

# gabbiani a 3

angular panel saw



# A 360° BEAM SAW



# GABBIANI A 3



**FLEXIBILITY  
AND  
PRODUCTIVITY  
PERFECT  
MATCH**

## QUALITY



**Highest product quality** due to the rigidity of the basements, when combined with a carriage sliding on linear guides results in total lack of vibrations, **guaranteeing an optimum cut quality.**

## TAILOR-MADE



**Maximum machine configuration** owed to the wide range of available options, **to meet all process and tools setting needs.**

Available solutions: automatic precutting, bars with differentiated cuts and automatic labeling in masked time.

## POWERFUL



With **high feed speeds**, 170 m/min on the carriages, 120 m/min on the pusher beam, and high saw carriage power (up to 37 kW), it will ensure excellent production levels.

## FLEXIBLE



**Two independent cutting units** on a single cutting axis for greater productivity and flexibility.

22  
SOFTWARE

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OVERALL DIMENSIONS

27  
TECHNICAL DATA

# TECHNICAL FEATURES OVERVIEW

## TECHNOLOGICAL ADVANTAGES

### GABBIANI A 3 130 - 165

for furniture companies requiring a complete panel sawing solution with high production volumes and quality levels.



**Rear pneumatic side aligner for cross cuts**  
Perfect alignment of the piece against the squaring fence and cycle time reduction.



**Air floating table**  
High efficiency air floating table with feeding rollers eases the sliding of heavy or delicate materials.  
**Maximum protection against risks of friction.**

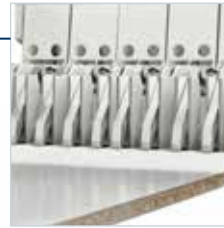


Find out more



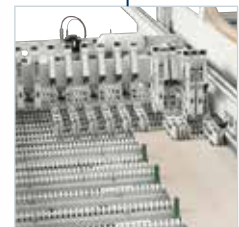
**Pusher with brushless motor**

*The best quality and the maximum performance due to the pusher stroke on prismatic guides with recirculating ball screws.*



**Floating clamps with double finger**

*Safe grip at the highest speed on squaring side, also when panels are not perfectly planar.*



**Machine base**

*It is composed by sturdy tubular steel with oversized nylon wheels for moving panels, even the heaviest without damaging them (standard).*



**Pressure beam**

*This structure guarantees a uniform and increased pressure on panels, with an optimum extraction of shavings and simplified maintenance.*

# PERFECTION AND FLEXIBILITY OF CUT



## THE BASE: THE VERY BEST RESULT IS GUARANTEED

Top quality machining on single sheet or panel packs, high-speed cutting, heavy workloads even on three daily shifts.

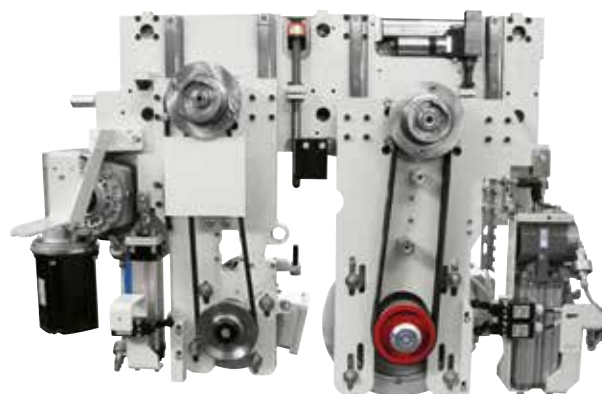
## HI-TRONIC: FOR TOP PERFORMANCE

The use of motors up to 37 kW ensures reaching the highest speeds.

**Precision and perfect finish cut** due to a balanced solution, which foresees an oscillating movement, rather than a vertical one, of the blade motor.

**Versatility of use** owing to the possibility to install advanced options.

**Ease of maintenance** with the belt tensioning system (optional\* see pages 24 and 25).



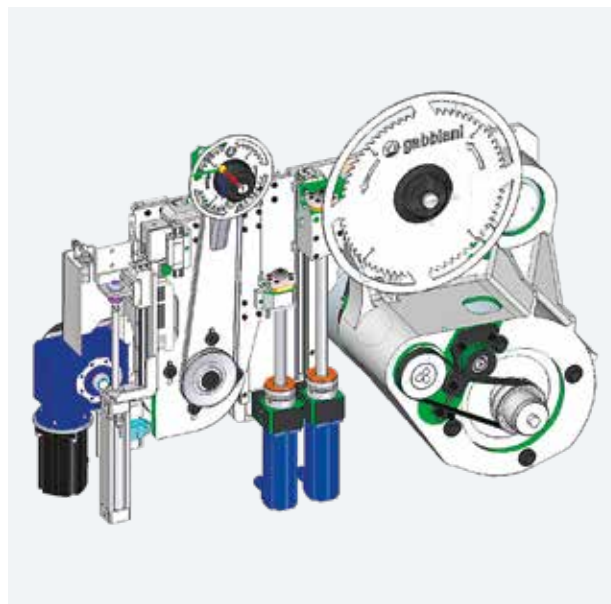
## EXCELLENT FINISH CUT

Sturdy saw carriage with independent pneumatic raising of the main blade and scoring blade, on prismatic guides with recirculating ball screws.

## PRISMATIC GUIDES WITH RECIRCULATING BALLS SCREW: IMPROVE MACHINE PERFORMANCE

Minimum friction and automatic lubrication with a remarkable maintenance reduction.

Maximum speed reachable both during the feeding stroke (100 m/min with a single sheet, 50 m/min with a panel stack) and the return stroke (up to 170 m/min).







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

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



### **RAPID BLADES LOCKING/UNLOCKING: MACHINING SAFETY IN REDUCED TIME**

This system provides safe and constant blade locking and unlocking, due to the pneumatic system which minimises the standby times for blade changeovers.



### **AKE DEVICE**

Rapid locking/unlocking of the blades with "EASYFIX" mechanical device ("AKE" patent) allowing for quick and easy change of the blades.

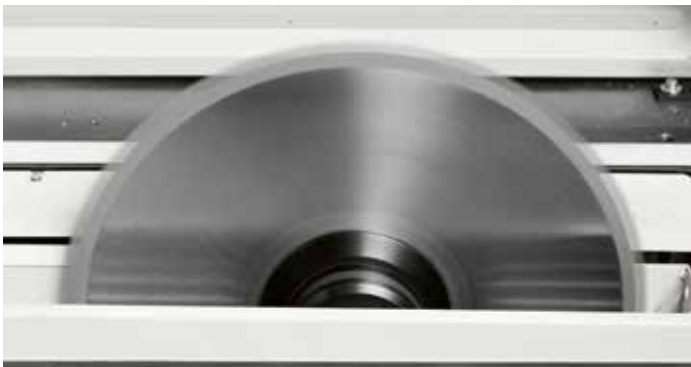
The tightening is ensured both with high blade-motor power and machining of the hardest materials (optional).

# MAXIMUM PROCESSING VERSATILITY



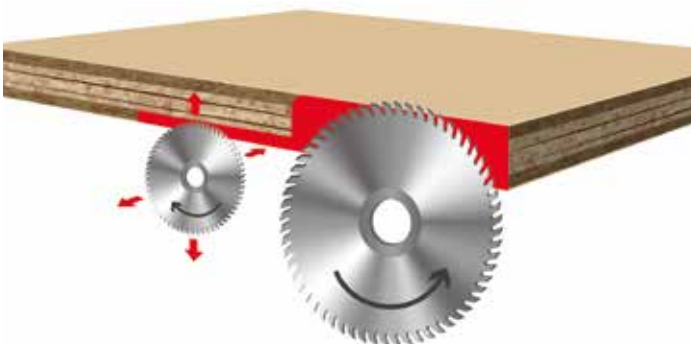
## OPTIMISED BLADE HEIGHT: FOR SMART CUT

The main blade projection is automatically adjusted according to the panel thickness to be cut. It always **guarantees an optimum cut quality** and **reduces the machine cycle time**.



## INVERTER: NO COMPROMISE

The possibility to adjust the main blade speed allows a **perfect finish** with any panel stack height (optional).



## SCORING UNIT ELECTRONIC ADJUSTMENT: TECHNOLOGY FOR REAL SUPPORT

The setting from the PC allows the management of a powered system for the scoring unit automatic positioning, drastically **reducing the blade set-up time** and avoiding any possible **errors** (with HI-TRONIC carriage as standard equipment).



**AUTOMATIC CLOSURE OF THE CUTTING LINE:**

it avoids the fall of waste trim cuts inside the machine (optional).

*Side alignment device  
with optimised stroke on prismatic guides with  
recirculating balls screw.*



# MAXIMUM PROCESSING VERSATILITY

## FLEXCUT

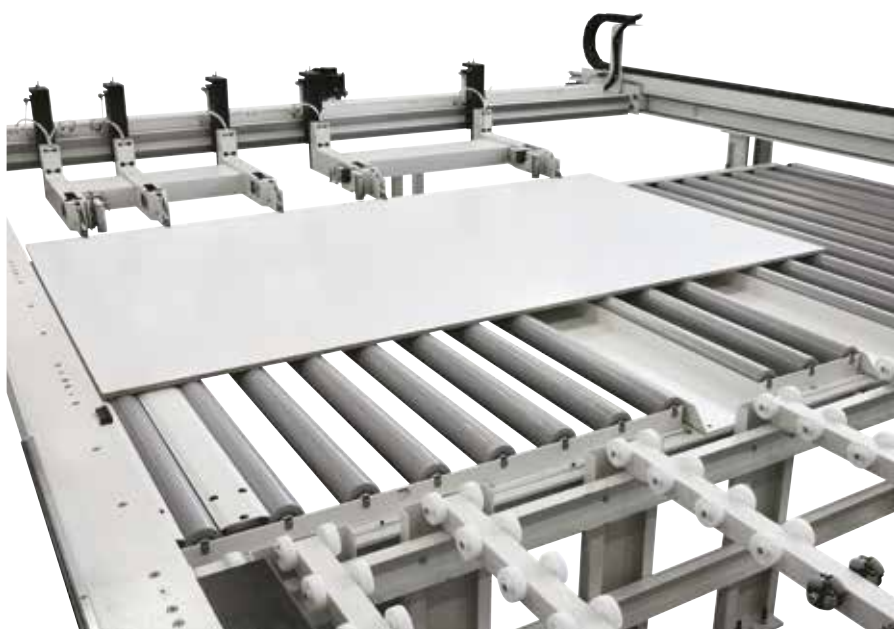
The modular FLEXCUT system enables the processing of complex cutting patterns in very rapid cycle times.

### Incomparable precision.

The use of brushless motors sliding on prismatic guide with recirculating balls screw reduces mechanical parts friction and guarantees best precision.



The extreme flexibility of this device is also ensured by the presence of the main pusher grippers, which can be excluded from the working area, so that strips with different widths can be secured and as a result any type of different cutting can be performed without limiting the stroke.



The special structure of its components allows to use gabbiani a 3 in different modes.

### SINGLE BLADE

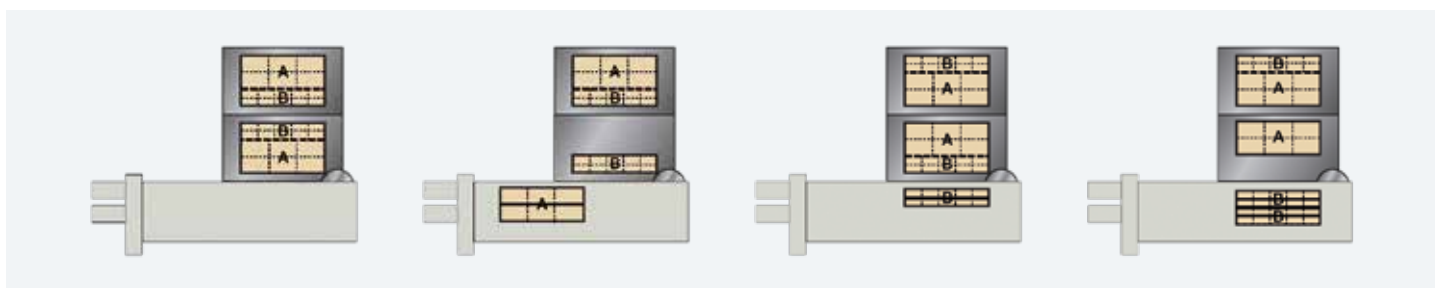
The crosscut section can be manually loaded and used as a normal single blade beam saw.

### AUTOMATIC LOADING

It operates with automatic stack loading from the lifting table.

### AB-BA CYCLE

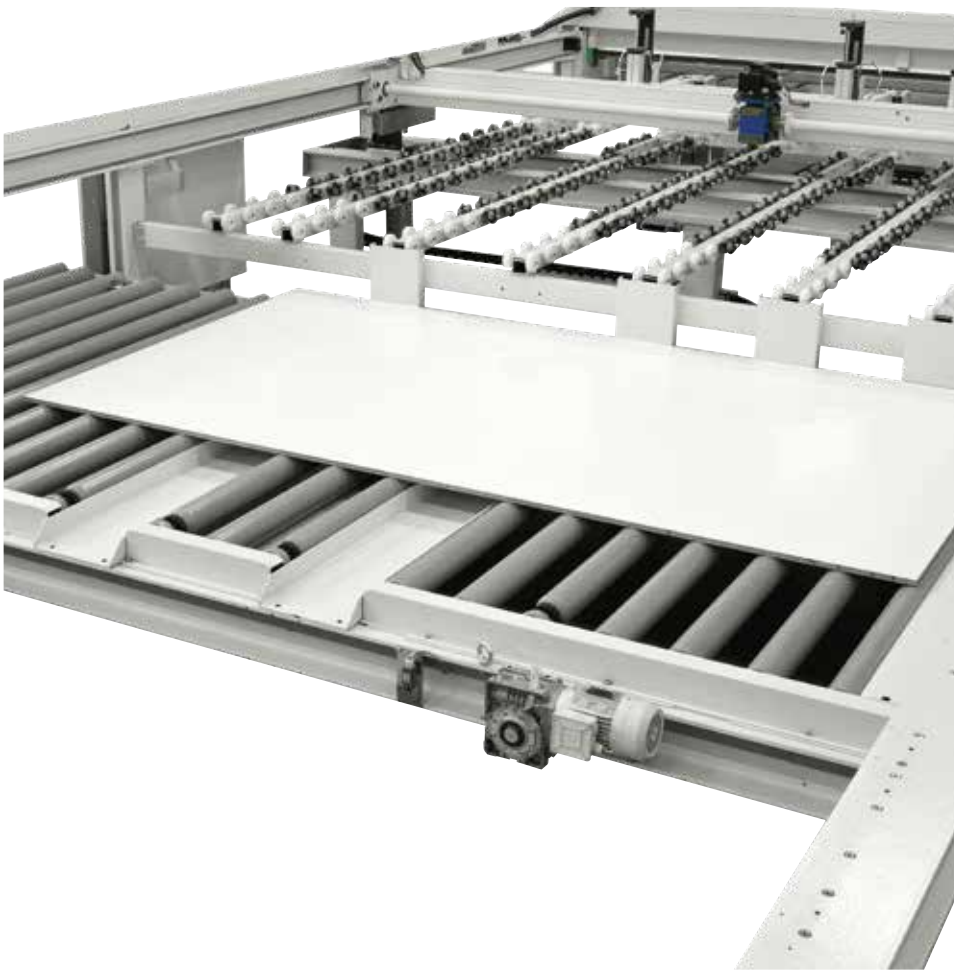
For specific cutting patterns it is possible to combine same size strips from different stacks in order to fully exploit the crosscut section by always supplying the maximum quantity of strips possible.



**gabbiani a 3**  
angular panel saw



# LOADING PLATFORM

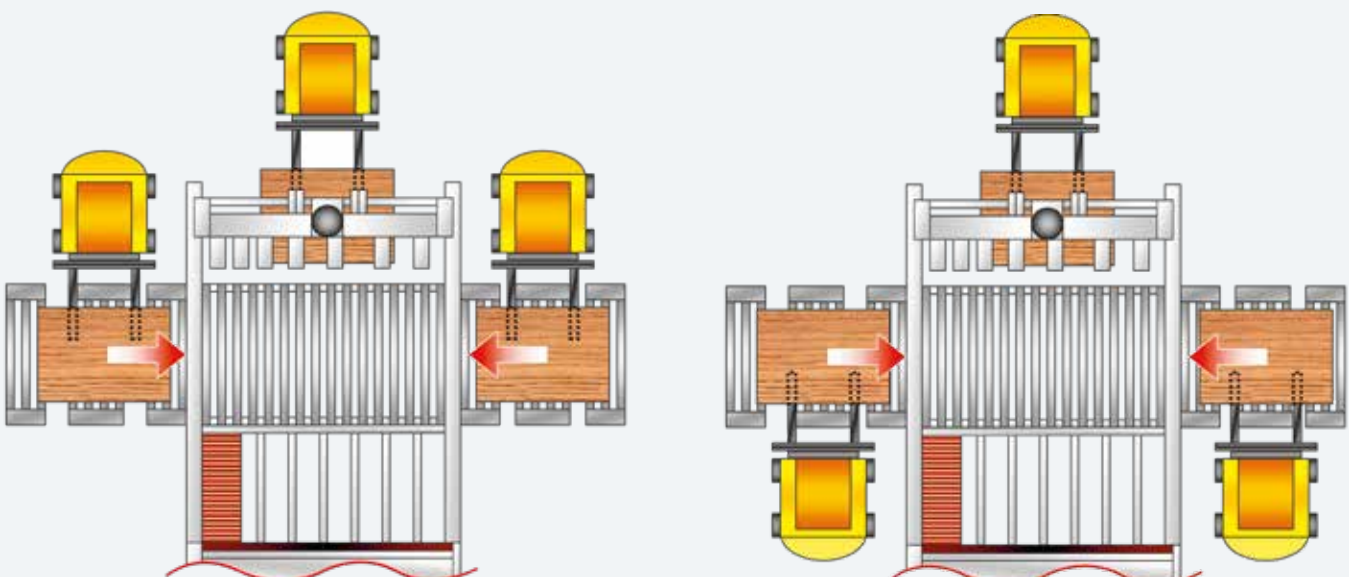


## LOADING PLATFORM: WHEN STURDINESS AND PRECISION MAKE THE DIFFERENCE

The lifting system running on 4 large trapezoidal screws is able to maximize the load capacity, with any material and format, **always** ensuring a **parallel lifting** of the panels stacks. In this way machine downtimes are avoided achieving **maximum productivity**.

## PRELOADING ROLLER CONVEYORS: SPACE IS NOT A PROBLEM ANYMORE

One or more preloading roller conveyors allow the endless running of the angular saw. Loading and unloading systems of the “half stack” and the baseboard or pallet handling offer effective solutions to space and production needs.

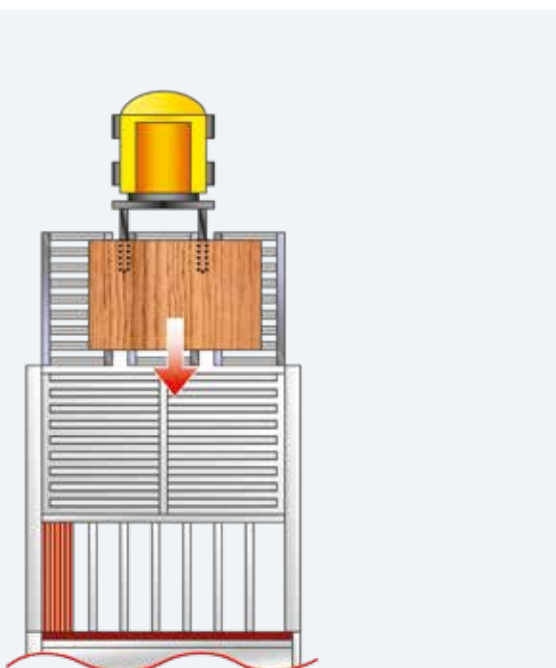
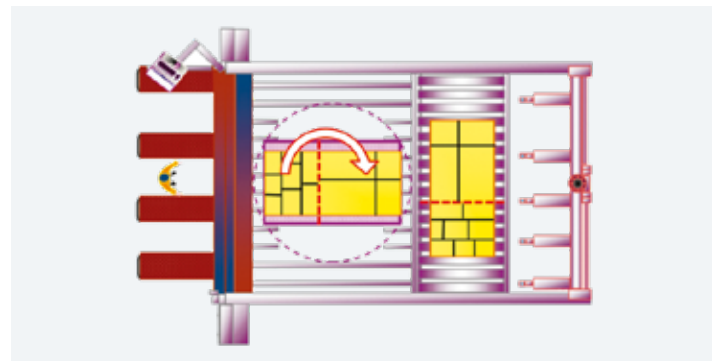


## AUTOMATIC HEAD-CUT MANAGEMENT DEVICE: PRODUCE FASTER

A sturdy metallic frame holds up the panels stack during the rotation cycle.

The main pusher automatically moves the panels stack from the loading rear table to the centre of the rotating table.

The system automatically manages the cutting of the "Slave" section and the reintroduction and rotation of the "Master" section.



# AUTOMATIC LOADING OF THIN AND DELICATE PANELS



## **AUTOMATIC LOADING SYSTEM OF THIN PANELS: SCM EXPERIENCE AT CUSTOMER DISPOSAL**

Precise and effective device which ensures the automatic loading of thin panels with thickness ranging between 3 and 10 mm.



## **THE DEVICE FORESEES THE MACHINE WORKTABLE WITH CLOSURE COVERS.**

For the thin panels stack loading/unloading it is compulsory a support panel (25 mm minimum thickness).

The minimum panel stack which can be loaded and aligned is 15 mm.



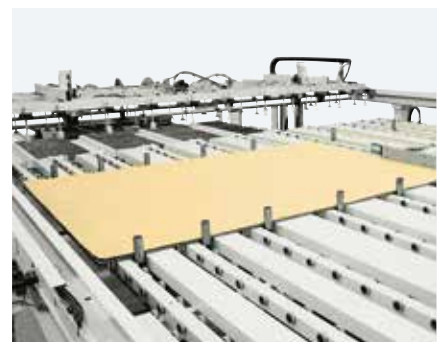
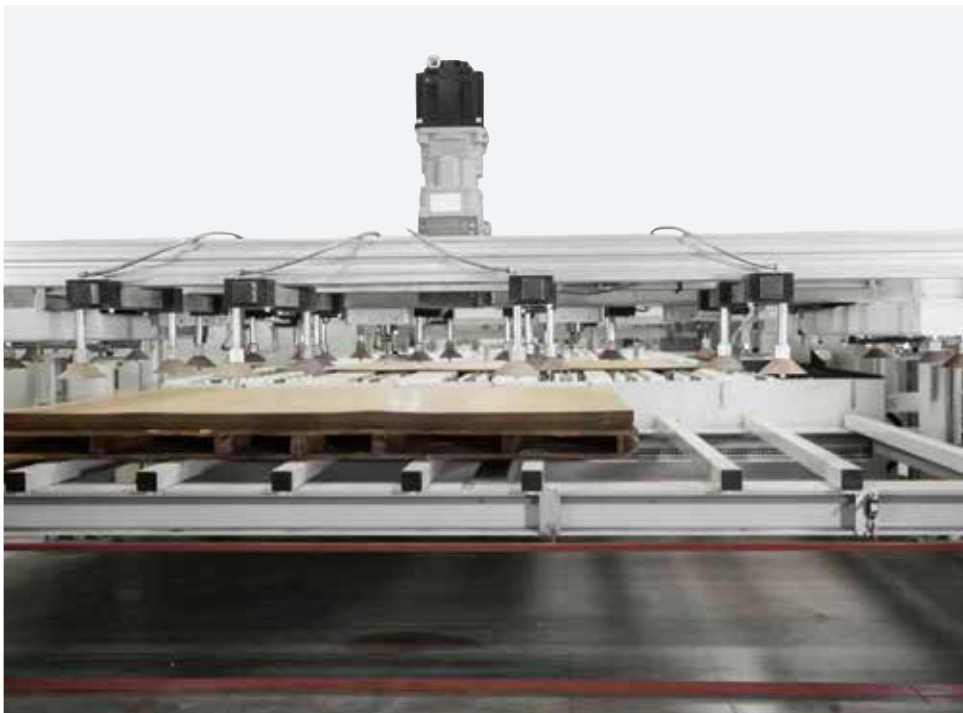




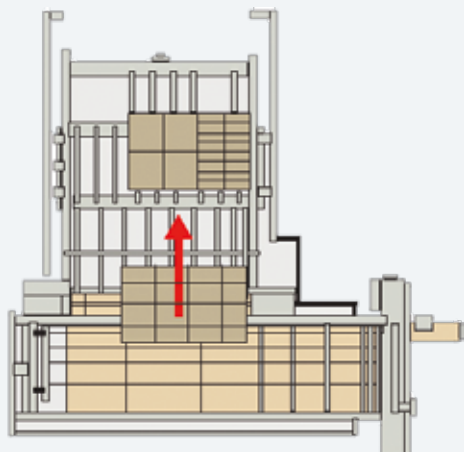
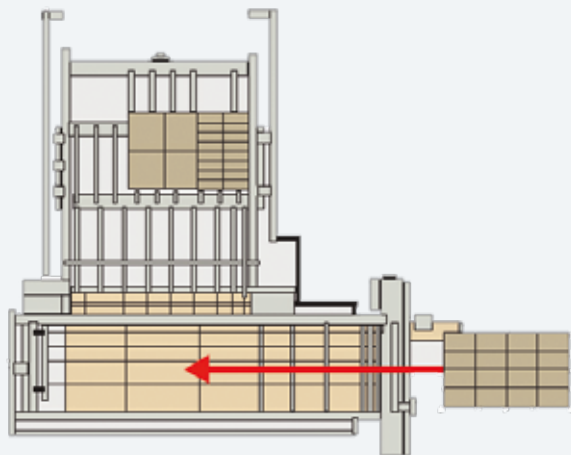
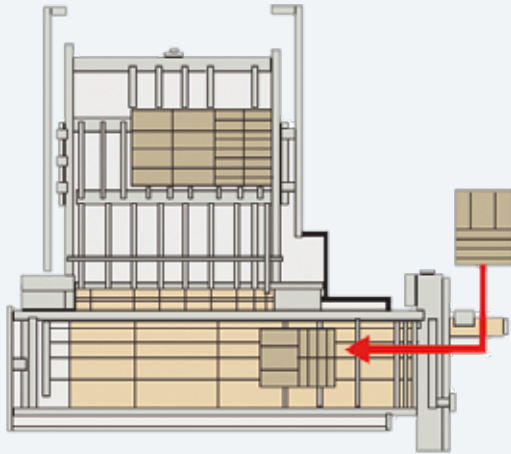
## **SUCTION CUP LOADING SYSTEM: THE PERFECT SOLUTION FOR PANELS WITH DELICATE COATING**

The suction cup loading system is integrated in the machine to guarantee minimum space requirements.

The suction device takes the single panel and puts it down in masked time in the alignment station inside the machine.



# PRECUTTING



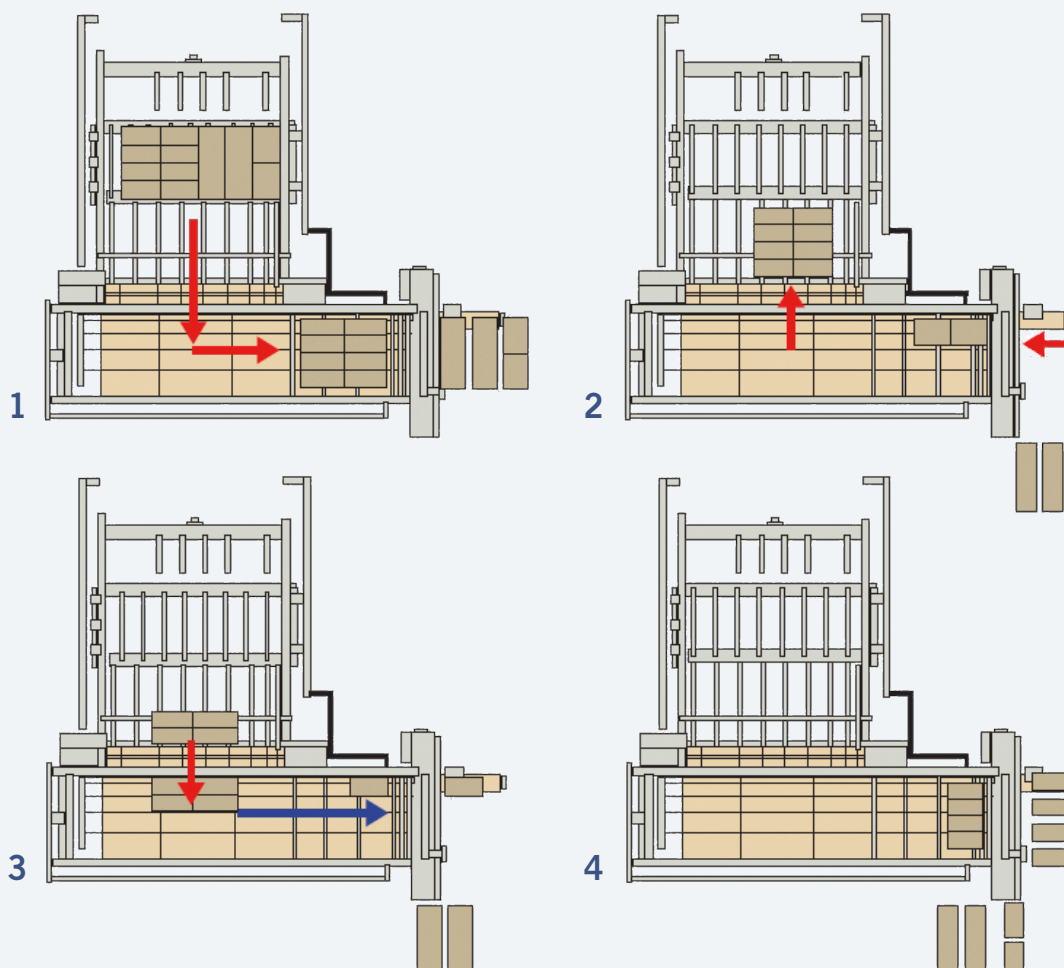
The crosscut section can be manually loaded and used as a normal single blade beam saw.

The special mechanical design and software enable panels to be loaded from the cross cut section without having to free the loading table. This is particularly useful for single batches or one-off orders.

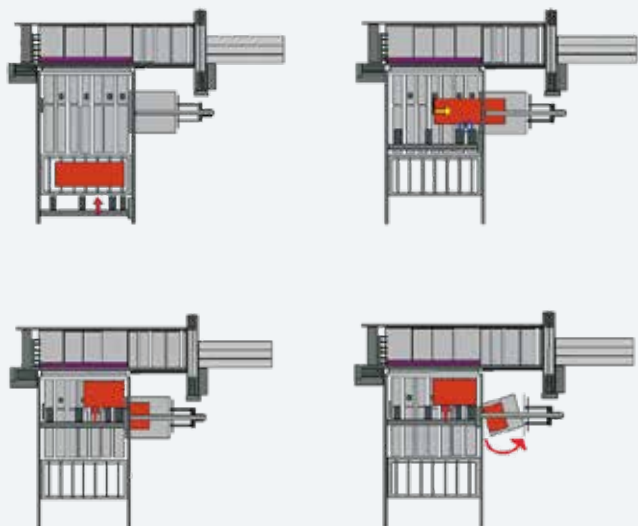
## INTERNAL PRECUTTING

The special mechanical design and the software management enable a simple and effective pre-cutting execution.

The pre-cut part is processed on the crosswise sawing axis while the main part is moved to the longitudinal axis and cut lengthwise. Simultaneous processing of both parts on two different cutting axes obtains excellent production levels for the best productive investment.



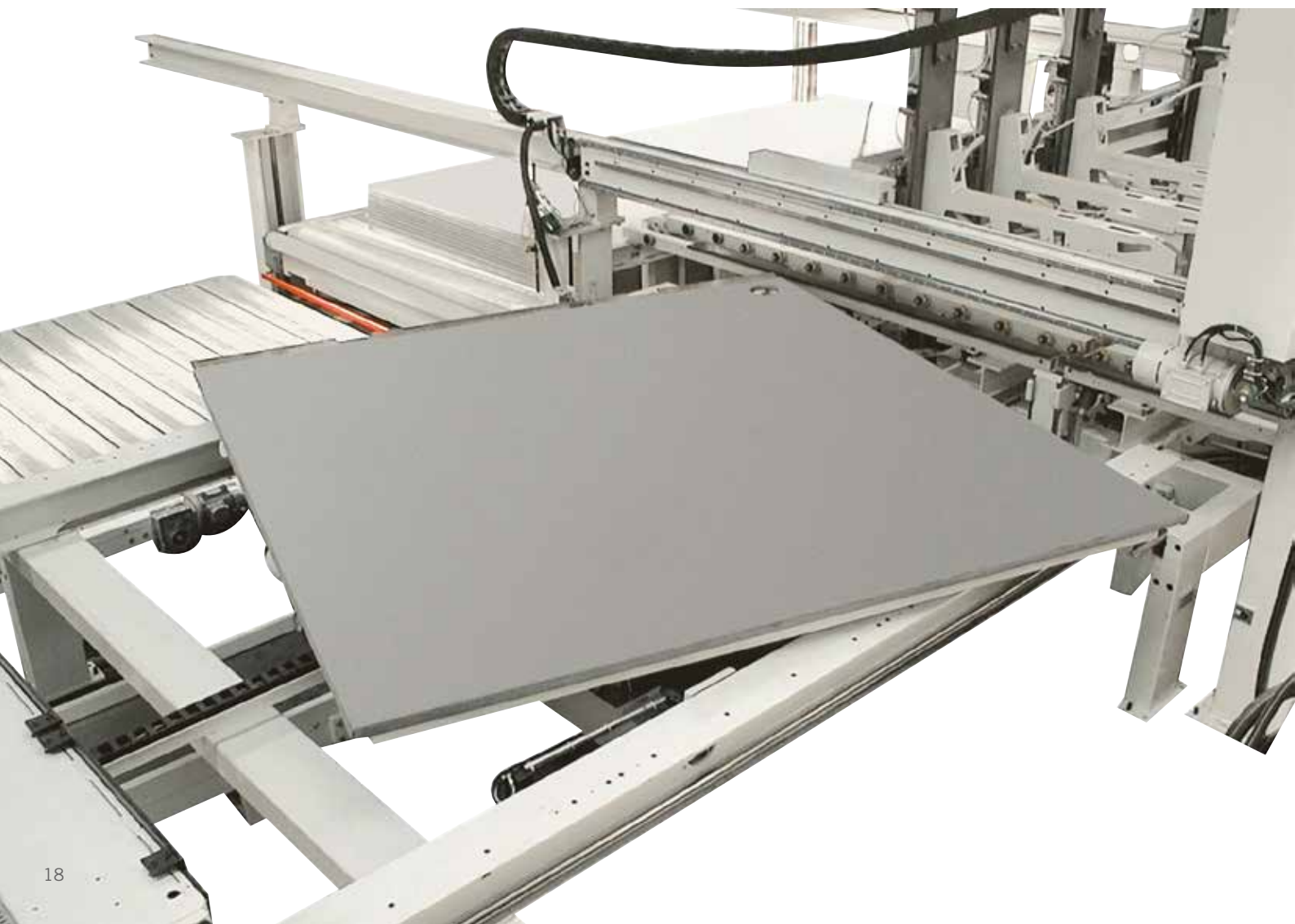
# OUR SOLUTIONS

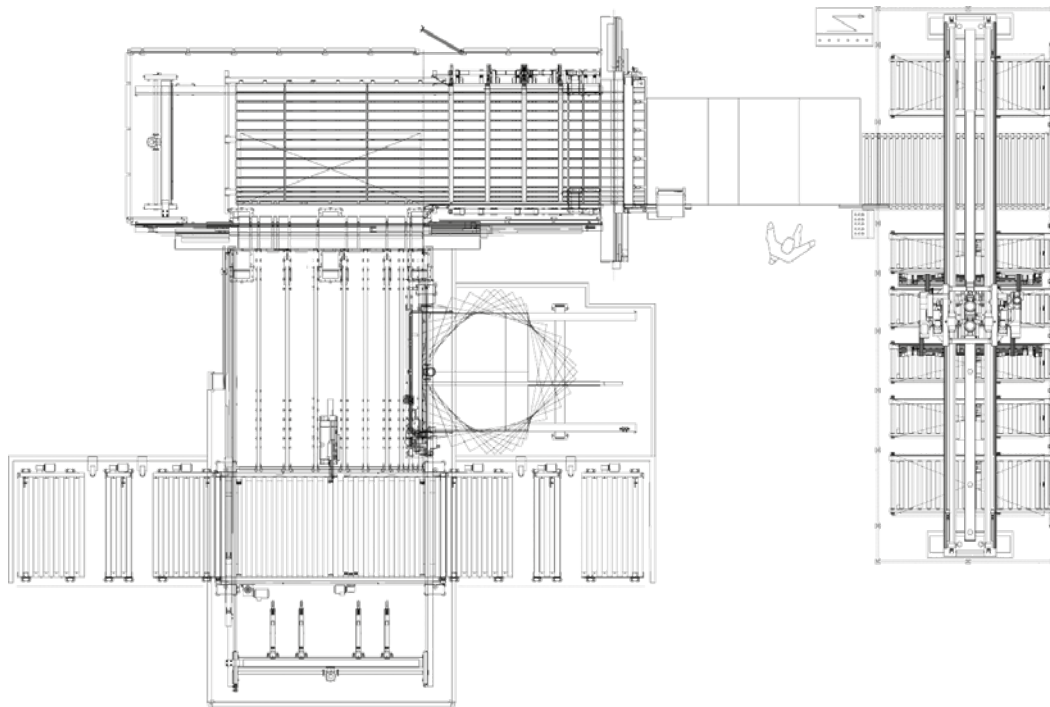


## EXTERNAL ROTATING TABLE FOR HEAD-CUT

The patented system for automatic head-cut execution is composed of a third cutting axis and an external rotating table.

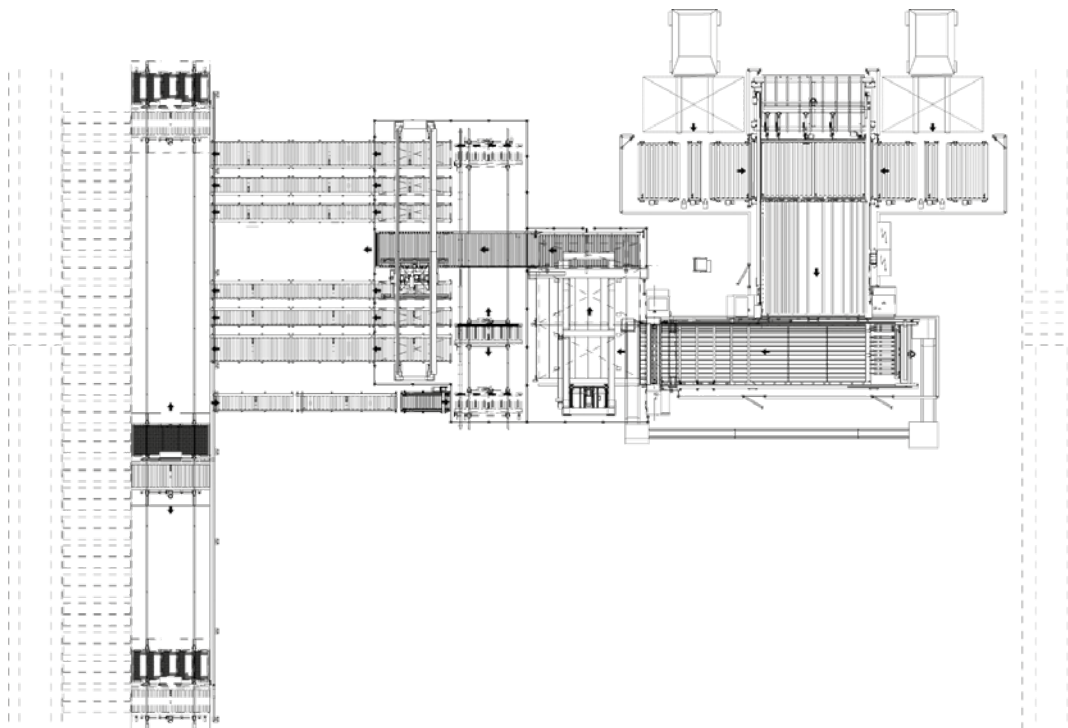
The device, working in hidden time, guarantees excellent production output even with high percentages of precutting for a better use of the panel surface (only on gabbiani a 3 130 configuration).





**ANGULAR PANEL SAW SYSTEM WITH EXTERNAL PRE-CUTTING AND SEMIAUTOMATIC SORTING OF FINISHED PANELS.**

The operator follows the instructions given by the cell Stack manager software and pushes the stacks produced by the panels saw directly to the unloading gantry. The gantry stacks the panels onto the floor roller conveyors.



**ANGULAR PANEL SAW SYSTEM WITH AUTOMATIC SORTING OF FINISHED STACKS**

The cell software program provides the unloading gantry and the automatic stock with all the information necessary to enable automatic finished stack distribution without any operator intervention.

# COMPLETE AND INTEGRATED SOLUTIONS

## STACKER

Panel saw unloading gantry with multiple stacker stations. The two beam gantry structure will withstand the stresses and strains of heavy loads and high production rates. The gripper carriage runs on prismatic guides with recirculating ball bearings. The guides have automatic lubrication to guarantee smooth operation and resistance to high dynamic loading.



The various unloading stations ensure the best working flexibility for different unloading requirements.

The gripping device picks up and unloads panel stacks. It automatically reads the panel dimensions and together with the motorized gripper opening ensures the optimum pick-up in every working condition.



#### **AUTOMATIC WASTE TRIM CUT HANDLING DEVICE**

Automatic device for the waste trim cuts management on two cutting axes including vibrating conveyors and chopping devices.



# M Maestro Digital Systems

SMART SOFTWARE AND DIGITAL SERVICES TO ENHANCE PRODUCTIVITY OF WOODWORKING AND FURNITURE INDUSTRIES.

cutting lists

> optimized cutting patterns

Maestro office

Office

Factory

Maestro active

optimized cutting patterns

> cutting

## 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.





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.

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 your machine.



# Maestro connect A REAL MASTER OF EFFICIENCY





## SCM LINEAR CUTTING OPTIMIZATION PROGRAM



In the office Maestro optiwise provides support during the design and optimization phases.

Maestro optiwise is the linear cutting optimization program created for production management directly from the office. Depending on users' parameters, it automatically generates the cutting patterns, identifying the best solution among different results.

## SOFTWARE

## Office

## TO EACH HIS OWN OPTIMIZATION SOFTWARE

Maestro optiwise is the professional software for controlling the entire costing and optimization process of the beam saw.

### ADDITIONAL FUNCTIONS



#### Maestro optiwise

Maestro optiwise is the professional software supplied by SCM for beam saws management. The main strengths are:

- Improved user experience: The user can easily and effectively carry out all raw material optimization operations.
- Increased efficiency: Improved user-experience enables required tasks to be performed in less time, increasing productivity
- Less effort for customization: the application is designed with a modular architecture that allows it to be easily adapted to each customer's production logic.
- Faster user learning: The application is a useful and simple tool that allows users to be productive in the shortest possible time.
- Multi-machine management: The application is able to manage optimizations and create machine programs for single-blade panel saws and angular systems.

## Maestro active cut

Maestro active is the new operator interface software which has been unified across all SCM technologies. A single operator can easily and confidently run multiple machines due to controller and interface consistency: regardless the machine, Maestro active maintains the same look&feel, with many identical icons and navigation buttons, thus ensuring the same approach to interaction.

### EASE OF USE

The new interface has been specifically designed and optimized for immediate use via touch screen. Graphics have been redesigned for simple and comfortable navigation, with tablet-like icons on touch screen controller.

### "ZERO" ERRORS

Improved productivity thanks to integrated help and recovery procedures that reduce the possibility of error from the operator's side.

## SOFTWARE

## Factory

## Maestro active cut

# A REVOLUTIONARY APPROACH TO INTERACT WITH YOUR SCM MACHINE

### FULL CONTROL OF PRODUCTION PERFORMANCES

The creation of customizable reports by operator, shift, program, forecast period (and much more) allows to monitor, optimize and improve the production performance.

### FULL MACHINE AWARENESS AND KNOWLEDGE MANAGEMENT SYSTEM

Maestro active allows to record the times related to setup, maintenance, training and other events, tracing all the activities in a database. The operator's know-how is also stored and made available to other people inside the organization thanks to the possibility to comment and document all production events or notifications.

### ORGANIZE YOUR PRODUCTION

Maestro active allows to create different users with different roles and authorizations (e.g.: operator, maintainer, administrator, ...). Any user can only execute the functions whose permissions have been assigned to him. It is also possible to define the work shifts on the machine and then detect activities, productivity and events that occurred in each shift.

### OPTIMIZATION FUNCTION ON BOARD MACHINE

Maestro pattern is the linear cutting optimization program for user who wants to optimize cutting patterns with a few simple clicks.

## SUPPLEMENTARY MODULES



### Cut editor angular

Labels printing software, panels editor, editor for Macro machining creation.



### Cut manager angular

Simulator for cycle time calculation, simulated execution of the cutting diagrams of single or multi orders in 2D mode; priority-based and date-based scheduling of the order; advanced report.

## Maestro connect

### CONNECT YOUR MACHINE AND GAIN ACCESS TO A WORLD OF SERVICES

Connecting your machine through IoT technology Maestro connect will let you subscribe a program of fast-evolving services. You will 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 your machine.

### FASTER SERVICE INTERVENTION AND PROBLEM RESOLUTION

Maestro connect provides real time data and Health Records of the machine also to SCM Service, drastically reducing its troubleshooting time.

### WORKING ALWAYS IN PERFECT CONDITIONS

Maestro connect can provide a full kit of sophisticated sensor devices to detect and warn the operator in case of alarming conditions of the machine.

## SMART MACHINE

### THE ENTIRE MACHINERY FLEET AT YOUR FINGERTIPS



- **REAL-TIME MONITORING** of the machine status, components, and performance in term of availability and efficiency.
- **INSTANT NOTIFICATIONS** on pc, tablet, and smartphone when machine alarms occur, allowing you to act timely and avoid additional equipment damages.

## SMART MAINTENANCE

### PLANNING AND MAINTENANCE: PREVENTION IS BETTER THAN... REPAIRING!



- **PLANNING:** In the Smart Maintenance section, you can find all the tools you need to plan the maintenance of the entire machinery fleet to prevent downtimes.
- **TROUBLESHOOTING:** Thanks to intuitive smart documents, Maestro connect guides the operator in the maintenance activities procedures step by step.
- **SERVICE REQUEST:** Do you need further support? Open a ticket in one click, and our experts will assist you.

#### WARRANTY EXTENSION

Is your machine still under warranty?



You will be able to activate the second year of warranty with facilitated conditions directly via Maestro connect.

## SMART ANALYTICS

### REPORT AND KPI: GET TO KNOW BETTER YOUR MACHINE



Maestro connect reports and KPIs provide an in-depth analysis of production results, enabling you to know your machine's performance in detail.

#### OEE: WHY IT'S IMPORTANT TO KNOW IT



The Overall Equipment Efficiency Indicator (OEE) allows you to monitor the three variables: **Availability, Performance and Quality**. By doing so, you'll be able to detect the lower one and act on it: the performance of your machine will be the highest ever.



# CONSOLE EYE-M

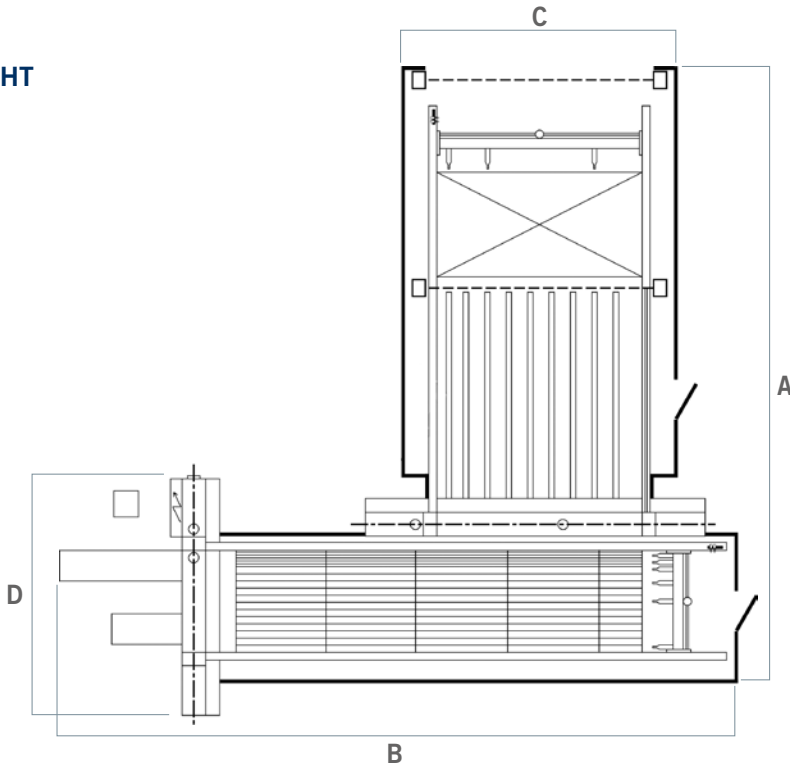
## EASY-TO-USE

due to the software which manage the design, the programming and the furniture automatic production in all machining phases.

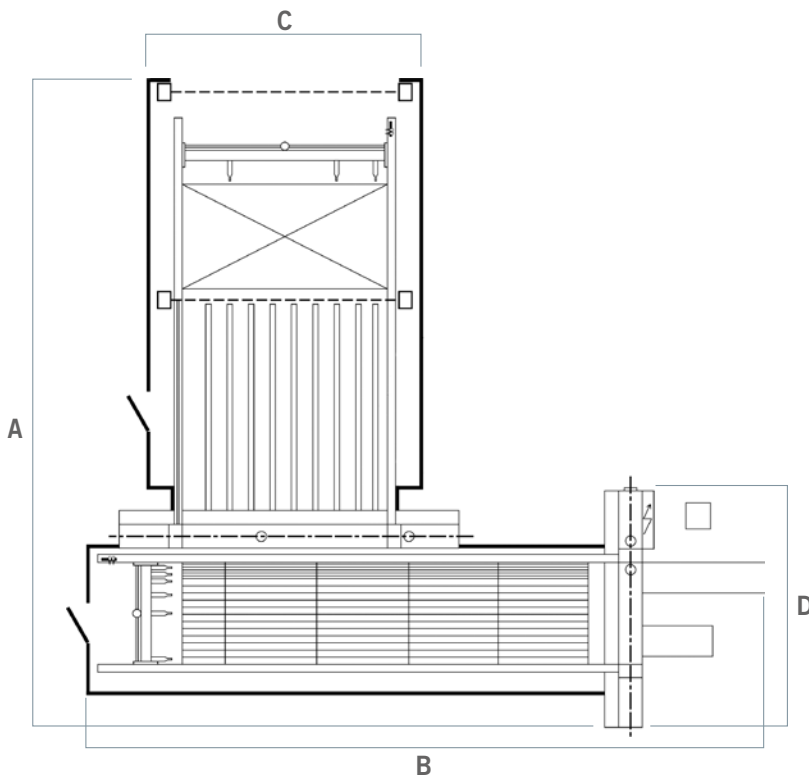
# OVERALL DIMENSIONS

GABBIANI A 3 130 - 165

RIGHT



LEFT

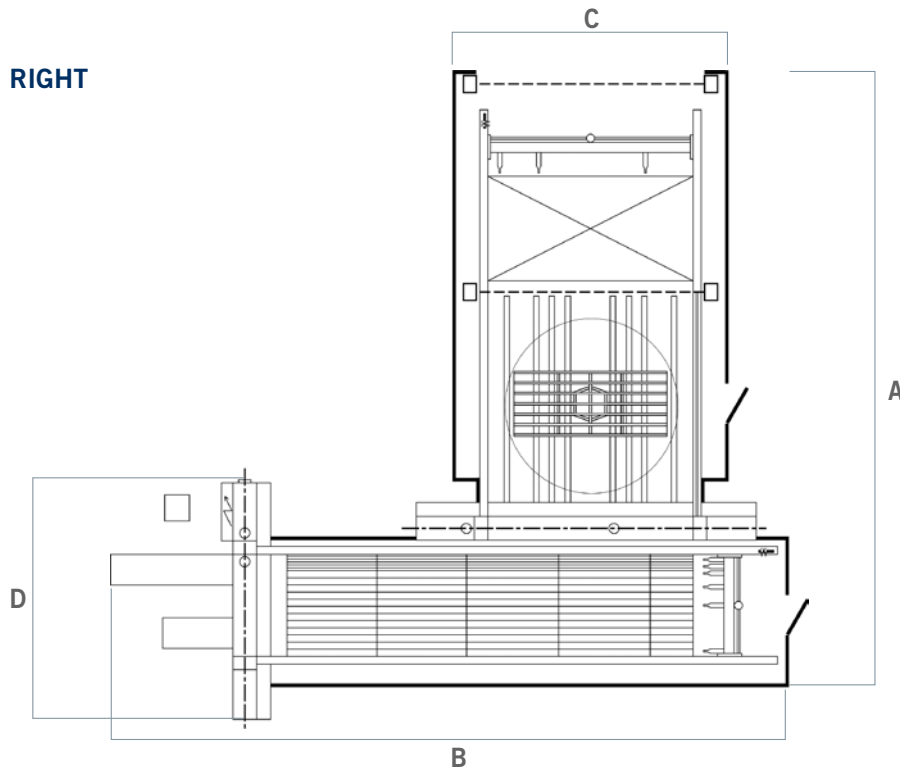


gabbiani a 3 130 - 165	A	B	C	D
3200 x 2440 (**)	14000	10100	4800	5500 (*)
4500 x 2440	14000	12500	6100	5500 (*)
5600 x 2440 (***)	14000	15900	7500	5500 (*)

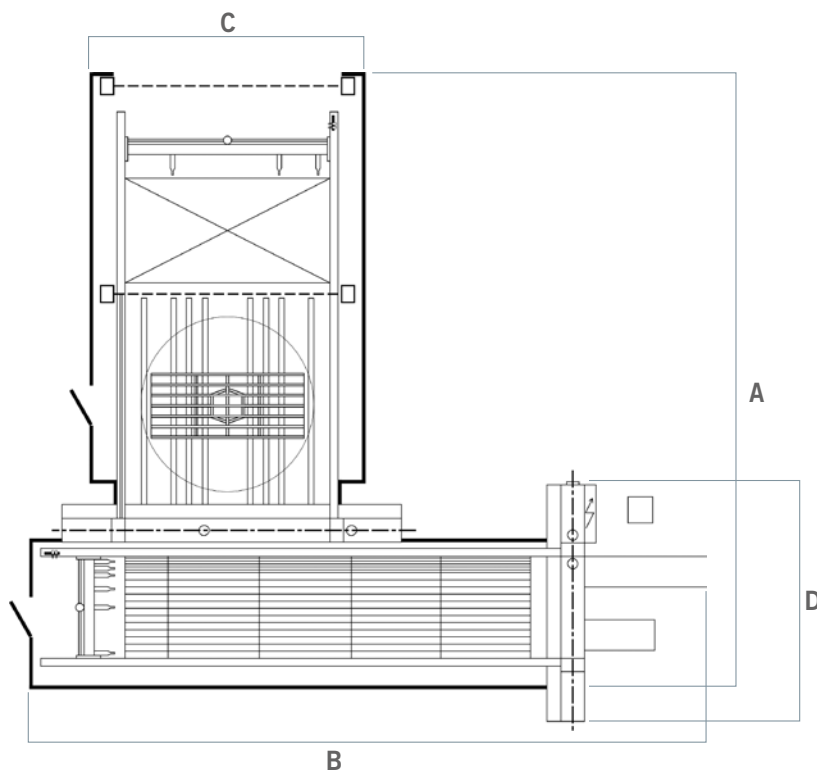
(\*) with HI-TRONIC carriage optional  
 (\*\*) gabbiani a 3 130 only  
 (\*\*\*) gabbiani a 3 165 only

## GABBIANI A 3 130 - 165 WITH ROTATING TABLE

RIGHT



LEFT



gabbiani a 3 130 - 165	A	B	C	D
3200 x 2440 (**)	15800	10100	4800	5500 (*)
4500 x 2440	15800	12500	6100	5500 (*)
5600 x 2440 (***)	17200	15900	7500	5500 (*)

(\*) with HI-TRONIC carriage optional

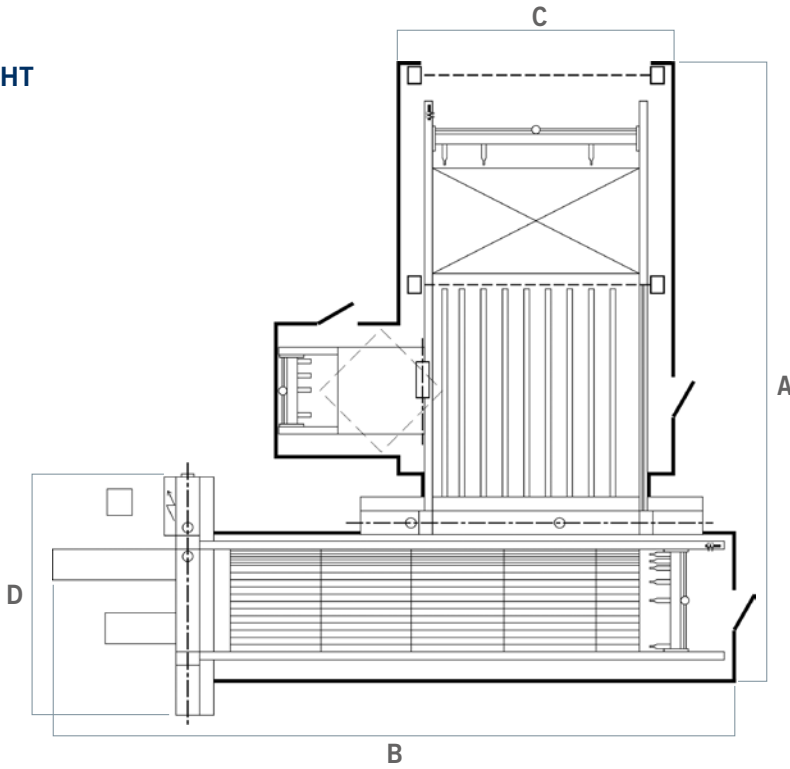
(\*\*) gabbiani a 3 130 only

(\*\*\*) gabbiani a 3 165 only

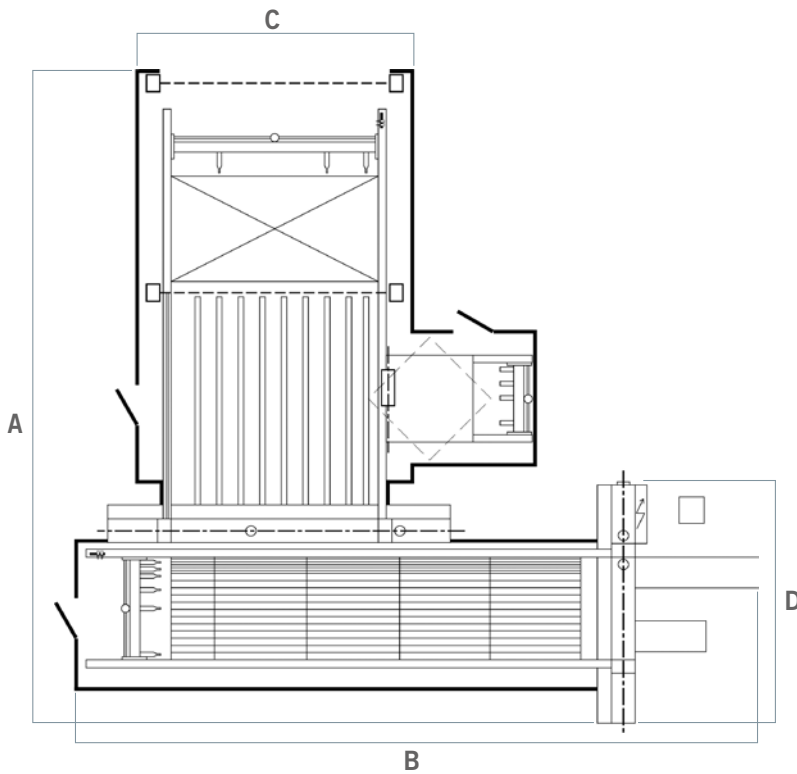
# OVERALL DIMENSIONS

## GABBIANI A 3 130

RIGHT



LEFT



gabbiani a 3 130	A	B	C	D
3200 x 2440	16200	10100	4800	5500 (*)
4500 x 2440	16200	12500	6100	5500 (*)

(\*) with HI-TRONIC carriage optional



gabbiani a 3 130		Rip cut section	Cross cut section
Cutting dimensions	mm	3200 - 4500	2440
Lifting table dimensions	mm	3200 x 2440 4500 x 2400	
Blade projection	mm	130	
Blade diameter	mm	430 - 460 (*)	
Scoring diameter	mm	200	200 - 300
Saw carriage speed	m/min	170	
Main blade motor	kW	18 - 22 - 30 - 37	
Pusher speed	m/min	135	

(\*) with HI-TRONIC carriage optional

gabbiani a 3 165		Rip cut section	Cross cut section
Cutting dimensions	mm	4500 - 5600	2440
Lifting table dimensions	mm	4500 x 2440 5600 x 2400	
Blade projection	mm	165	
Blade diameter	mm	530	
Scoring diameter	mm	200	200 - 300
Saw carriage speed	m/min	170	
Main blade motor	kW	22 - 30 - 37	
Pusher speed	m/min	135	



## ENERGY ONLY WHEN YOU NEED IT

**SavEnergy** allows you to operate with the devices only when really necessary. The machine moves in stand-by automatically when there are no panels to process.

**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 EN 1870-13:2012  
Acoustic pressure in process 83 dbA (measured according to EN ISO 11202:2010, uncertainty K = 4 dB)  
Acoustic power in process 101 dbA (measured according to EN ISO 3746:2010, uncertainty K = 4 dB)  
Even if there is a correlation between above mentioned "conventional" noise emission values and average levels of personal exposure of operators over eight hours, 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><b>SERVICE AND MAINTENANCE</b></p> <ul style="list-style-type: none"> <li>• Remote support</li> <li>• Scheduled maintenance contracts</li> <li>• Warranty extension</li> </ul>	 <p><b>TRAINING SERVICE</b></p> <ul style="list-style-type: none"> <li>• Courses for machine operators</li> <li>• Software and programming courses</li> <li>• Training in production start-up</li> </ul>
 <p><b>SPARE PARTS</b></p> <ul style="list-style-type: none"> <li>• Recommended spare parts list</li> <li>• E-shop</li> <li>• Interactive spare-parts catalogues</li> <li>• Repairs on electronic parts, glue tanks and electro-spindles</li> </ul>	 <p><b>DIGITAL SERVICES</b></p> <ul style="list-style-type: none"> <li>• Maestro Connect - IoT platform to be constantly connected with your machines</li> <li>• Smartech - assistance with augmented reality</li> <li>• My Scm portal - opening of service ticket and single point of access to the apps and Services tools</li> </ul>

**CONTACT**

**SCM SERVICE**

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

**SCM SPAREPARTS**

Via Emilia, 61 - 47921 - Rimini - 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

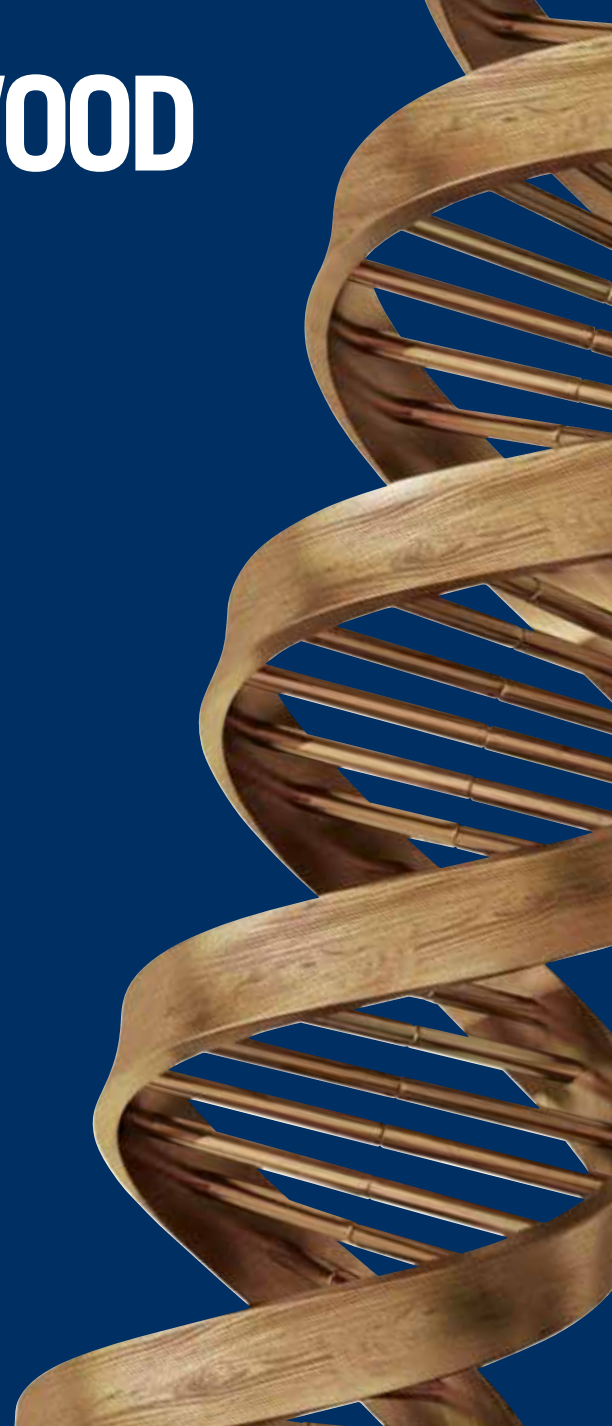
**90%** export

**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  
gabbiani@scmgroup.com  
www.scmwood.com



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