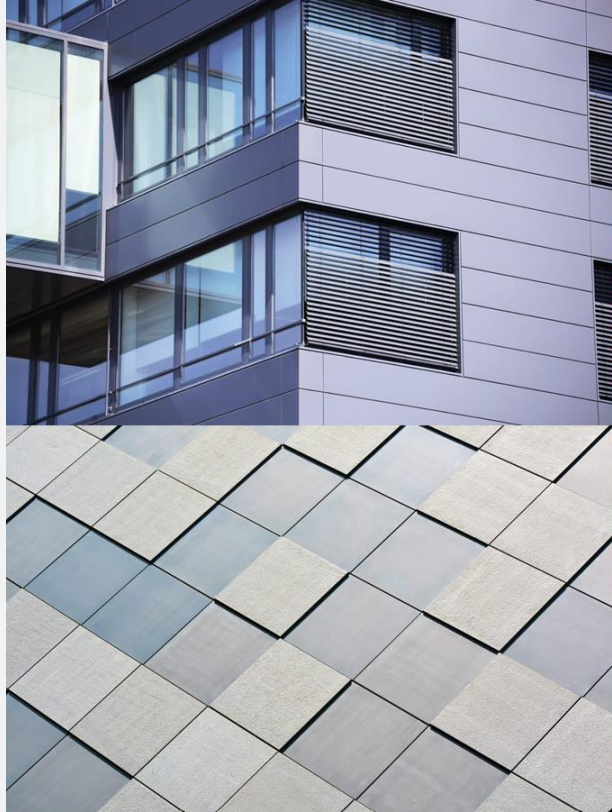
## ADVANTAGES

- Pressurized chain tracks to reduce abrasion considerably
- Exhaust system upgraded and dust hoods designed to be closer to the tool, wear resistant and extremely effective to remove dust and chips from the working area.



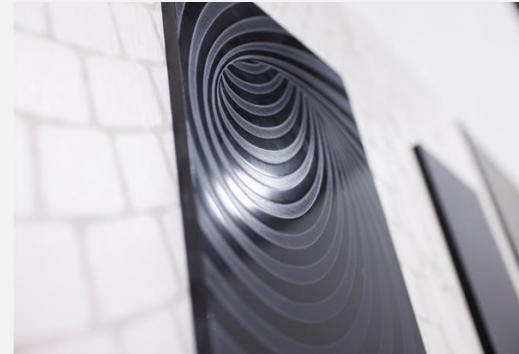
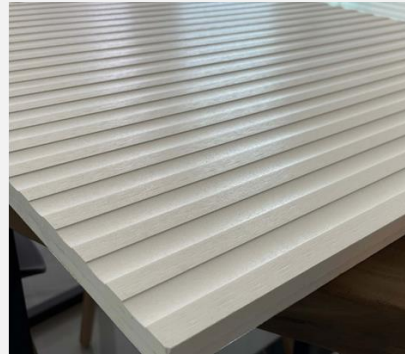
	<b>celaschi p60</b>
Work width	120 - 6100 mm
Workpiece height	3 -200 mm
Feed speed	up to 120m/min
Electro-spindle	up to 30 kW

# SURFACE TECHNOLOGIES



SCM offers a complete range of solutions for fibre cement boards, sidings, acoustic ceiling tiles or roof tiles, from the calibrating to the final decoration.

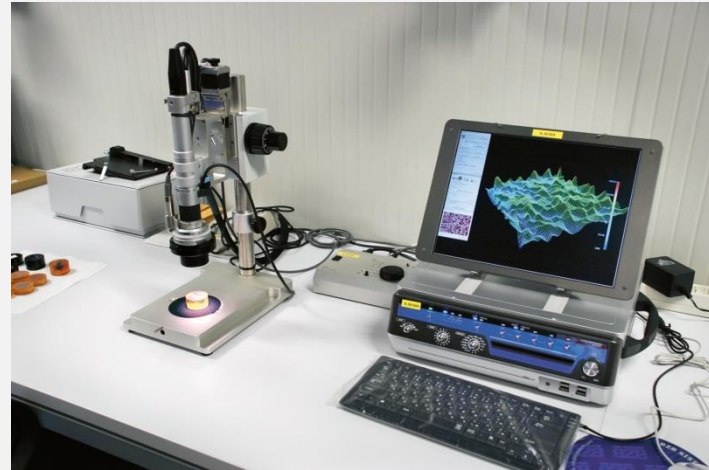
**Highly flexible solutions that perfectly fit any production requirement.**



The most suitable application methods such as **curtain coating**, **roller coating** or **spraying** are combined with high-performance **calibrating sanding machine** able to execute 3D effects and heavy-duty calibration on both sides of the board; and optimized **drying systems** to perform any required finishing cycle.

## SCM LABORATORY AND TECHNOLOGY CENTER

Every day, in our laboratory for sanding and calibration process, we test and study many different samples from worldwide customers with the highest technology to find the perfect finish for every material, finding the right machine configuration to fulfill customer requirements.





# WIDE BELT SANDERS

**dmc system** is an extremely resistant and reliable heavy duty machine suitable to perform calibrating and sanding operations on high-density fiber-cement boards.

## ADVANTAGES

- High-flow exhaust hoods to ensure the maximum dust extraction
- Hardened steel inserts that increase the wear resistance of the work table
- compressed air nozzle for bearings protection from dust
- Engines up to 90 kW for each working unit that allow 1.5 mm of stock removal on panels with high density at a feed belt speed of 40 m/min
- Abrasive belts with 3250 mm length suitable for intensive applications.
- Cover panels for motor transmission system protection from the working area



# WIDE BELT SANDERS

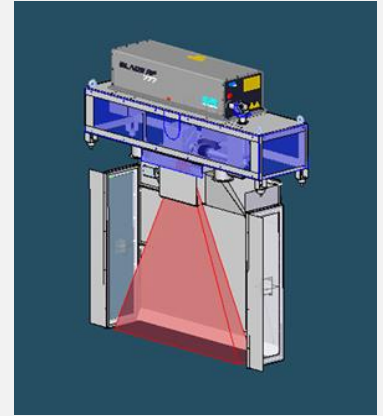
**CARVING OPERATING UNIT**  
for a 3D custom design



**CO<sub>2</sub> LASER UNIT**

for a customised design

- Feed speed up to 3 m/min
- Loading of jpeg, TIF and images



# SURFACE TREATMENTS

**superfici** finishing lines are based on spraying, roller or curtain coating technology combined with vertical and flat dryers and apply insulating primers and protective top coats to achieve extremely attractive facade panels in a wide range of colours with high aesthetical and technical performances.

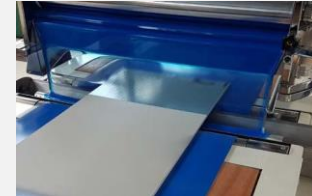
## Spraying Machines



## Roller Coaters



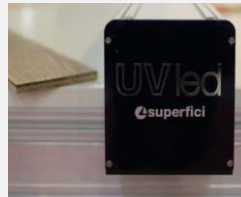
## Curtain Coaters



## Flat & Vertical Dryers



## UV LED Systems

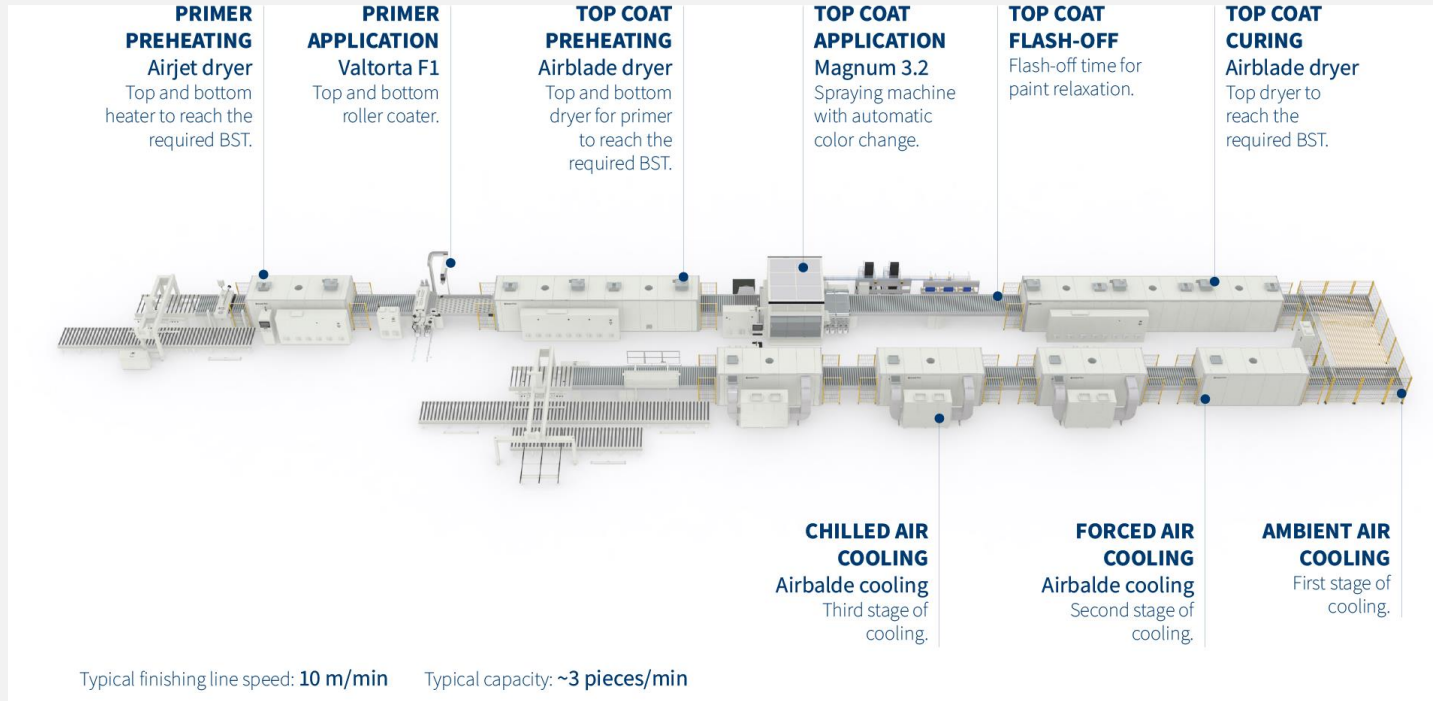


## UV Systems



# FINISHING LINES FOR FIBER CEMENT

sized for every production capacity and for the most intensive uses, always managed with maximum energy efficiency, thanks to the right combination in drying of infrared radiation and heat transfer with hot air.

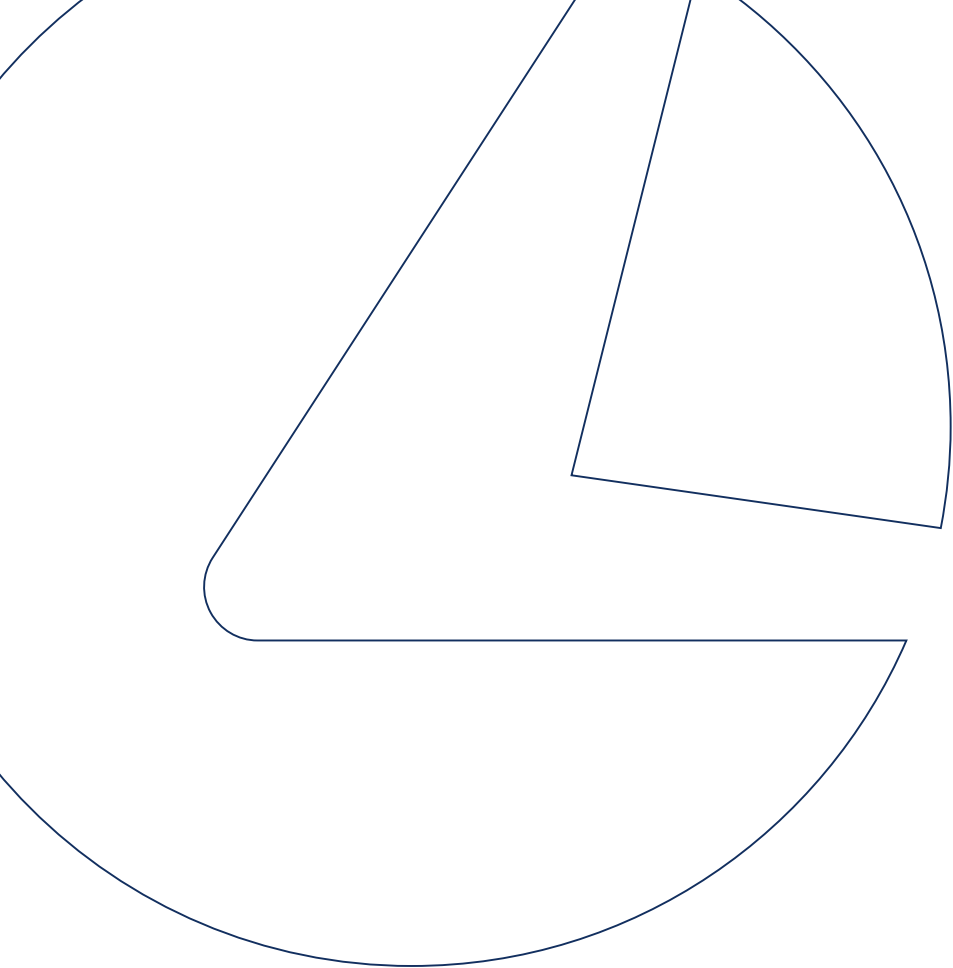


# AUTOMATION SYSTEM

SCM designs and produces material handling devices, going from roller conveyors to loading/unloading systems such as **mahros stacker** for beam saws, **mahros carrier**, **mahros runner** and **mahros brush** to load and unload lines automatically up to 20 cycles/min.

**SCM maestro watch** supervisor software manages complete lines.





**Thank you  
for your kind  
attention**