beam saws

gabbiani a 3

angular panel saw



scm
woodworking technology

A 360° BEAM SAW

GABBIANI A 3



FLEXIBILITY AND PRODUCTIVITY PERFECT MATCH

4 GABBIANI A 3

22 SOFTWARE

An expert operator that guides you to produce quickly. Wincut plus allows an easy, quick machine management without errors.

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.

24 TECHNICAL DATA
28 SERVICE - SPARE PARTS

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.



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



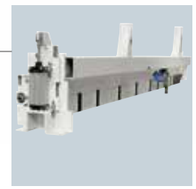
Floating clamps with double finger
Safe grip at the highest speed on squaring side, also when panels are not perfectly planar.



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.

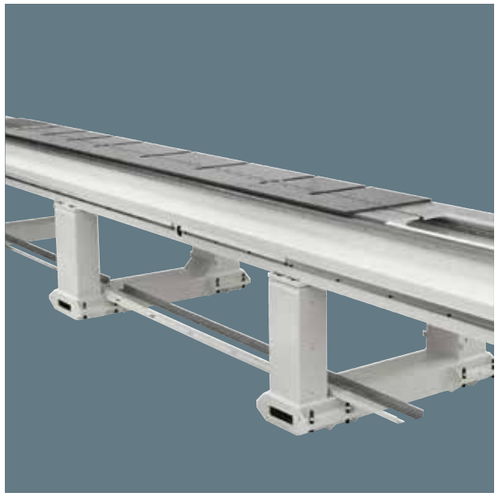
Machine base
It is composed by sturdy tubular steel with oversized nylon wheels for moving panels, even the heaviest without damaging them (standard).



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

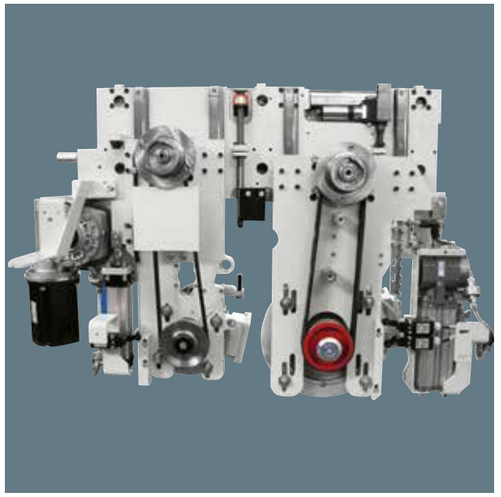
Find out more

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.



EXCELLENT FINISH CUT

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

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.

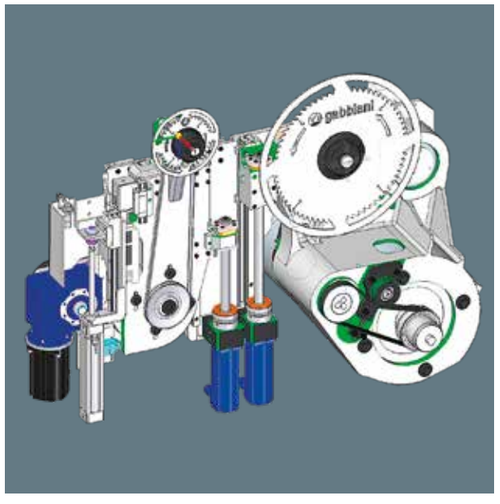
Versatility of use owing to the possibility to install advanced options.

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

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 r**educes the machine cycle time.**

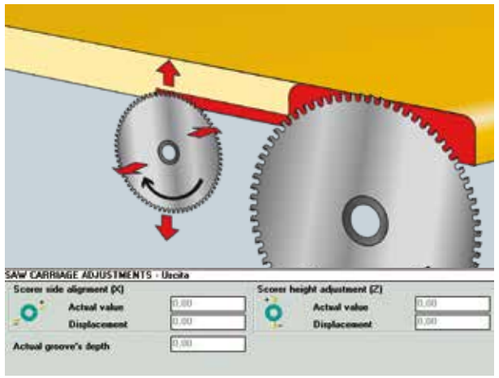






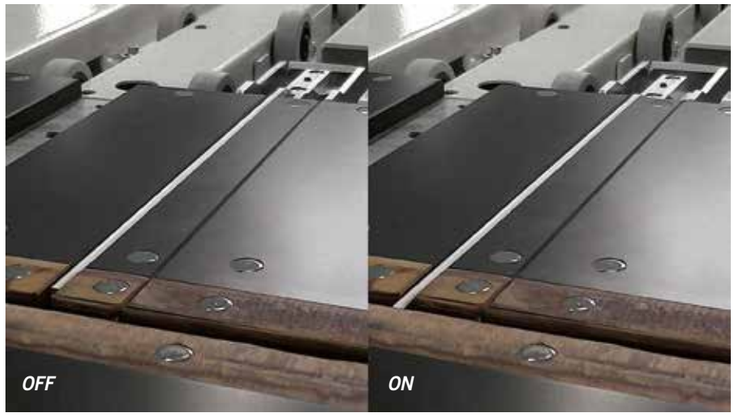
INVERTER: NO COMPROMISE

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



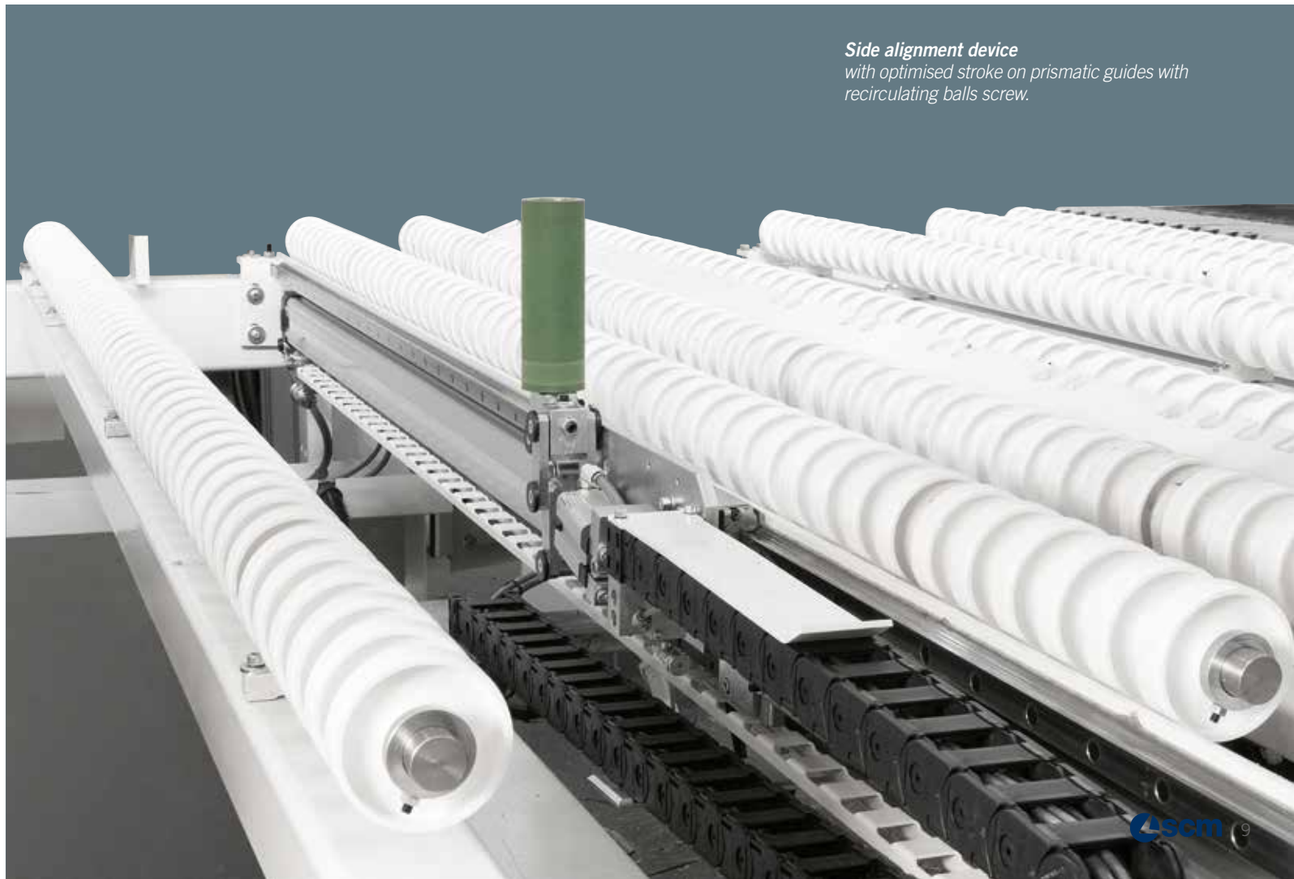
SCORING UNIT ELECTRONIC ADJUSTMENT: TECHNOLOGY FOR REAL SUPPORT

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

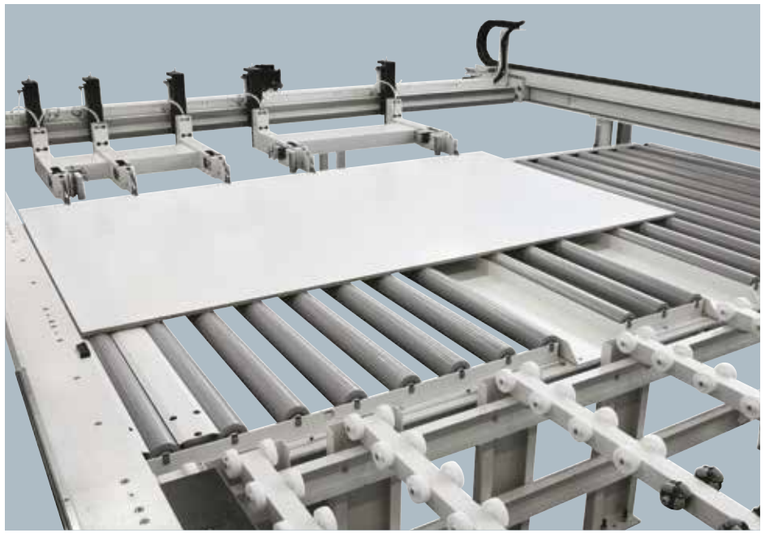
The modular FLEXCUT system enables the processing of complex cutting patterns in very rapid cycle times.

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

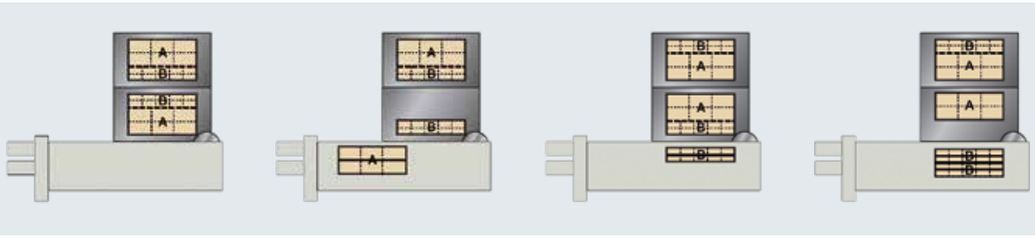
The crosscut section can be manually loaded and used as a normal single blade beam saw.

AUTOMATIC LOADING

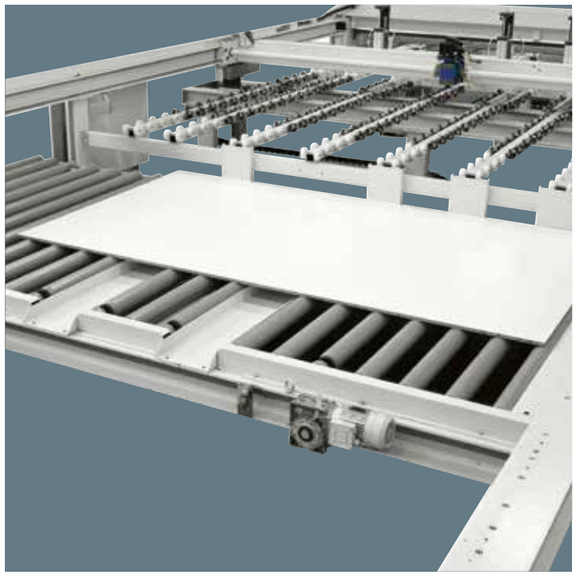
It operates with automatic stack loading from the lifting table.

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.



LOADING PLATFORM

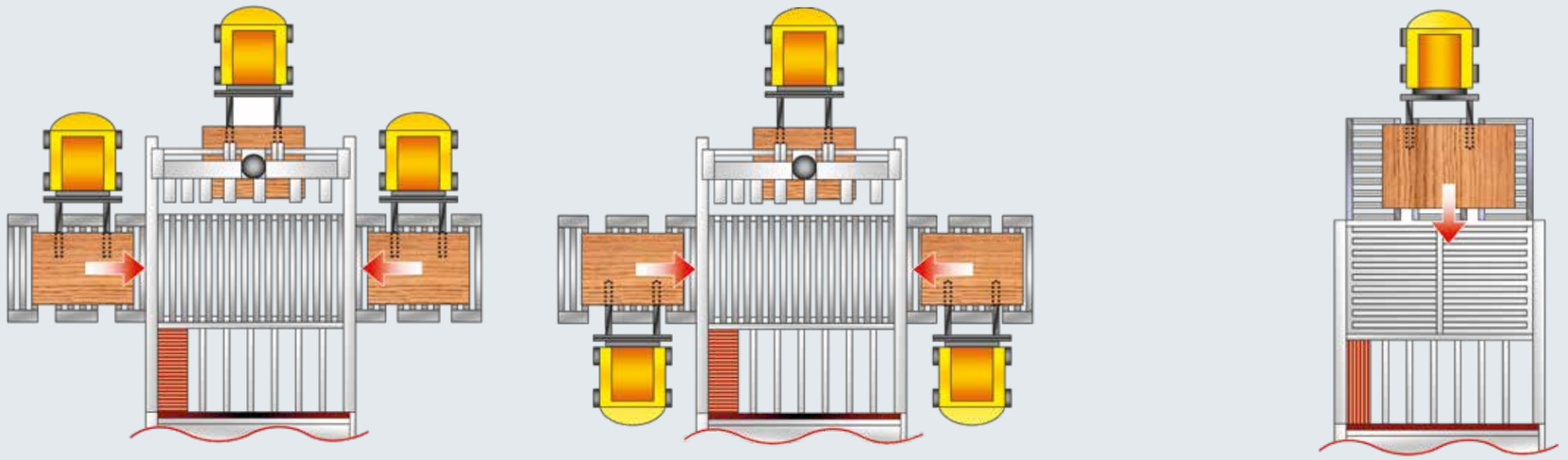


LOADING PLATFORM: WHEN STURDINESS AND PRECISION MAKE THE DIFFERENCE

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.

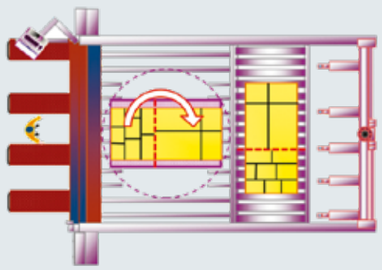


AUTOMATIC HEAD-CUT MANAGEMENT DEVICE: PRODUCE FASTER

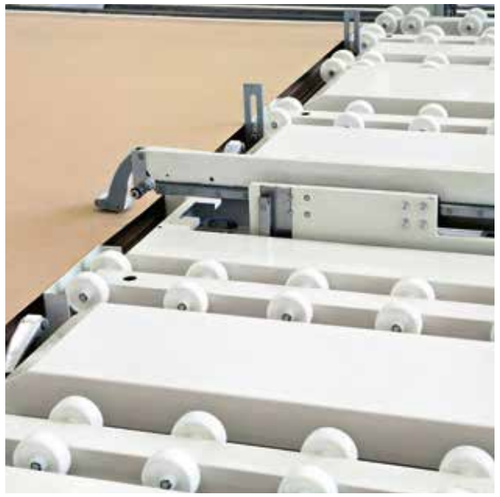
A sturdy metallic frame holds up the panels stack during the rotation cycle.
The main pusher automatically moves the panels stack from the loading rear table to the centre of the rotating table.
The system automatically manages the cutting of the "Slave" section and the reintroduction and rotation of the "Master" section.







AUTOMATIC LOADING OF THIN AND DELICATE PANELS





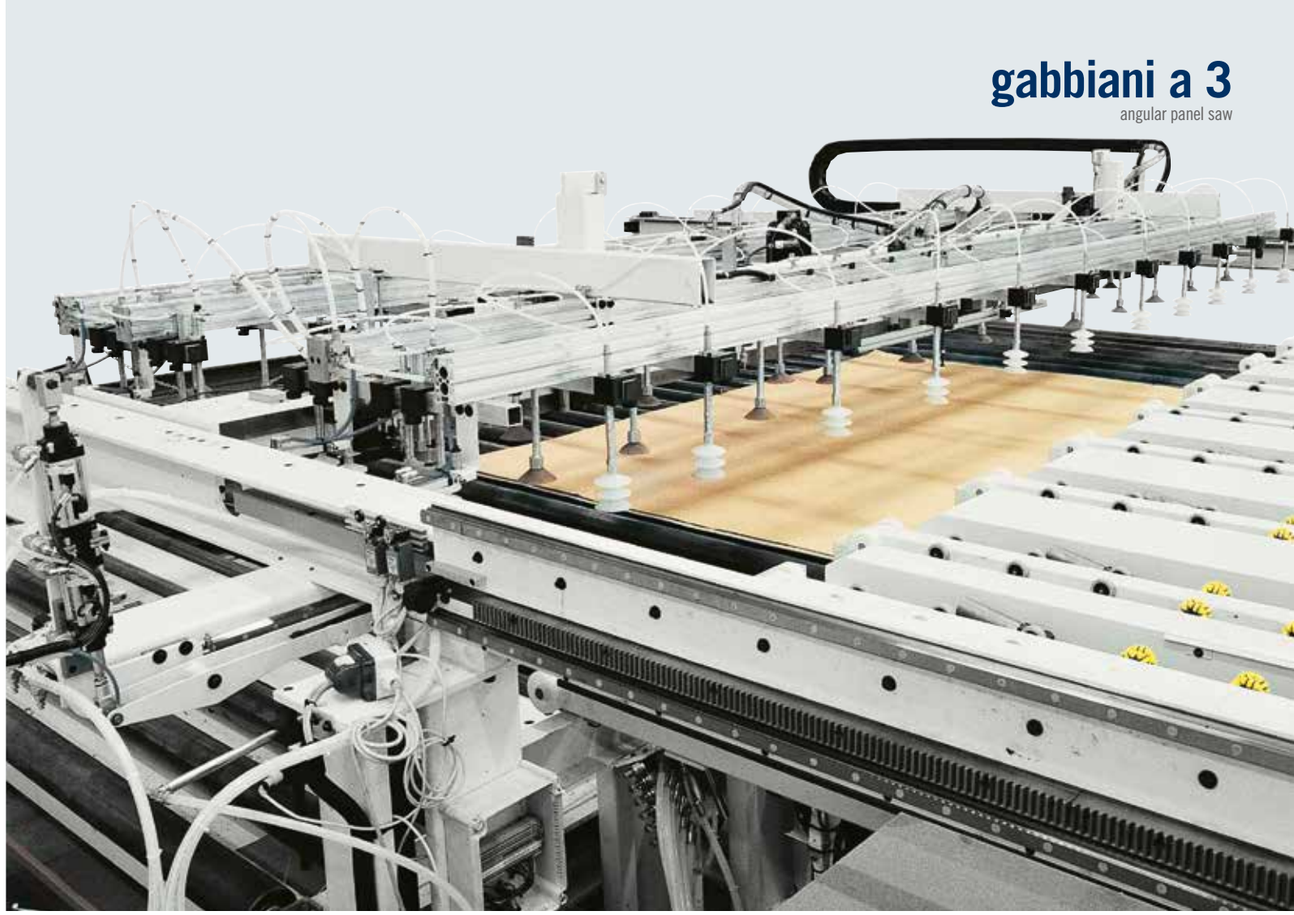
AUTOMATIC LOADING SYSTEM OF THIN PANELS: SCM EXPERIENCE AT CUSTOMER DISPOSAL

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.

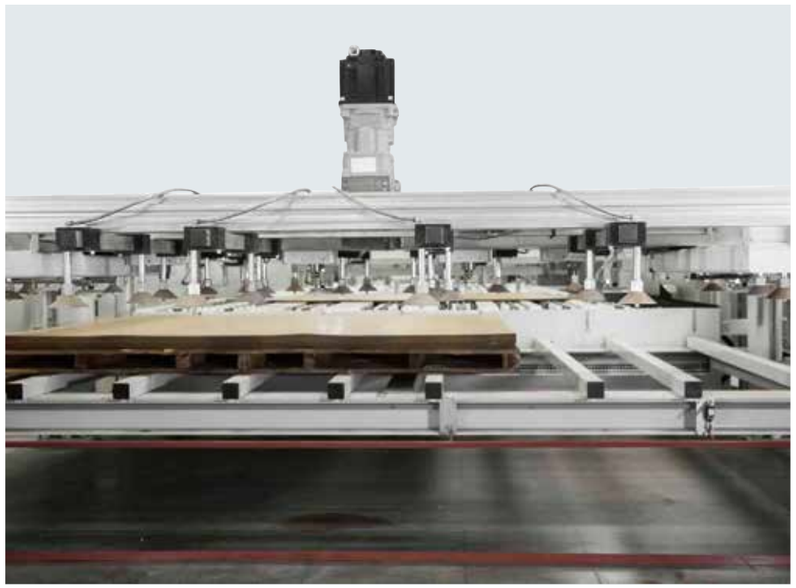




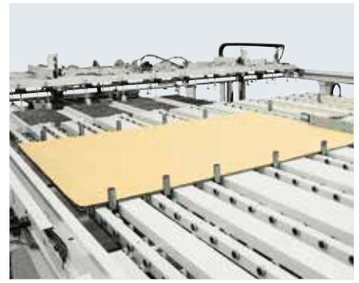
SUCTION CUP LOADING SYSTEM: THE PERFECT SOLUTION FOR PANELS WITH DELICATE COATING

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

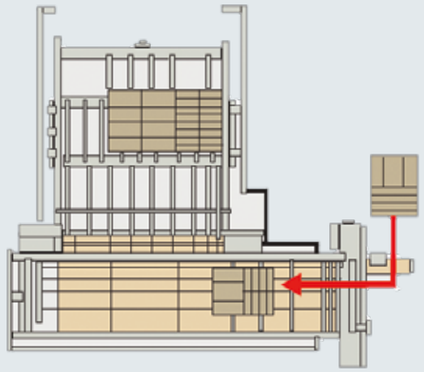
The suction device takes the single panel and puts it down in masked time in the alignment station inside the machine.

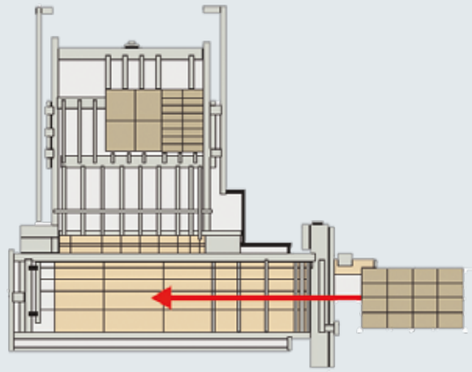


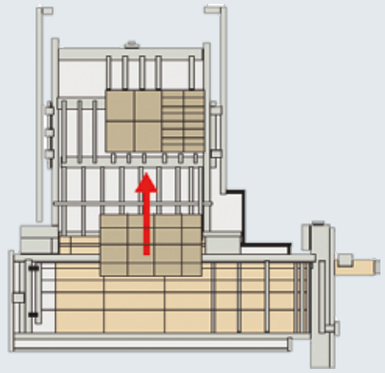




PRECUTTING



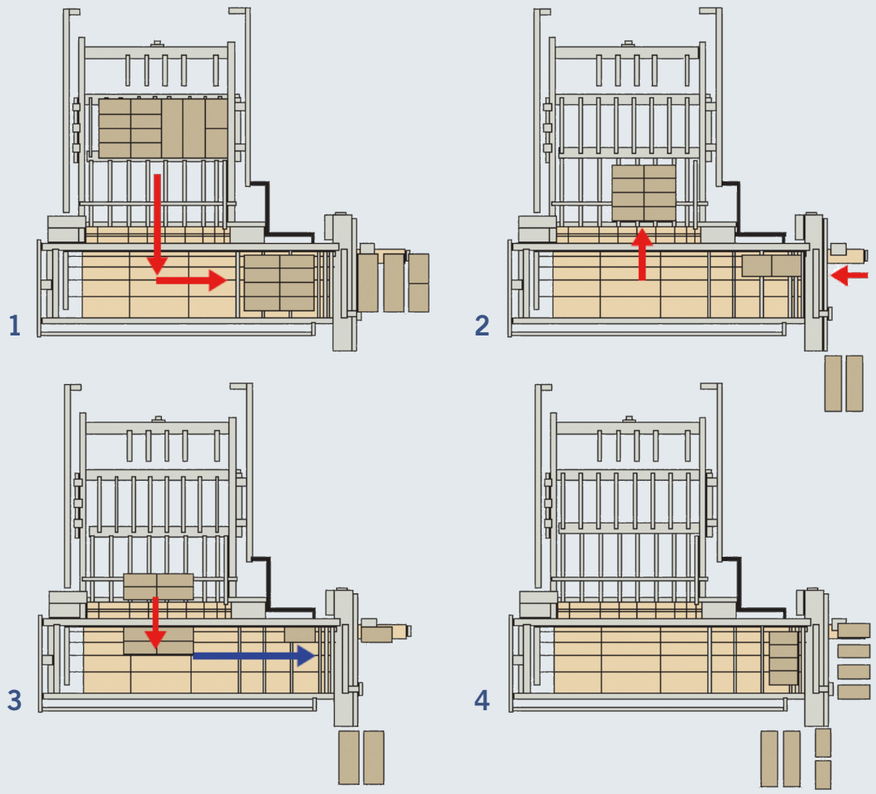




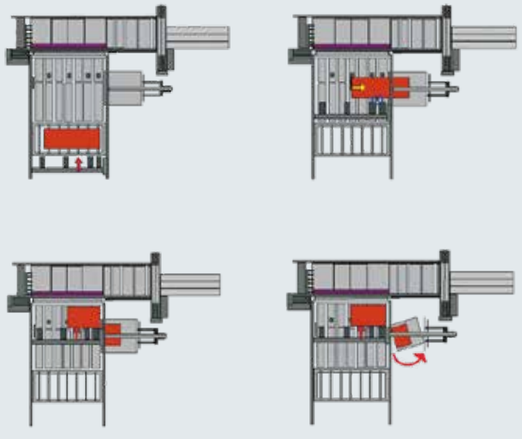
The crosscut section can be manually loaded and used as a normal single blade beam saw.
The special mechanical design and software enable panels to be loaded from the cross cut section without having to free the loading table. This is particularly useful for single batches or one-off orders.

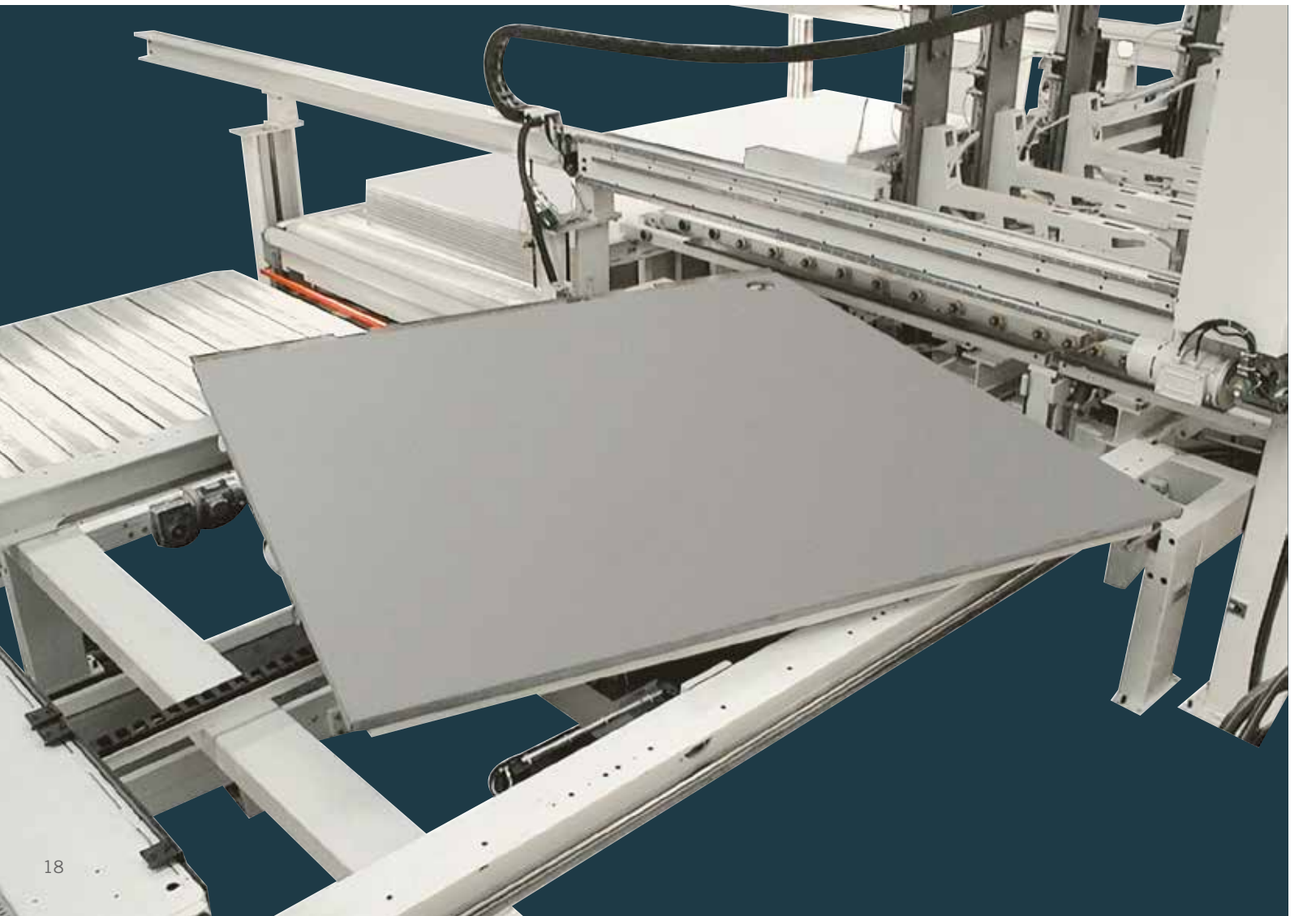
INTERNAL PRECUTTING

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.



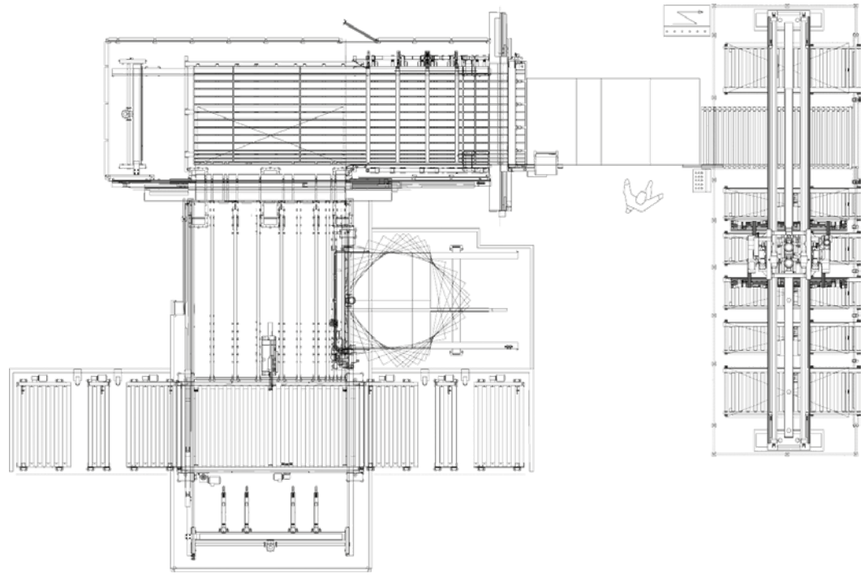
OUR SOLUTIONS





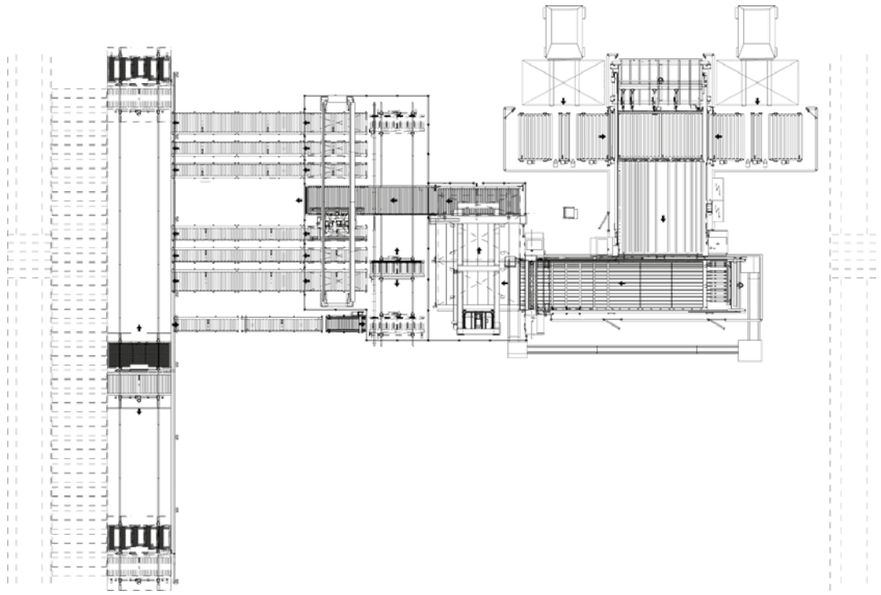
EXTERNAL ROTATING TABLE FOR HEAD-CUT

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.



SOFTWARE

TO EACH TECHNOLOGY ITS OWN SCM SOFTWARE

Wincut plus

Wincut plus software has been developed for angular panel saw systems. It allows an easy management by the end-user of all machine's potential.
From the home screen, the operator has a quick access to all the main machine functions. These include: automatic processing of cutting lists, loading of optimised cutting programs from USB key or networks, and labels printing management directly from machine.
The program guides the operator around all the information concerning the machine with detailed daily production reports, comprehensive machine status log and specific maintenance schedules for machine top efficiency at all times.

Stack manager

The software controls the panel saw cell and enables automatic or semi-automatic unloading. The software links the panel saw and the automated unloading device, defining the sequence for unloading finished panels automatically or according to their size, the height of the stack on the roller conveyor, the minimum or maximum dimensions of parts or on the basis of unloading capacity in multiple rows.
Stack manager elaborates the orders in progress and manages the labels printing directly on the outfeed table. Through easy to follow graphic it guides the operator during the automation systems operations.

Ottimo perfect cut

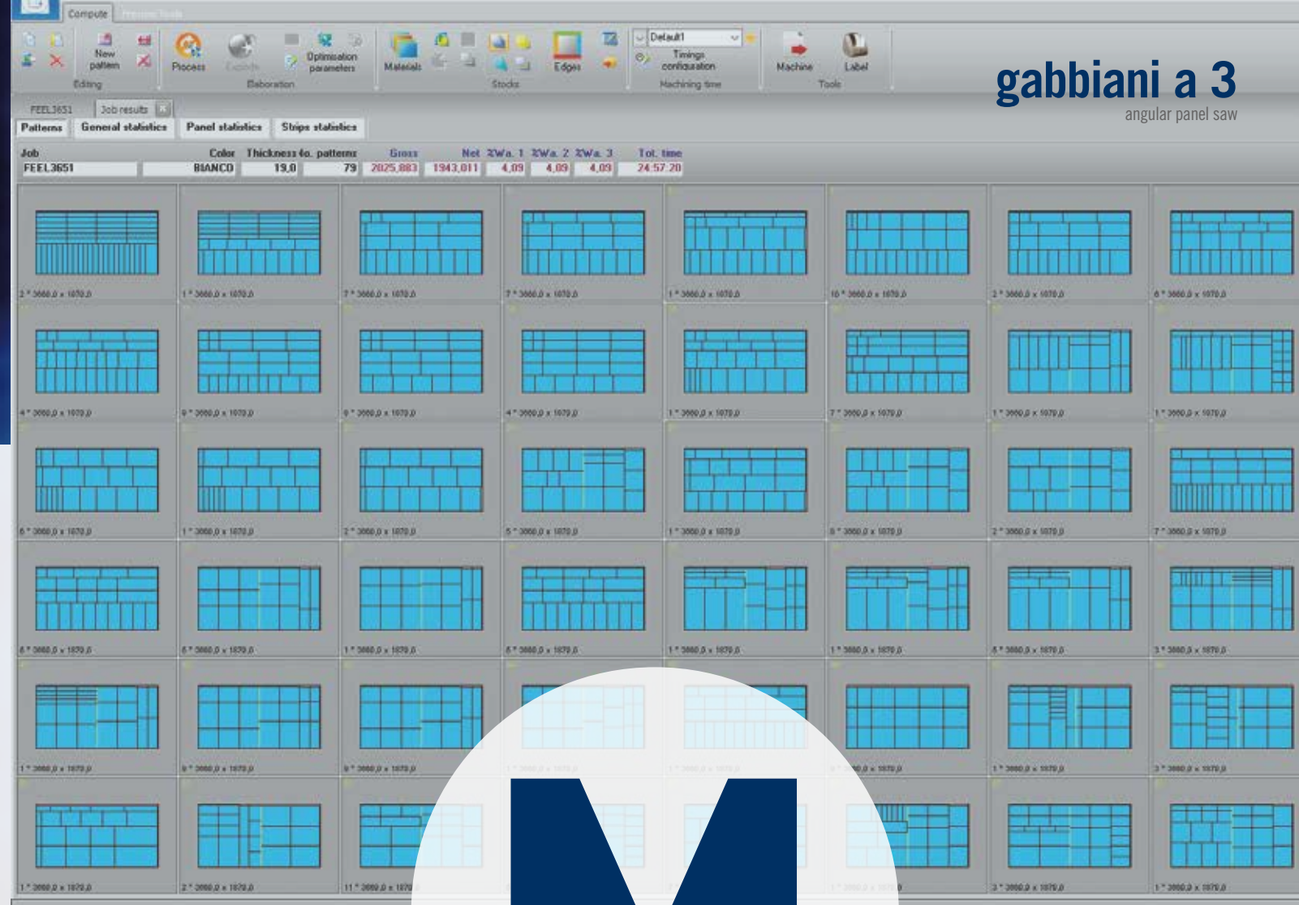
Ottimo perfect cut is the cutting plans optimisation program developed for an immediate and functional management of the angular panel saws, directly from the office. Ottimo perfect cut permits the automatic generation of the cutting plans identifying the best solution among different results suggested, depending on users' parameters.
It includes the following functions:

- material, pieces and edges stocks management
- grained panels management (longitudinal and cross)
- optimization of orders and multi-orders
- preventive calculation of costs and machining time
- prints of custom reports with production statistical data
- labels with integrated graphic editor
- sends of cutting programs with labeling data included to the beam saws control
- connection with the business management software

Maestro ottimo import (optional)

Additional module to Ottimo perfect cut in MS Excel environment that exports to Ottimo perfect cut:

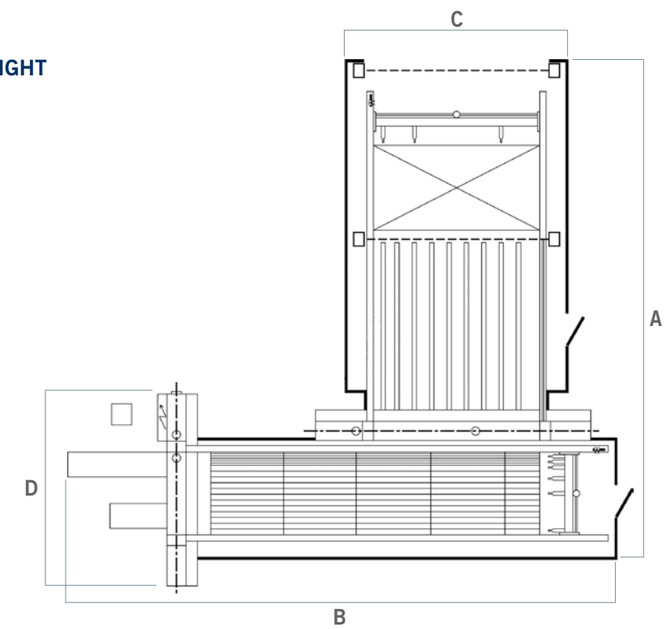
- 10 fields for panels description (length, width, quantity, grain…);
- 36 fields of information import for labeling machine;



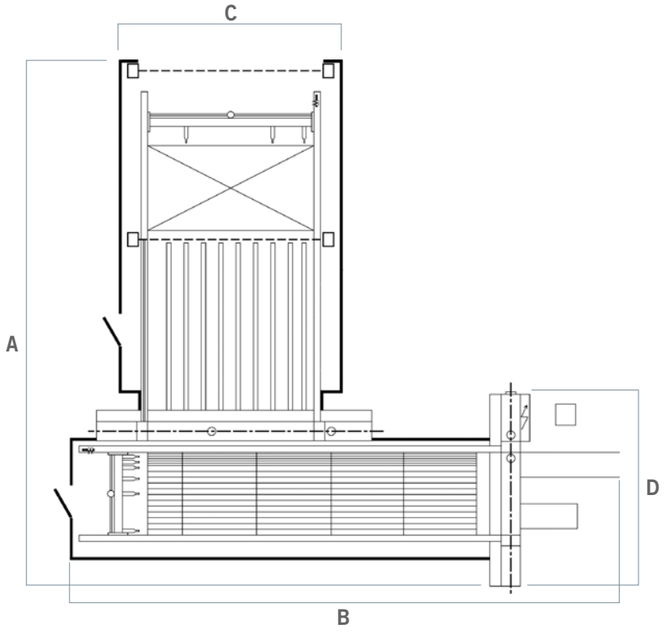
OVERALL DIMENSIONS

GABBIANI A 3 130 - 165

RIGHT



LEFT

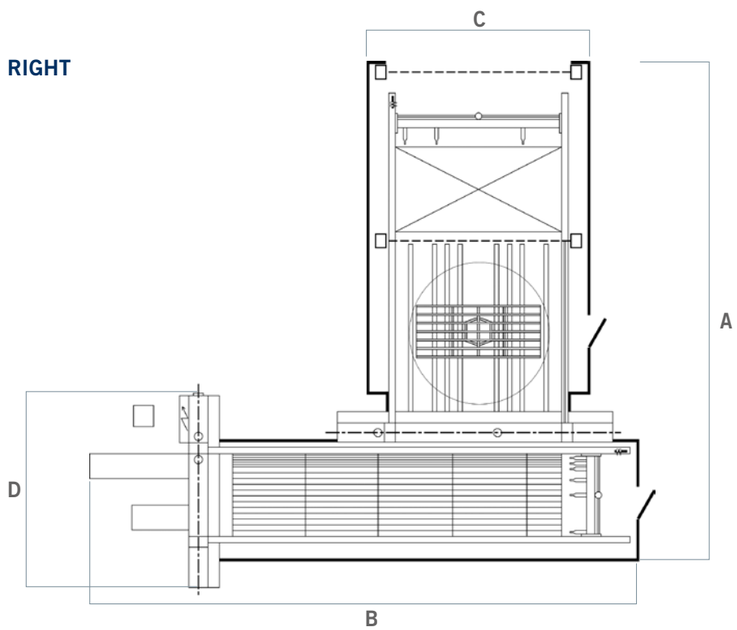


gabbiani a 3 130 - 165	A	B	C	D
3200 x 2440 (**)	14000	10100	4800	5500 (*)
4500 x 2440	14000	12500	6100	5500 (*)
5600 x 2440 (***)	14000	15900	7500	5500 (*)

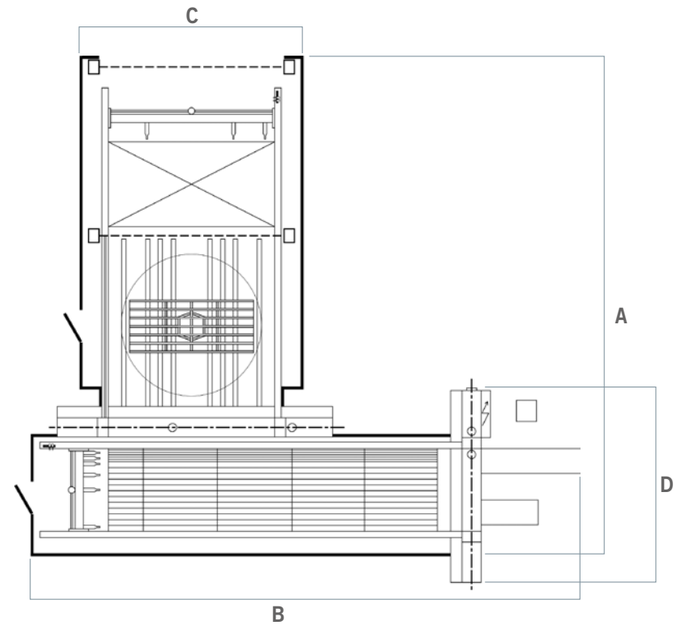
(*) with HI-TRONIC carriage optional
(**) gabbiani a 3 130 only
(***) gabbiani a 3 165 only

GABBIANI A 3 130 - 165 WITH ROTATING TABLE

RIGHT



LEFT



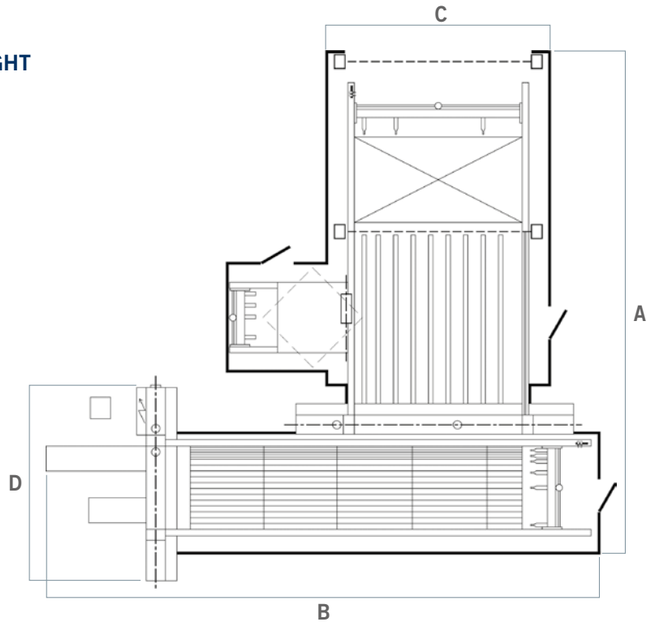
gabbiani a 3 130 - 165	A	B	C	D
3200 x 2440 (**)	15800	10100	4800	5500 (*)
4500 x 2440	15800	12500	6100	5500 (*)
5600 x 2440 (***)	17200	15900	7500	5500 (*)

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

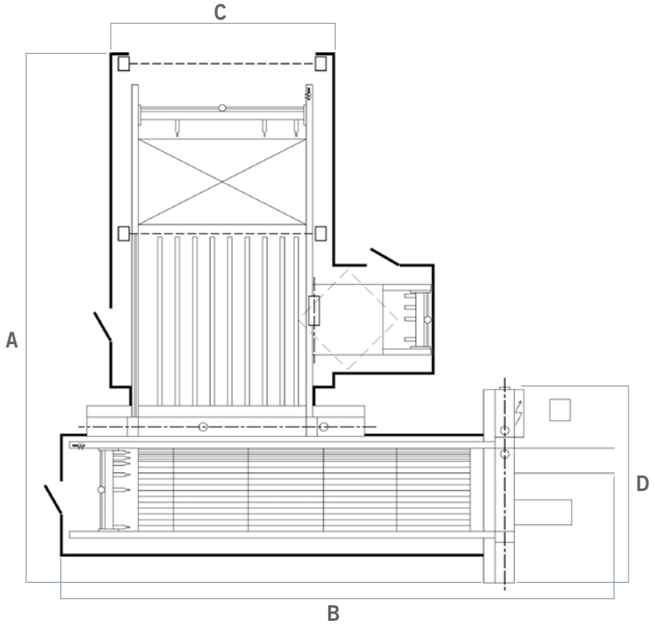
OVERALL DIMENSIONS

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

TECHNICAL DATA

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	

SAV€NERGY

THE USE OF POWER ONLY WHEN IT IS REQUIRED

Sav€nergy allows making things operate only when they are really necessary. It means the machine automatically enters "stand-by" mode when there are no panels to be machined.

COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV GL = 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.

PROMPT AND EXPERT TECHNICAL SUPPORT THROUGH **A NETWORK OF 1000 TECHNICIANS AND AN INVENTORY OF 36,000 SPARE PARTS.**

HIGHLY SPECIALISED TECHNICIANS, EFFICIENT MANAGEMENT AND 6 SPARE PARTS BRANCHES AROUND THE WORLD GUARANTEE A CLOSE, SAFE AND EFFECTIVE TECHNICAL SUPPORT.

SERVICE

SCM provides a service that goes beyond the purchase, to guarantee the long term performance of your technological production system and peace of mind for your business.

A COMPLETE RANGE OF AFTER-SALES SERVICES

- installation and start-up of machines, cells, lines and systems
- tailored training programs
- telephone support to reduce times and costs when machines are not working
- preventive maintenance programs to guarantee long term performance
- complete renovation of machines and plants to renew the added value of the investments
- custom upgrading to update machines and plants and meet new production requirements

SPARE PARTS

SCM Group can count on 140 spare parts professionals worldwide to meet any request with real time shipments.

36,000 SPARE PARTS
Our spare parts inventory, with a value of 12 million euros, covers every single machine

SPARE PARTS GUARANTEED
We guarantee also hard to find parts, with 3,5 million euros invested in "critical" spare parts.

IMMEDIATE AVAILABILITY
Over 90% of orders received are carried out the same day thanks to the huge inventory available.

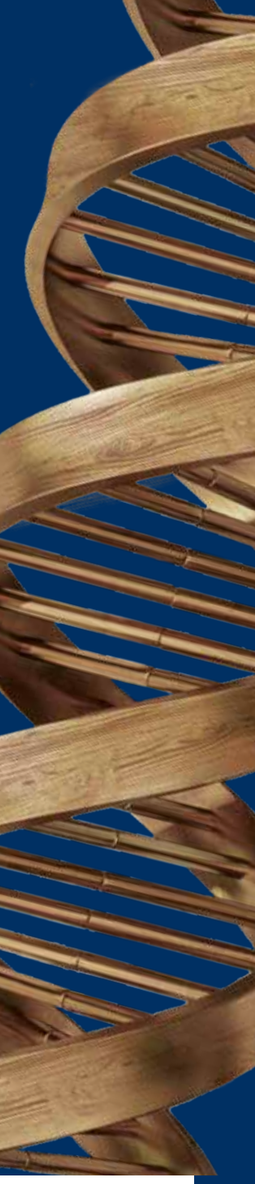
6 BRANCHES AROUND THE WORLD
The spare parts service can count on worldwide support (Rimini, Singapore, Shenzhen, Moscow, Atlanta, São Bento do Sul

500 SHIPMENTS A DAY



THE STRONGEST WOOD TECHNOLOGIES ARE IN OUR DNA

SCM. A HERITAGE OF SKILLS IN A UNIQUE BRAND
Over 65 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.



65 years history
3 main production sites in Italy
300.000 square metres of production space
17.000 machines manufactured per year
90% export
20 foreign branches
350 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.

- scm — WOODWORKING TECHNOLOGIES
- Cms — 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.

- HITECO — SPINDLES AND TECHNOLOGICAL COMPONENTS
- es — ELECTRIC PANELS
- steelmec — METALWORK
- scmfonderie — CAST IRON

scm woodworking technology | *is more*

REV. N. 00 - 06.2018



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



00L0456730A