

Technologies for

Inorganic-Bonded Fiber Composites processing

IIBCC - November 2024



THE FIGURES OF A SOLID AND RELIABLE GROUP



850Million/Euro
of consolidated turnover



4,000+
people
in Italy
and abroad



main industrial centres



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.

HITECO

Electro-spindles and technological components

Les

Electrical panels

4steelmec

Carpentry and mechanics processes

Cscmfonderie

Iron castings



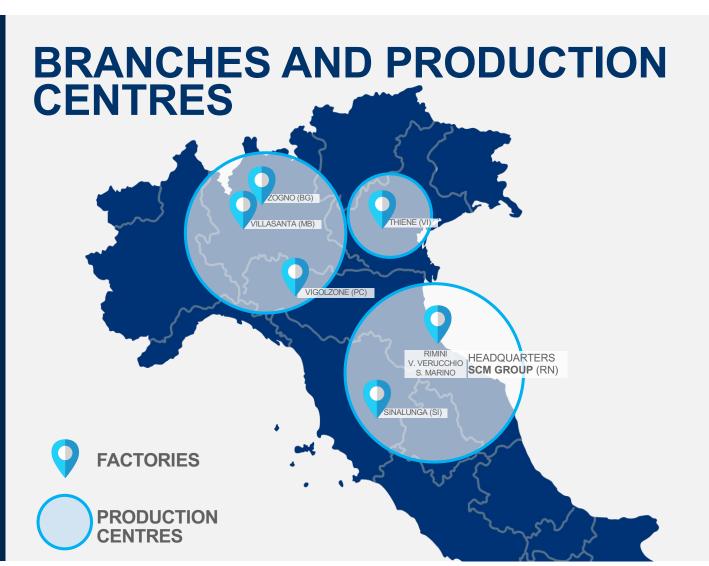


ADVANCED TECHNOLOGIES FOR MACHINING MATERIALS

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

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















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.



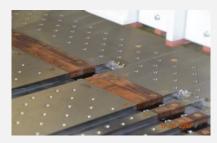


BEAM SAWS

gabbiani gt2 beam saw and **gabbiani a3** angular panel saw <u>are</u> <u>designed for fibercement machining</u>, 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









	gabbiani gt2
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 highperformance 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 fibercement 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





IG	120	
		escm accord 25 fam

	accord 25 fxm
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 CENTRESFOR 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.







	area
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.



- 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.





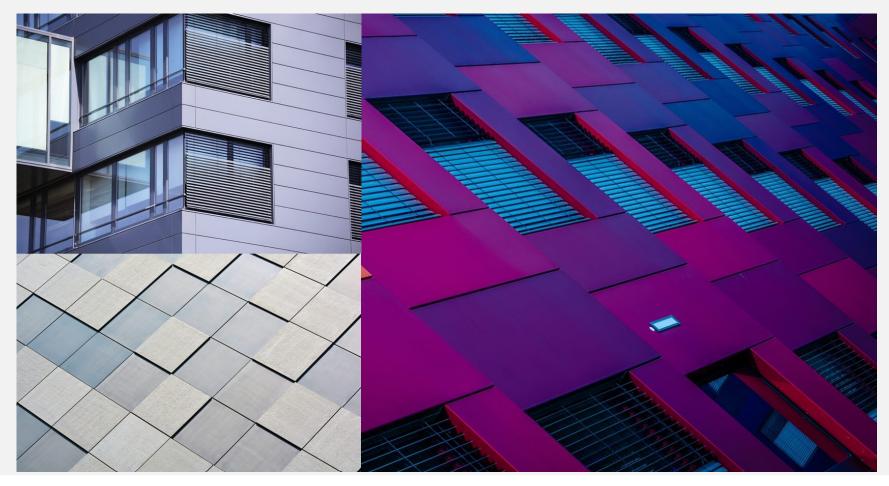


	celaschi p60
Work width	120 - 6100 mm
Workpiece height	3 -200 mm
Feed speed	up to 120m/min
Electro-spindle	up to 30 kW





SURFACE TECHNOLOGIES



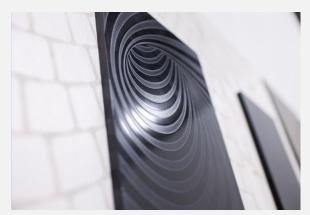


SCM offers a complete range of solutions for **fibre cement boards**, **sidings**, **acoustic ceiling tiles or roof tiles**, from the <u>calibrating</u> to the <u>final decoration</u>:

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.

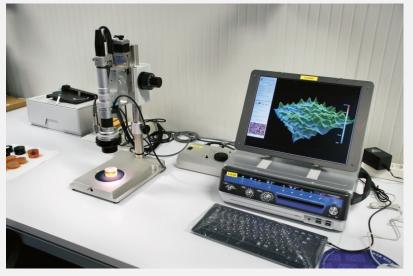


SCM LABORATORY AND TECHNOLOGY CENTER

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.





WIDE BELT SANDERS

CARVING OPERATING UNIT

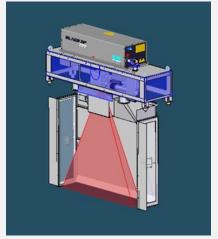
for a 3D custom design



CO₂ 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



Flat & Vertical Dryers



Roller Coaters



UV LED Systems



Curtain Coaters

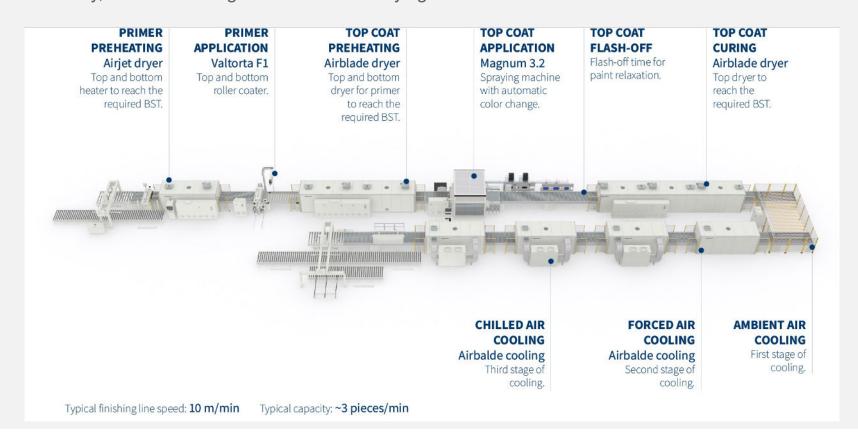


UV Systems



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.

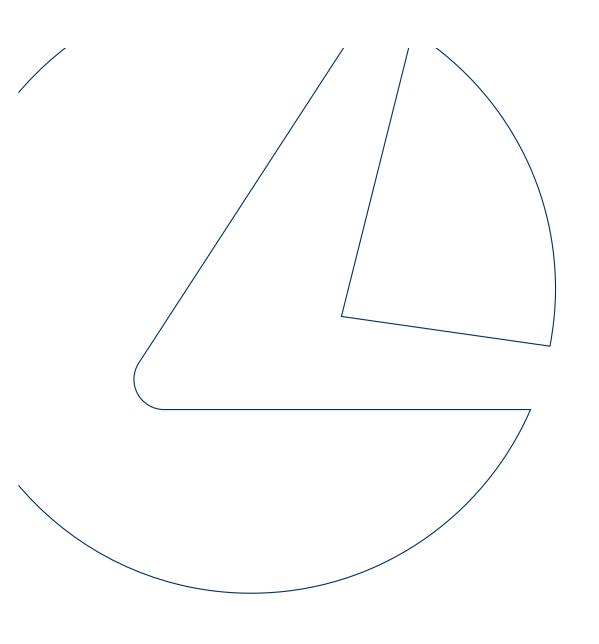
SCM maestro watch supervisor software manages complete lines.











Thank you for your kind attention