



# **gabbiani gt 2**

## Automatic horizontal single blade beam saws

Strictly reserved to the sales network of SCM

April 2023



## Maestro active cut

### A revolutionary approach to interact with your machine

Integrated help and recovery procedures that reduce the possibility of error from the operator's side.

• **SMART**

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

• **CUSTOMIZABLE**

Maestro active allows to record the times related to setup, maintenance, training and other events, tracing all the activities in a database.

• **TROUBLE-SHOOTING**

It allows to create different users with different roles and to define the work shifts on the machine and then detect activities and productivity

• **PLANNING**

Graphics have been redesigned for simple and comfortable navigation

• **EASY TO USE**

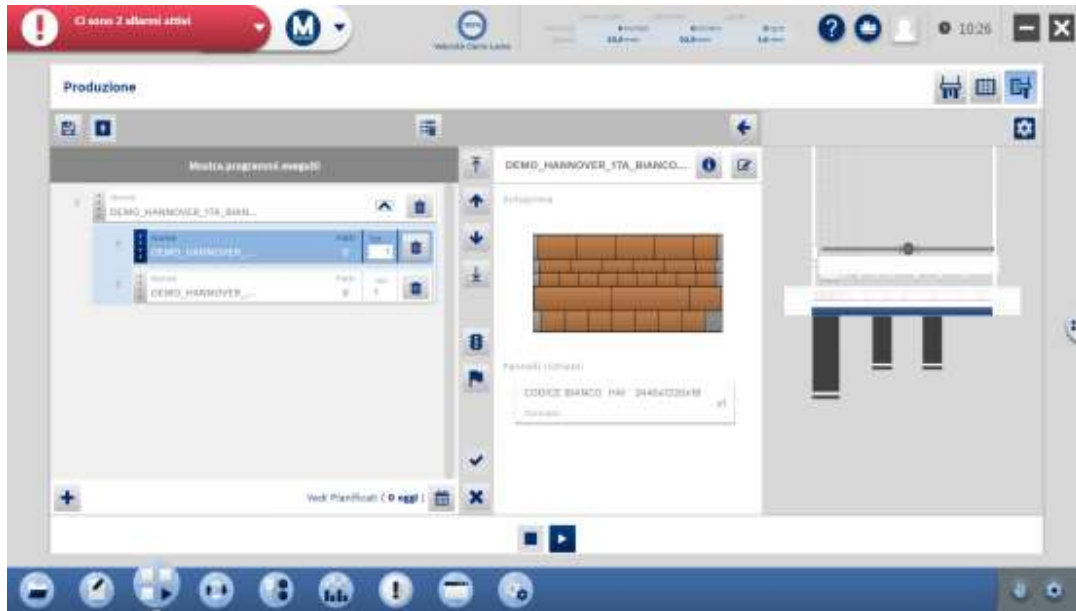


**New console:**  
simple and elegant design  
16/9 21" touch screen

**SUPPLEMENTARY MODULES TO INCREASE THE MAESTRO ACTIVE CUT POWER:**



**Maestro cut editor**



Labels printing software

Cutting schemes graphic editor

Panels editor

Cutting editor for grained panels (flame cut)

Editor for Macro machining operations

SUPPLEMENTARY MODULES TO INCREASE THE MAESTRO ACTIVE CUT POWER:



# Maestro cut utility



Cuts editor for panels de-tensioning

Editor for cutting diagrams and trims modifications

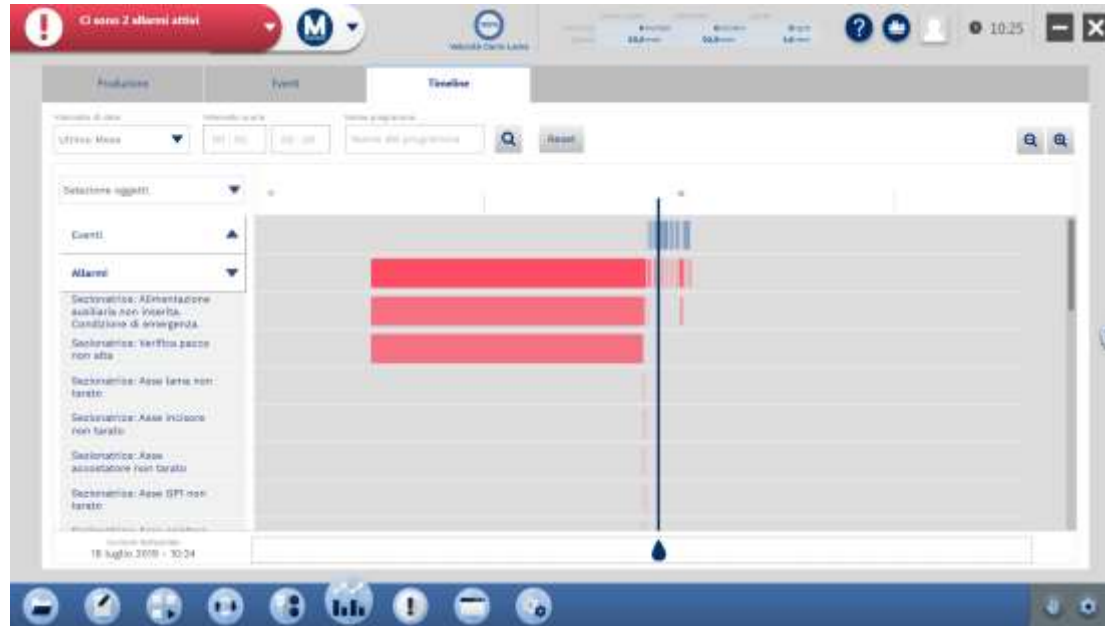
Automatic panels EDITOR (FILLER)

Off-cuts stock management

SUPPLEMENTARY MODULES TO INCREASE THE MAESTRO ACTIVE CUT POWER:



# Maestro cut manager



**Simulator for cycle time calculation** (It includes the instantaneous simulation in 2D mode)

**Priority-based and date-based scheduling of the order**

**Advanced report**



## Maestro pattern

### Optimisation program installed on the machine

Simple and efficient creation of optimized cutting programs



Fast configuration of a simplified number of parameters



Off-cuts reduction due to the creation of an overproduction for each element



Off-cuts stock creation with the most used parts

## Maestro optiwise



**Maestro**  
optiwise

The best sizing formula

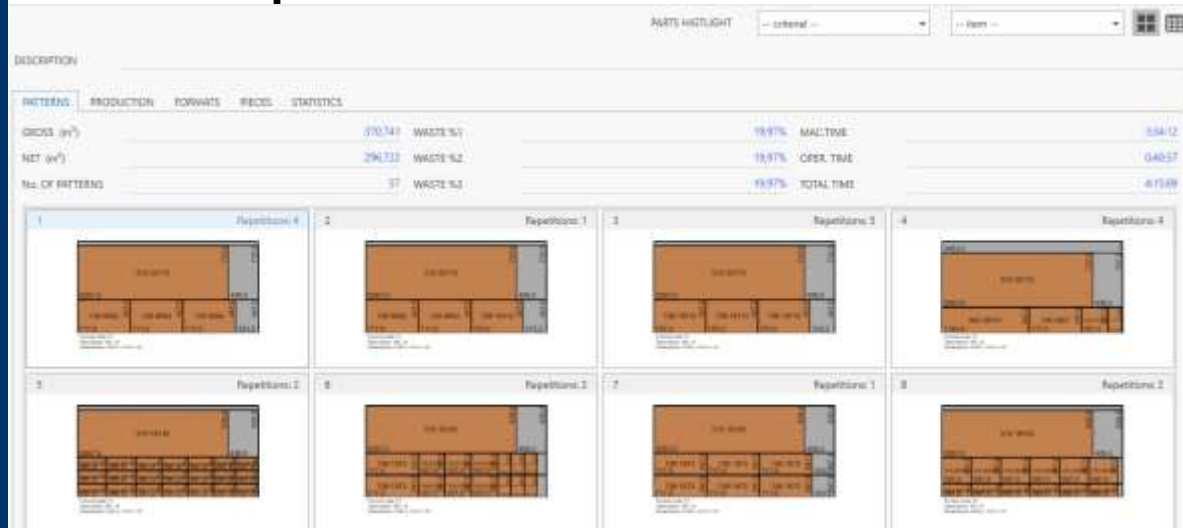


**NEW SOFTWARE**

**NEW ALGORITHM**

- **BEST RESULTS**
- **ACCURATE TIMING SIMULATION**
- **SHORT PROCESSING TIME**
- **SMART CONCEPT**
- **EASY TO USE**

# Maestro optiwise



# Maestro optiwise

The best sizing formula



Labels with integrated graphic editor

Editor to customize cutting patterns

Connection with the business management software

Custom reports

Dynamic machine connection

Material, pieces and edges stocks management

Grained panels management

Orders and Multi-orders

Preventive calculation of costs and machining time

Excel integrated



**Maestro**  
optiwise

The best sizing formula



**Maestro**  
optiwise

The best sizing formula





## Maestro converter cut

EasyCut Plus Rel. 2.00 - Lista Pannelli.xls

File Modifica Visualizza Inserisci Formato Strumenti Dati Finestra Traduzione

A2 Disegno

1 Pianificazione lavori settimanali

2 Disegno

	A	B	C	D	E	F	G	H	I	J	K	
		Codice	Descrizione	Length	Largh.	Spess.	Colore	5 GG.	IGR.	Vena	Boyd	Loop
3		3844112BB	ANTA SOFT 3844448X18 BIANCO	384	448	18	18BB	180	36	0	PVCM034G	
4		3844113BB	ANTA SOFT 3844598X18 BIANCO	384	598	18	18BB	180	36	0	ABSM022	
5		3844122BB	ANTA SOFT 732X448X18 BIANCO	732	448	18	18BB	175	35	0	SFTM048	
6		3844123BB	ANTA SOFT 732X598X18 BIANCO	732	598	18	18BB	190	38	0	PVCM034G	
7		3844132BB	ANTA SOFT 1100X448X18 BIANCO	1100	448	18	18BB	60	12	0	ABSM022	
8		3844133BB	ANTA SOFT 1100X598X18 BIANCO	1100	598	18	18BB	10	2	0	SFTM048	
9		3844142BB	ANTA SOFT 1468X448X18 BIANCO	1468	448	18	18BB	85	17	0	PVCM034G	
10		3844143BB	ANTA SOFT 1468X598X18 BIANCO	1468	598	18	18BB	35	7	0	ABSM022	
11		3844152BB	ANTA SOFT 1836X448X18 BIANCO	1836	448	18	18BB	50	10	0	SFTM048	
12		3844153BB	ANTA SOFT 1836X598X18 BIANCO	1836	598	18	18BB	30	6	0	PVCM034G	
13		3844162BB	ANTA SOFT 2204X448X18 BIANCO	2204	448	18	18BB	50	10	0	ABSM022	
14		3844163BB	ANTA SOFT 2204X598X18 BIANCO	2204	598	18	18BB	25	5	0	SFTM048	
15		3844172BB	ANTA SOFT 2572X448X18 BIANCO	2572	448	18	18BB	60	12	0	PVCM034G	
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17		3844472BB	ANTA ANG. 2572X463X18 BIANCO	2572	463	18	18BB	50	2	0	SFTM048	
18		3844473BB	ANTA SOFT 2572X463X18 BIANCO	2572	463	18	18BB	5	1	0	PVCM034G	
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22		3844133BP	ANTA SOFT 384X598X18 BLU	384	598	18	18BP	100	20	0	ABSM022	
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24		3844123BP	ANTA SOFT 732X448X18 BPFG	732	448	18	18BP	60	12	0	PVCM034G	
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31		3844123BP	ANTA SOFT 1100X598X18 BPINC	1100	598	18	18BP	50	2	0	ABSM022	
32		3844123BP	ANTA SOFT 1468X448X18 BLU	1468	448	18	18BP	18	3	0	SFTM048	

Lista pannelli

GENERIC SOFTWARE OPTIMISER



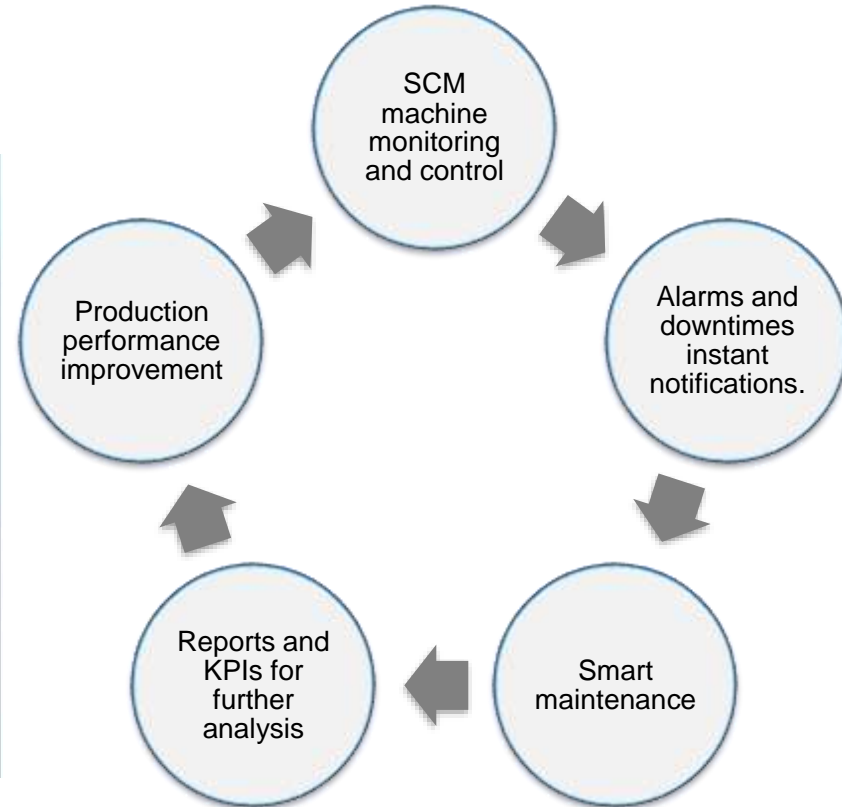
EXPORT OF THE RESULTS IN PTX (minimum release 1.14)



CONVERSION PTX → SCM MACHINE LANGUAGE

Maestro converter cut is the module that allows to integrate any type of cutting optimization programs with SCM beam saws through PTX file (minimum release 1.14).

## Maestro connect



## Maestro connect





***gabbiani gt 2*** high performance automatic single blade beam saw for the quality of its cut finishing and working speed, in order to satisfy all the production requirements of the furniture enterprises.

## **gabbiani gt 2 115/130 – technical data**

		<b>gabbiani gt 2 115</b>	<b>gabbiani gt 2 130</b>
Cutting length	mm	3200/3800/4500	
Cutting depth	mm	1850/2440	
Blade projection	mm	115	128
Variable saw carriage speed	m/min	0 – 150	
Variable pusher speed	m/min	80	
Motor power – 50 Hz (star-delta start)	kW (opt.)	7,5 (11 – 15 – 18)	-
Max. motor power 100 Hz with inverter	kW (opt.)	-	15 (18)
Flexcut device		IS – ID	
Kit for advanced building materials		YES (opt.)	
HI – Tronic		YES (opt.)	

# gabbiani gt 2 115/130 – general features

## CUTTING AXIS

- The base is equipped with 2 openings for moving the cutting axis through the forklift and to ease the machine installation
- Alignment adjustment of the horizontal and vertical blades which are positioned close to the working area
- Integrated electric cabinet inside the cutting axis, cables do not need to be discontinued for the shipment

## PRESSURE BEAM

- Steel structure with openings for the clamps passage
- Uniform pressure on panels and an optimum extraction of shavings and sawdust with the triple dust conveying system
- Lifting on prismatic guides driven by rack and pinion on both sides
- Absence of maintenance is granted thanks to the mechanical solution studied by SCM which foresees the pressure beam movement on prismatic guides
- Pressure adjustment for clamps locking by manometer

## SIDE ALIGNER DEVICE

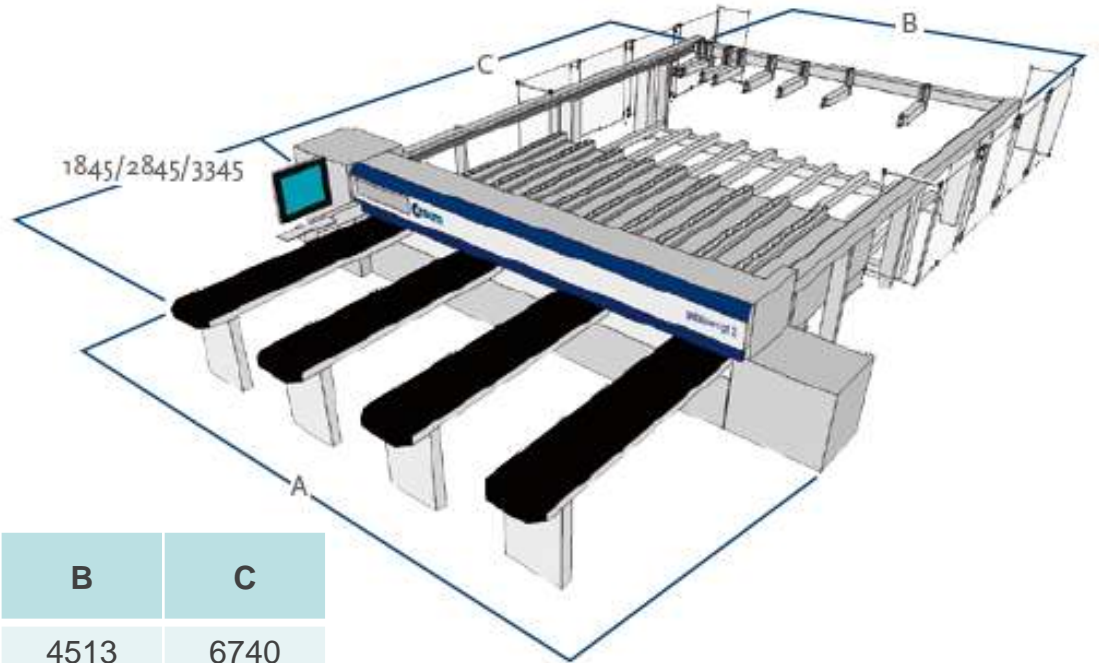
- On/Off from control
- Minimum width 60 mm
- Maximum width equal to 1200 mm
- Alignment pressure can be set by manometer

## PUSHER

- Steel structure
- Movement with BRUSHLESS motor
- Floating and independent clamps
- Automatic exclusion of the pieces beyond the cutting axis



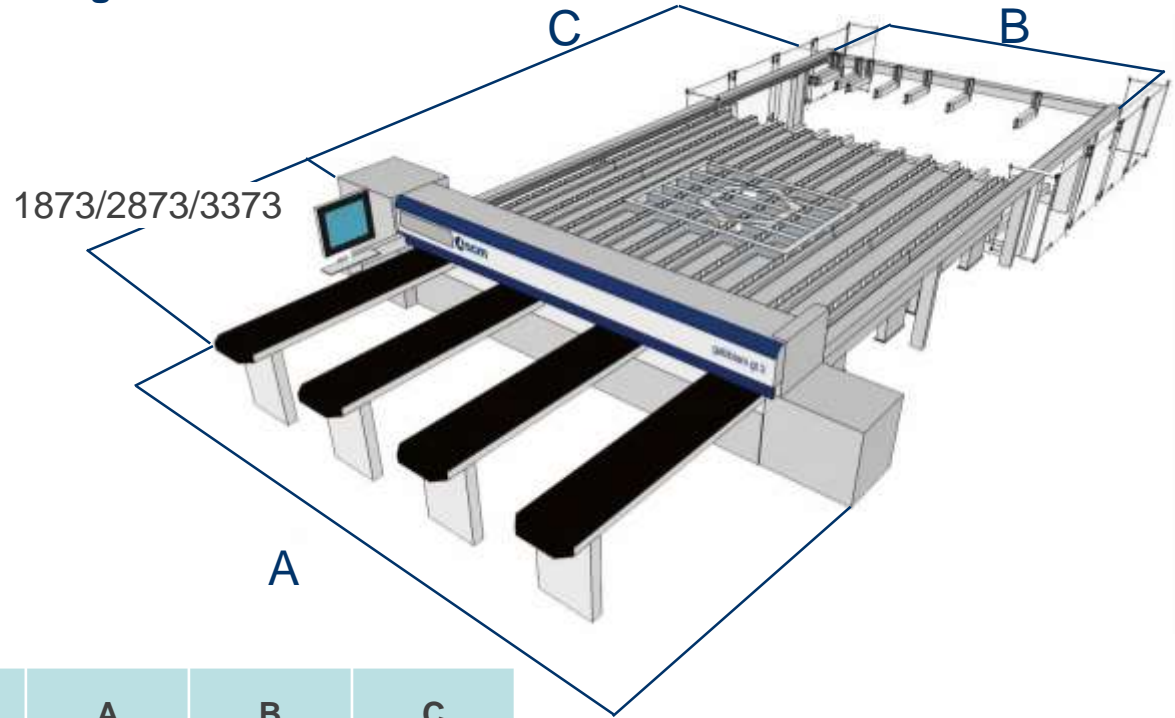
## gabbiani gt 2 115/130 with rotating table



Cutting dimensions	A	B	C
3200 x 1850	5663	4513	6740
opt. 3200 x 2440	5663	4513	8100
3800 x 1850	6263	5113	6740
opt. 3800 x 2440	6263	5113	8100
4500 x 2440	6963	5813	8100



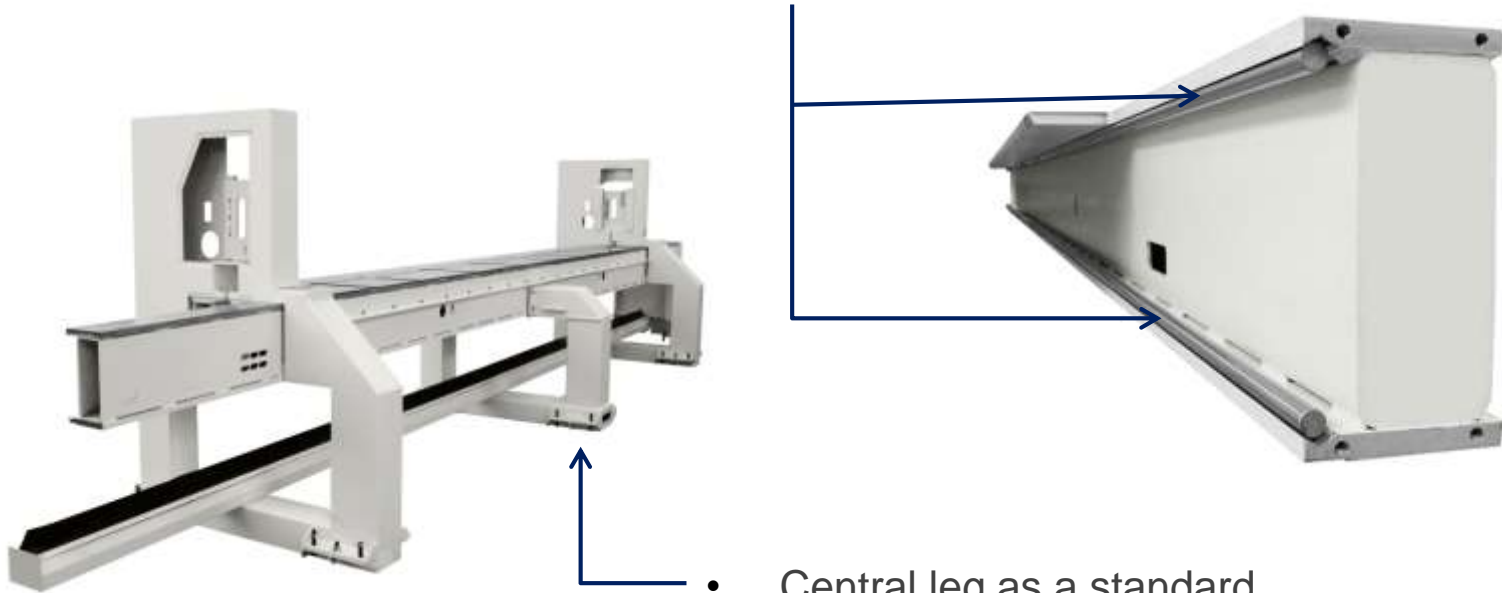
## gabbiani gt 2 115/130 with rotating table



Cutting dimensions	A	B	C
3200 x 2440	5663	4513	10747
3800 x 2440	6400	5113	10747
4500 x 2440	7100	5813	10747

## Base

- Reinforced ribbed steel structure with a “closed” ring shape → deformations are irrelevant even with high loads
- Saw carriage slides on hardened and ground cylindrical guides



- Central leg as a standard

## **Saw carriage with independent rise of the blades**

- Raising on linear guides with recirculating ball screws



## **Rapid blades locking/unlocking: machining safety in a reduced time**

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



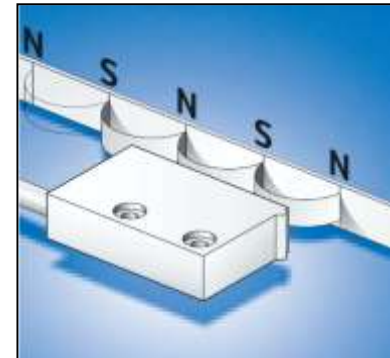
## **Brushless motor on saw carriage and pusher**

- 80 m/min pusher speed
- 0-150 m/min saw carriage speed



## **Magnetic band** (pusher position is controlled by a magnetic band and sensor)

- This system reads directly and exactly (0,02 mm) the pusher position
- Independent system from mechanical stress
- Improves the reliability and robustness of components



## **Automatic side aligner device (width 60-1200 mm)**

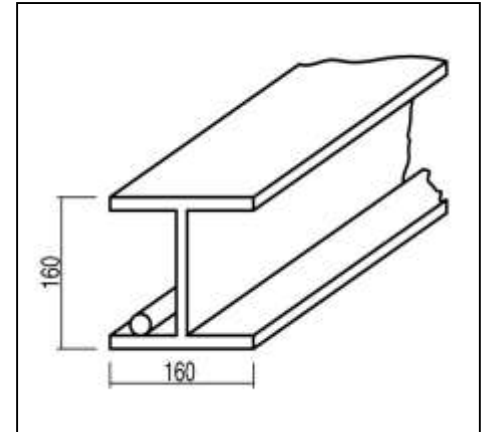
- Precision during cross cuttings due to the sliding on prismatic guides
- Optimum extraction of shavings due to the openings on the lateral beam



## Pusher and rear part machine

- Pusher feeds on cylindrical guides and shoulders 160x160 mm
- Rear part with tubular supports with  $\varnothing 50$  wheels made of antiscratch material
- Rear Bakelite-coated table 470 mm width positioned on the squaring area

Sect. HEB 160  
ROUND guide



## Inverter for the blade peripheral speed management:

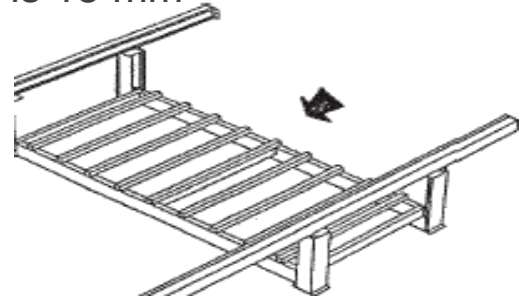
- Device for continuous adjustment of the main blade speed
- During the cutting process, speed can be changed through a potentiometer on the control panel and displayed on the screen
- It improves cut quality for every material and panels stack height



## **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**
- 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

<b>Panels stack</b>
600 mm
6.500 Kg

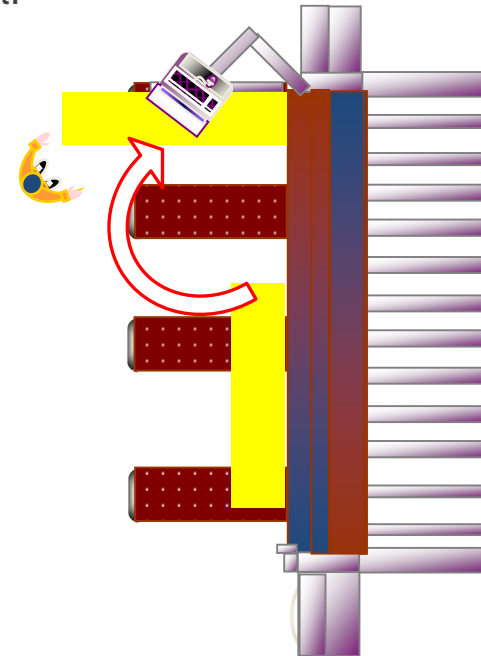




**Fixed air floating table with feeding rollers (1500 – 2500 – 3000 x 600/800 mm)**

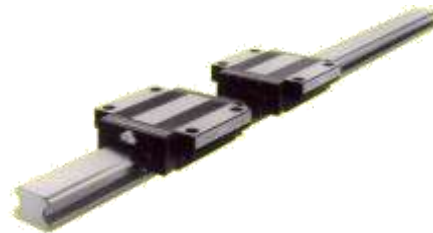
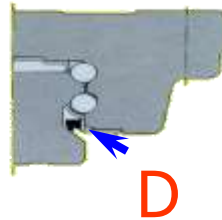
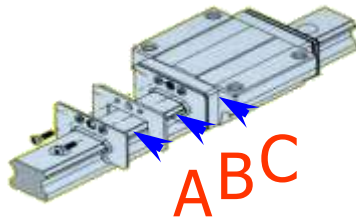
**Mobile air floating table with feeding rollers (1500 – 2500 – 3000 x 600 mm)**

- Optimal sliding in all working conditions due to the independent fans which ensure an always effective movement with panel stacks of every type and weight.
- Maximum protection against risks of friction



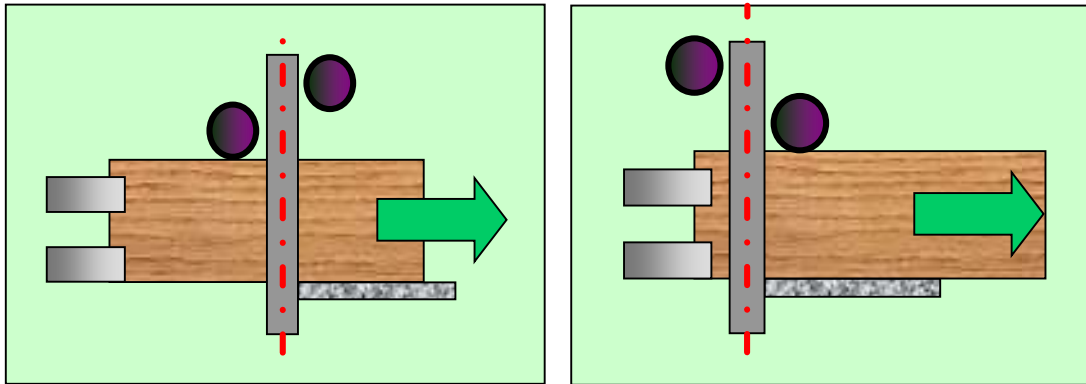
## Prismatic guides with recirculating ball screws: improve machine performance

- 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)
- Perfect slide on linear guides
- Maximum verticality with respect to the working table
- Maximum load balance



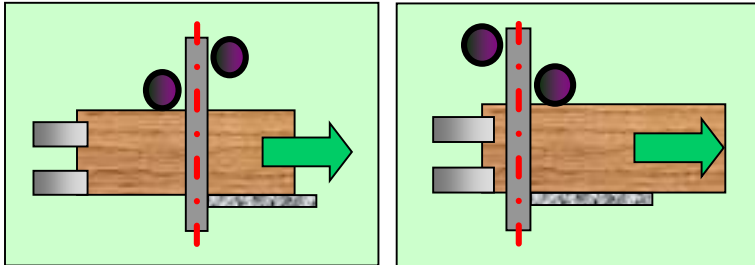
## Double automatic side aligner device (width 60-1200 mm)

- The automatic side aligner device slides on guides with recirculating balls screws
- It is equipped with pneumatic cylinder
- Manual adjustment of the alignment pressure



## Double powered side aligner device (width 60-2200 mm)

- The side aligner device slides on prismatic guides with recirculating ball screws.
- It is equipped with brushless motor driven by rack and pinion
- Total control of the pressure on the workpiece



## **Device for the selective closing of the clamps**

(surface area 0 - 800 mm or 0 - 1600 mm )

- Device is managed by PC
- During transversal cutting operation, this device prevents chipping on the panels with edges in correspondence of the clamps working area



## **System with automatic closure of the cutting axis:**

- It avoids the fall of waste trim cuts inside the machine



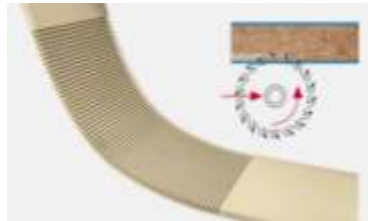
## **Optimised blade height (only with pneumatic carriage)**

- Automatic adjustment of the main blade projection



## **Groove execution (only with pneumatic carriage)**

- Minimum groove width coincide with the main blade thickness
- For the execution of different thicknesses, the saw carriage carries out all the necessary strokes to obtain the requested width



## **Slots execution device (only with pneumatic carriage)**

This particular device allows the carrying out of interrupted cut inside the panel for producing slotted doors



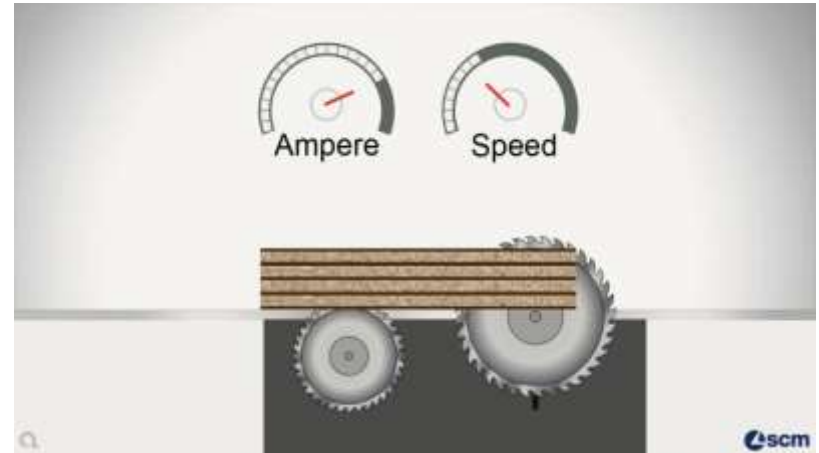
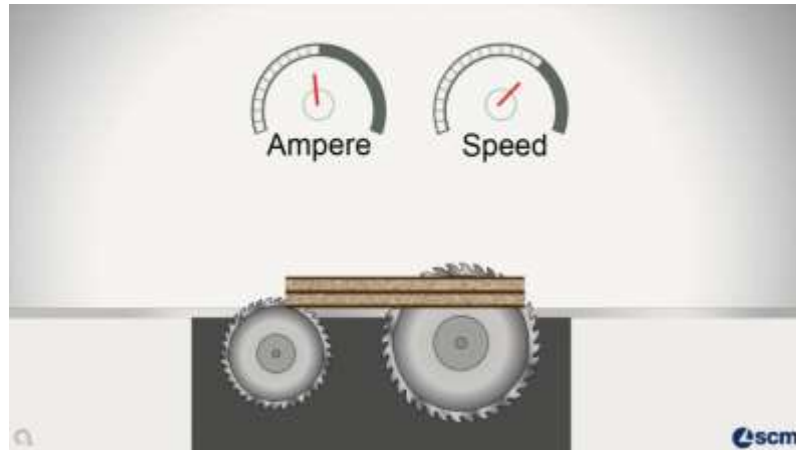
### **Execution of panels de-tensioning cuts**

Device that reduces tensions inside the material on longitudinal cuts guaranteeing cut linearity.



## Adaptive control of the saw carriage feed speed

Automatic monitoring of energy absorption of the motor according to the thickness/type of material and the type of the blade in order to obtain the best results avoiding wastage.

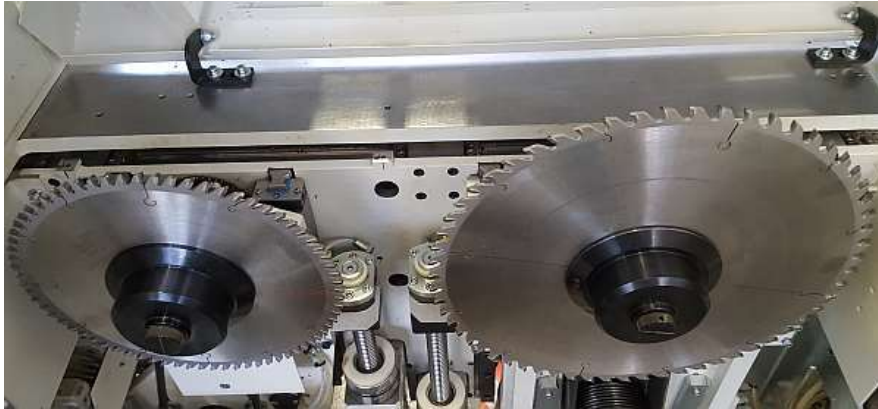


## **AKE device**

- Rapid locking/unlocking of the scoring blades with "AKE" mechanical flanges "EASYFIX" ("AKE" patent) allowing a quick and easy change of the blades.
- The tightening is ensured both with high blade-motor power and machining of the hardest materials.



## **New saw carriage: HI-TRONIC VERTICAL STROKE (15-18 kW)**



- Optimised blade stroke (brushless motors)
- Blades unlocking with AKE mechanical flanges
- Self-learning pressure beam
- Postforming
- Scoring blade electronic adjustment
- Electronic grooves device
- Slots execution device
- Blade speed adjustment with inverter (only on gabbiani gt 2 130)

## **SAW SET device for the automatic adjustment of scoring unit and main blade**

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



## **FlexCut**

### **Incomparable precision**

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

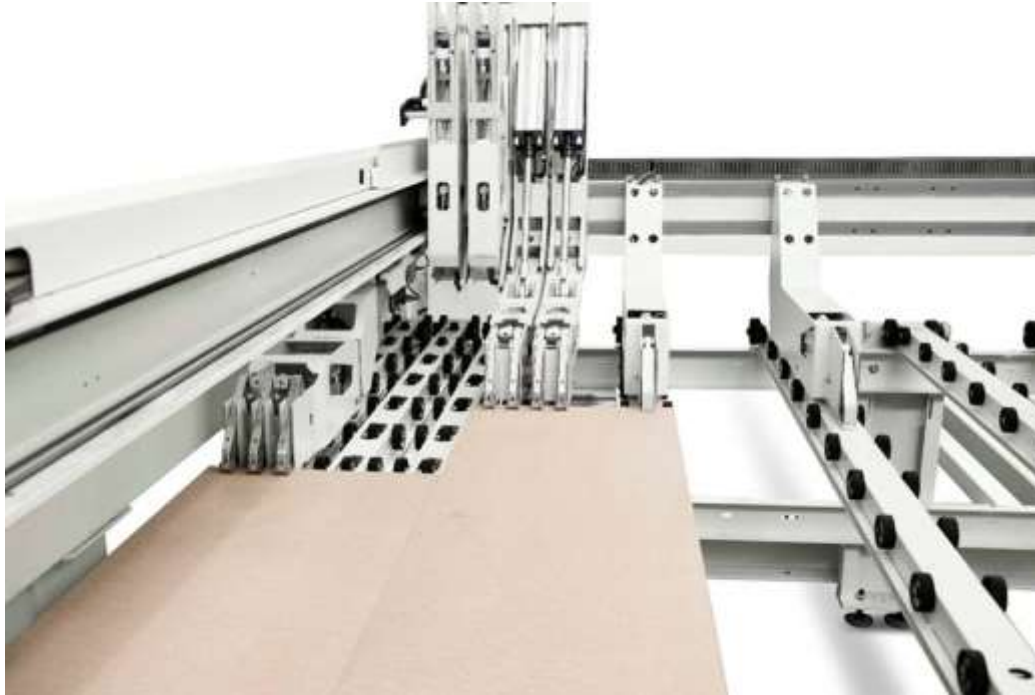
The extreme flexibility of these devices is also ensured by the presence of the main pusher grippers, which can be excluded from the working area, so that strips with different widths can be secured and as a result any type of different cutting can be performed without limiting the stroke.

### **Simultaneous execution of two-differentiated cuts**

Devices consisting of a mobile grippers unit whose stroke is completely independent due to the two independent pushers which enable the following operations:

- cross and rip cuts
- cross cuts on side-by-side bars
- cross cut during the platform loading of a following longitudinal cut
- **increasing of productivity up to 40%**

## **FlexCut 1 S FULL single clamp unit 1/2**



## FlexCut 1 S FULL single clamp unit 2/2

- Independent mobile unit from the main pusher:
  - ✓ 1 clamp with triple finger with independent stroke for the entire depth of the machine
  - ✓ 4 clamp with double finger with pneumatic exclusion
  - ✓ 3 std fixed clamps with single finger
- Sliding on prismatic guide with recirculating ball screws positioned under the shoulder
- Brushless motors for the positioning (100m/min return)
- Synchronized feed with the main pusher when carrying out logical cuts
- **The powered double side aligner device is compulsory**

## **FlexCut 1 D FULL double clamp unit 1/2**

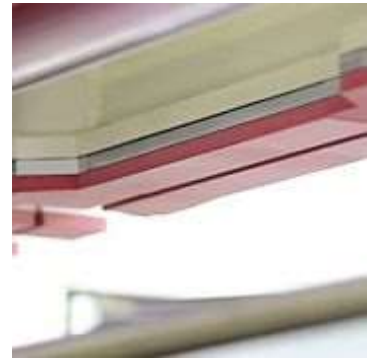
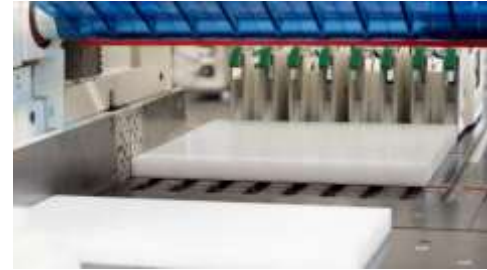




## **FlexCut 1 D FULL double clamp unit 2/2**

- Independent mobile unit from the main pusher:
  - ✓ 2 clamps with double finger (the 2° can be excluded) with independent stroke for the entire depth of the machine
  - ✓ 4 clamps with double finger with pneumatic exclusion
  - ✓ 3 std fixed clamps with single finger
- 2 clamps are sliding on prismatic guideways with recirculating ball screws positioned under the shoulder, while the main pusher is sliding on double cylindrical guide
- Brushless motors for the positioning (100m/min return)
- Synchronised feed with the main pusher when carrying out logical cuts
- **The powered double side-aligner device and rear table with tubular supports with wheels are compulsory**

- Clamp with double finger and narrow slots on the cutting line to guarantee an optimum panel grip
- Precision and uniform pressure even on small size strips due to our pressure “shoes”



- Cooling and lubrication of the main blade
- Main blade rotation controlled by inverter so that it can be adapt to any material to be processed (*15 kW std on gabbiani gt 2 130 – 18 kW – opt.*)



Special software solutions able to meet every machining requirements both on hard and soft materials:

- Reverse cutting mode of the main blade
- Continuous blade speed adjustment: possibility to cut thick and hard materials in several steps

## gabbiani gt 2 115/130 - optional device

### Panels stack

1.300 mm

6.500 Kg

### Panels stack

800 mm

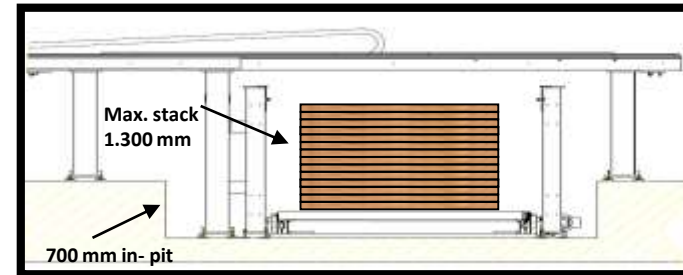
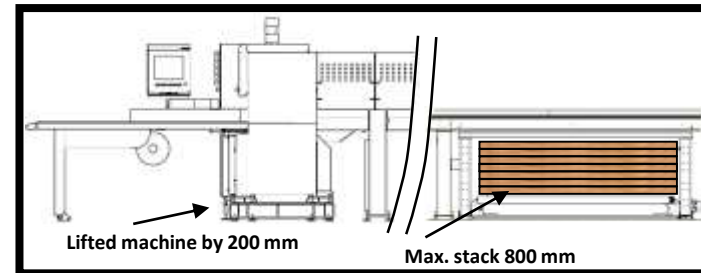
6.500 Kg

**LIFTED machine (↑ 200 mm)**

or

**IN - PIT PLATFORM (↓ 200 mm)**

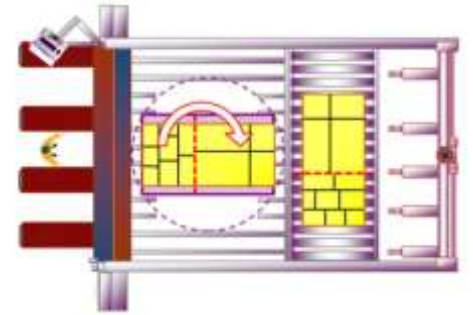
**IN - PIT PLATFORM (↓ 700 mm)**



## Internal rotating table

Device for the management of the pre-cutting process:

- Sturdy metallic frame holds up the panels stack during the rotation cycle
- A pneumatic system for the lifting and a mechanical one for the panels stack rotation
- **Min. rotating panel dimension:** 1500x1500 mm
- **Max. panel stack height:** 90 mm (gabbiani gt 2 115) / 110 mm (gabbiani gt 2 130)
- **Max. panel stack weight:** 500 Kg (gabbiani gt 2 115) / 1000 Kg (gabbiani gt 2 130)



## **Semi-automatic loading of thin materials (thickness between 3 and 10 mm) 1/2**

- Operator sets the thin panel pack height (15mm min.)
- Operator has to apply a divider (25mm min. A) to separate thin panel pack to be cut and to facilitate the grip of the clamps

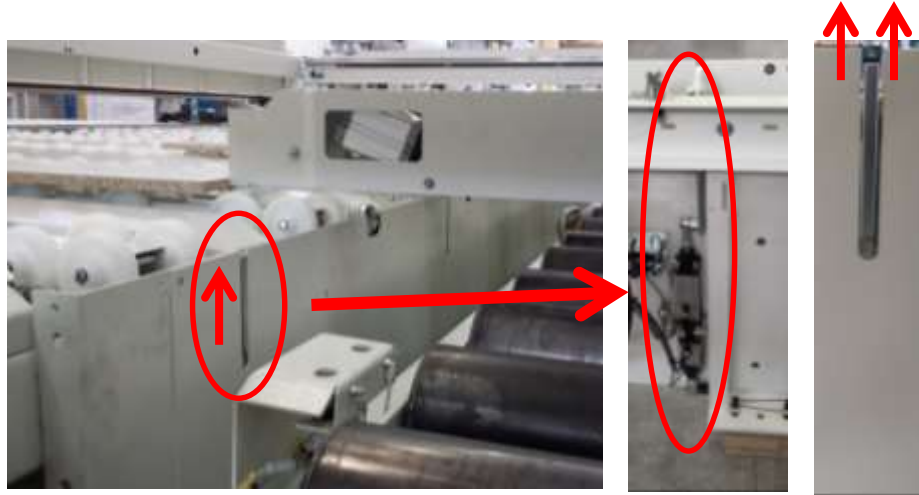


- Operator manages the operation from remote control panel near the lifting table



## **Semi-automatic loading of thin materials (thickness between 3 and 10 mm) 2/2**

- For normal panels stacks (thickness >10 mm) a locking device is activated to facilitate the loading

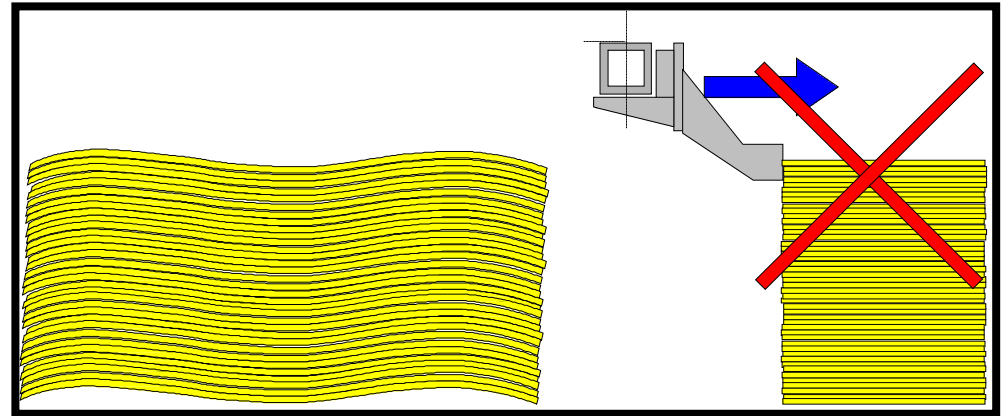


- For thin panels stacks the locking device is deactivated to allow the loading of panels stacks showing marked geometric irregularity



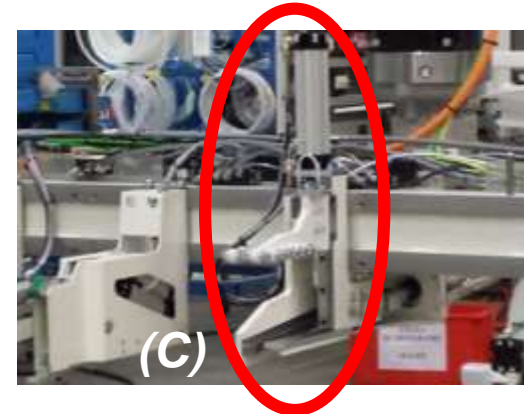
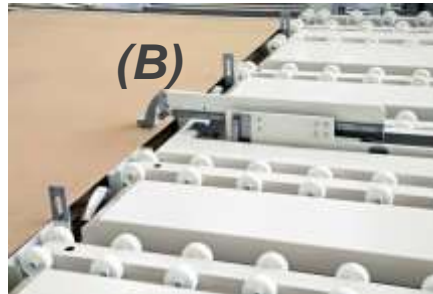
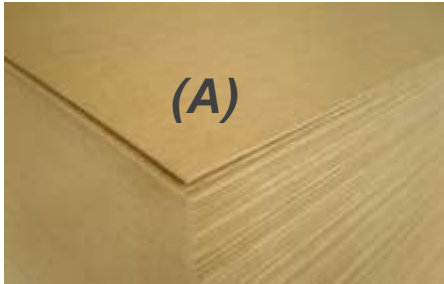
## Automatic loading of thin materials (thickness between 3 and 10 mm) 1/4

- The device foresees the machine worktable with closure covers to facilitate thin panels movement



## Automatic loading of thin materials (thickness between 3 and 10 mm) 2/4

- Panels thickness for the loading: 3 ÷ 10 mm (A)
- System with central pushing opposite to the infeed direction (B)
- Dedicated clamp on the main pusher for the selection of the panels to be cut (C)
- Front device for the stop of the remaining panels
- Loading panels tolerance: +/- 2 panels
- Max. deformation accepted: +/- 30 mm (3 mm per panel)
- Minimum height of the pack to be load: 15 mm



## Automatic loading of thin materials (thickness between 3 and 10 mm) 3/4

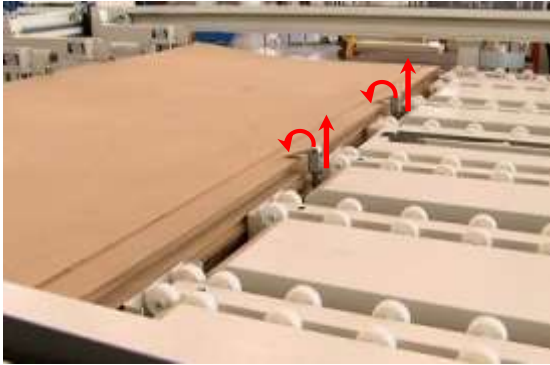


- The auxiliary pusher, with counter sensor, pushes the stack panels against the open grippers of the clamps in the main pusher



- The grippers of the main pusher close by tightening the pack

## Automatic loading of thin materials (thickness between 3 and 10 mm) 4/4



- The stop-pack devices block the stack on the elevator table to avoid the load of the underlying panels.

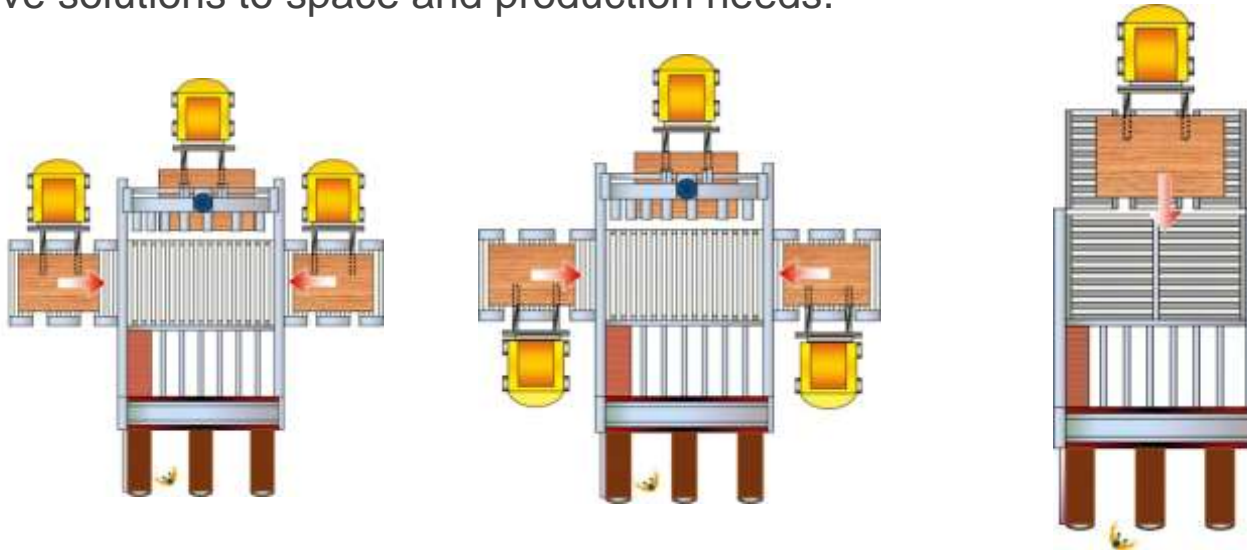


- The main pusher moves forward with the load of the package to be cut

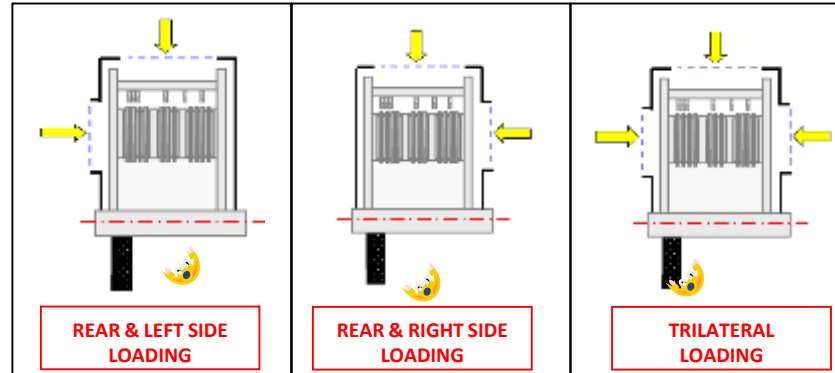
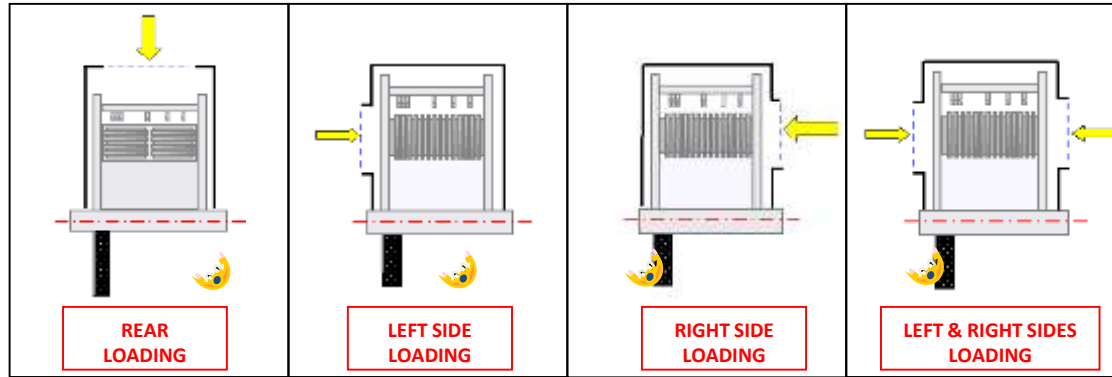
## Loading platform

### Preloading roller conveyors: space is not a problem anymore

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

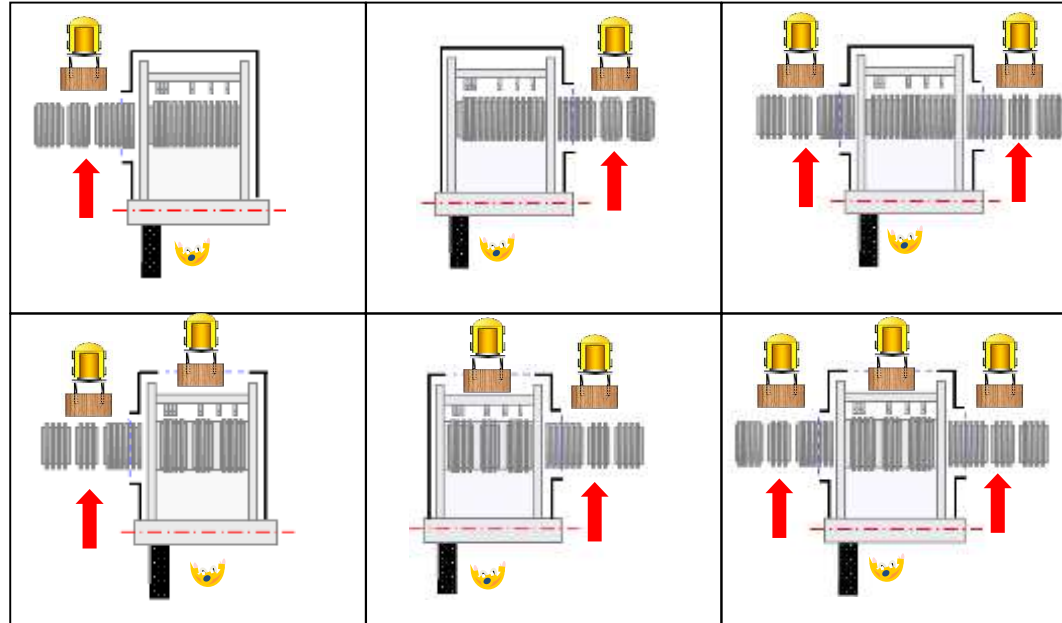


- Options for the loading from platform



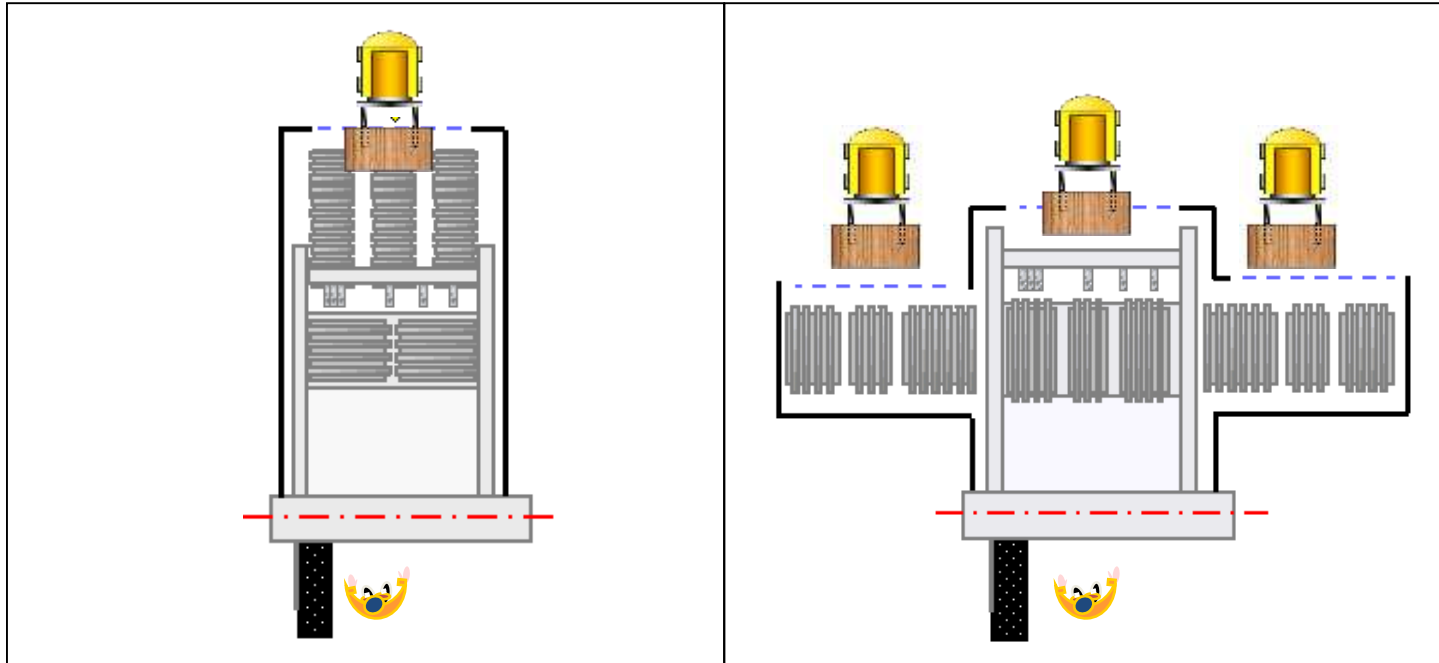
## Options for the loading from the preloading conveyors

- **SEMI-AUTOMATIC CYCLE:** *the operator holds the control device for the entire panel loading process*



## Options for the loading from the preloading conveyors

- **AUTOMATIC CYCLE:** *with safety fences and photocells*





## SAV€ENERGY

### LOWER CONSUMPTION = LOWER COSTS

Sav€energy allows the use of power only when it is required, 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 at any particular time.

Year saving up to 10% (optional).





**Thank you for  
your kind attention**