

DESIGN AND MANUFACTURE OF WOODWORKING MACHINERY

Systems for preparing and assembling semi-finished wood products are continuously evolving and this has been a driving force behind our range of machines specifically developed to meet production needs and deliver what wood packaging manufacturers expect in terms of:

- reliability
- higher production rate
  - flexibility
  - cost-effectiveness

**CEMIL IMPIANTI** machines are designed to meet each and every one of these needs.

#### CM 100 Fast stringer assembly



Our **CM 100** nailing bench allows fast manual assembly of pallet stringer boards. This means nailing together the stringer board and block, which is the part of the pallet resting on the ground, becomes a cinch. Assembly operations follow this order:

- 1. Introduction of the 18 (36) blocks in the templates.
- 2. Locking and pneumatic squaring of blocks.
- **3.** Positioning of the 6 (12) lead boards.
- 4. Nailing.
- 5. Pneumatic template opening.
- 6. Assembled stringer ejection.

# Stringer options possible





#### FEATURES

- Simple to use
- Tilting and adjustable table
- Pneumatic squaring of stringer boards
- Simultaneous ejection of assembled stringer boards
- Dimensions of stringers for assembling approx. 630 ÷ 2200 mm

#### **ADVANTAGES**

- Significantly increased production
- Instant adjustment, no downtime
- creased production flexibility
- Maximum precision
- · Reduced operator fatigue

• This information is subject to change without notice and is not binding on CEMIL IMPIANTI.

## CM 250 The universal bench for 2- and 4-way entry pallets



Our **CM 250** nailing bench is the perfect system for fast and precise manual assembly of 2- and 4-way entry pallets and/or case and crate planking.

Assembly of 4-way entry pallets follows this order:

- 1. Introduction of ready-assembled pallet stringers.
- 2. Positioning of intermediate deck boards.
- 3. Introduction of lead deck boards.
- 4. Nailing Riveting.
- **5.** Pneumatic ejection of finished pallet.

#### **FEATURES**

#### ADVANTAGES

- Simple to use
- · Tilting and adjustable table
- Fast work set-up
- Pneumatic ejection of finished pallet
- Dimensions of pallets for assembling approx. 600 ÷ 2200 (2800 with wing) x 1300 mm
- Working platform with universal template
- · Fast template adjustment
- Increased production flexibility
- Maximum precision
- Reduced operator fatigue





#### TCA 10 Automatic Block Cutting Machine



Our **TCA 10** automatic block cutting machine is used for automatic production of blocks, which are essential components for the assembly of 4-way entry pallets.

The machine is equipped with automatic sorting device for off-size block rejection, electric cutting height adjustment, and finished piece exit conveyor. The **TCA 10** automatic block cutting machine provides maximum functionality through simple, reliable and maintenance-free mechanics that make it an indispensable piece of equipment in the wood packaging industry.

SPECIFICATIONS		
BLOCK	min-max length min-max width min-max height	60 ÷ 120 mm 60 ÷ 120 mm 60 ÷ 140 mm
Circular blade diameter		ø 550 mm
Blade rpr	n	3000
Blade motor power		10 hp
Installed motor power		12 hp
Hourly output		approx. 4500 ÷ 5000
Max. ove	rall dimensions: w x l x h	2500 x 1500 x 1300 mm
Weight		900 kg

• This information is subject to change without notice and is not binding on CEMIL IMPIANTI.

#### **TCO** Automatic Block Cutting Machine



**SPECIFICATIONS** Loading platform dimensions (other lengths on request) min - 60 x 60 mm Beam thickness max - 150 x 130 mm Cutting length 50 ÷ 150 mm ø 500 mm Circular blade diameter Blade rpm 3000 Blade motor power 7.5 hp Hourly output Approx. 1500 1600 x 5100 x 1500 mm Max. overall dimensions: w x I x h Weight 1000 kg

Our **TCO** automatic block cutting machine is designed to automatically produce blocks, which are essential components of 4-way entry pallets, from full beams. The machine comes with a loading chamber that ensures greater operating range and, on request, can be equipped with a finished block exit conveyor.

Our **TCO** automatic horizontal block cutting machine is extremely functional and offers very high precision cutting, versatility and maintenance-free operation. These qualities make it an exceptional piece of equipment in the wood packaging industry.

### TR 550 Automatic Cutting Machine



The **TR 550** automatic cutting machine is designed to automate the board, stringer, block and plank cutting workflow, increasing productivity while ensuring maximum operating safety.

The machine comes in various different configurations that can include idle, motorised or push feed; manual or powered gauges; PLC electronic control systems, automatic discharge systems and discharge chambers, and other equipment to satisfy specific cutting needs.



SPECIFICATIONS	
Cutting capacity	30 ÷ 397 mm 100 ÷ 347 mm 165 ÷ 175 mm
Circular blade diameter	ø 550 mm
Blade rpm	3000
Blade motor power	10 hp
Minimum cutting time	0.3"
Max. overall dimensions: w x l x h (machine body)	640 x 1050 x 1650 mm
Working platform height	860 mm
Weight (machine body)	280 kg

• This information is subject to change without notice and is not binding on CEMIL IMPIANTI.

### T 140/R Automatic Cutting Machine



The T140/R automatic cutting machine is designed to automate the board, stringer, block and plank cutting workflow, increasing productivity while ensuring maximum operating safety.

The machine offers two different cutting options: long and fast, and it comes in various different configurations that can include idle, motorised or push feed; manual or powered gauges; PLC electronic control systems, automatic discharge systems and discharge chambers, and other equipment to satisfy specific cutting needs.



SPECIFICATIONS	
Cutting capacity (fast cutting)	30 x 225 mm 70 x 190 mm 140 x 60 mm
Cutting capacity (long cutting)	30 x 725 mm 70 x 690 mm 140 x 560 mm
Circular blade diameter	ø 550 mm
Blade motor power	15 hp
Blade rpm	3000
Max. overall dimensions: w x I x h (machine body)	810 x 1650 x 1700 mm
Working platform height	860 ÷ 1050 mm
Weight (machine body)	400 kg

#### TP Pendulum Saw



Our **TP** pendulum saw is designed to meet various cutting needs.

The machine is offered based on the specific requirements of customers, to best match their needs.

Amazingly versatile and extremely easy to manoeuvre and use, our **TP** pendulum saw is unrivalled in the wood packaging industry.



SPECIFICATIONS	
Cutting height	mm. 120
Cutting length	mm. 400
Circular blade diameter	ø mm. 400
Blade rpm	3200
Blade motor power	7.5 hp
Max. overall dimensions: w x l x h	mm. 4000 x 1350 x 1700
Weight with roller conveyor	Kg. 400

• This information is subject to change without notice and is not binding on CEMIL IMPIANTI.

### TPA 120/R Automatic Pack Cutting Machine





The **TPA** pack cutting machine is designed for timber pack sizing and cutting. The packs move on a roller conveyor until reaching the desired cutting position, as established by the gauge. Cutting takes place through a chain bar driven to deliver the maximum level of precision on timber packs measuring 1200 x 1200 mm. The chain is lubricated automatically through a gear pump. The **TPA** pack cutting machine is easy to use and gets the job done fast, reasons why it is becoming an increasingly important and necessary piece of equipment in the wood packaging industry.

SPECIFICATIONS		
Cutting capacity	mm.1200 x 1200 (others on request)	
Standard chain	pitch 3/4 gauge mm. 3	
Blade rpm	3000	
Blade motor power	15 hp	
Max. overall dimensions: w x I x h	based on work requirements	

### **STA** Automatic Board Bevelling Machine



Our **STA** automatic board bevelling machine is designed to meet various bevelling needs. The machine achieves high production levels in a short time and with only one operator for loading and unloading operations, since it comes complete with automatic board feeder.

The **STA** automatic board bevelling machine is easy to use, delivers the job fast and thanks to its simple mechanics, it is reliable over time and maintenance-free, making it unique in the wood packaging industry.



SPECIFICATIONS		
Board:	min-max length min-max width min-max thickness 700 - 1300 mm 90 - 150 mm 20 - 30 mm	
Milling cutter diameter	ø 140 mm	
Milling cutter rpm	5300	
Milling cutter motor power	7.5 hp	
Feed motor power	1 hp	
Hourly output	approx. 1000 ÷ 1200	
Max. overall dimensions: w x l x h	1100 x 4100 x 1500 mm	
Weight	900 kg	

• This information is subject to change without notice and is not binding on CEMIL ITALIA S.r.l.

### PA 1 Automatic Sheet Metal Forming Machine



Our **PA1** sheet metal forming machine is designed to transform flat metal strap coils into shaped/edged and cut-to-size strips.

It comes with automatic cutting programmer, which ensures strips are cut to the exact quantity and precise length, and with coil reel.

The PA1 automatic sheet forming machine is very simple to use: you set the measurements and desired lengths, introduce one end of the coil in the drive rollers, and start the machine; the system performs the subsequent measurement, cutting and discharge operations automatically, even stopping the machine when it reaches

the pre-established number of pieces.

The **PA1** automatic sheet metal forming machine is incredibly silent and made to last, offering a virtually unlimited life thanks to the careful choice of materials and perfect machining of each part.

SPECIFICATIONS	
Sheet forming capacity:	max. thickness 0.5 mm
Feeding speed	11 m/min
Drive motor power	1 hp
Max. overall dimensions: w x l x h (machine body)	1600 x 900 x 1200 mm
Max. overall dimensions: w x l x h (reel)	700 x 400 x 750 mm
Weight (machine body)	400 kg

• This information is subject to change without notice and is not binding on CEMIL IMPIANTI.

### RS Single-head Riveting Machine



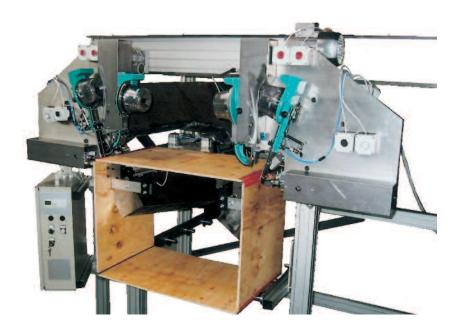
The single-head riveting machine is used to assemble collapsible wooden cases, which have walls joined with metal rivets. The machine is powered by an electronically controlled single-phase 220V motor but on request, it can be supplied with pneumatic operation.

The electric single-phase motor and all functions are electronically managed by a microprocessor incorporating a resettable partial counter as well as a total counter. Options include slow motion setting for tests and a multiple function that repeats a sequence pre-programmed with rivet number and laying speed.

Collapsible case sizes that can be assembled depend on the outreach of the arm, which normally comes in three different lengths: 850 mm, 1200 mm or 1500 mm.

• This information is subject to change without notice and is not binding on CEMIL IMPIANTI.

#### RD Double-head Riveting Machine



The double-head riveting machine can lay four bifurcated rivets at the same time - two vertically and two horizontally - so that two metal strips can be attached to the walls simultaneously. This makes it possible to finish the collapsible case in just two steps.

The machine is available either with manual shifting of the riveting stage or in an automatic computerized version and can also be used to build cases left open on one side (with or without metal strip), with no additional operation required. The machine allows for quick format changeover and the plywood thickness is preset, changed with 6/10 selector.



SPECIFICATIONS			
Вох:	min/max length min-max width min-max height	500 - 2500 mm 300 - 1100 mm 100 - 1250 mm	
Plywood:	6- or 10- mm thick		
Power supply:	220V single-phase		
Absorbed power:	100W at rest - 3kW during cycle		
Electrical power consumption: 0.001 kW/h per cycle			
Air consumption: 1.8 normal l/cycle at 5 bar			
Overall dimensions: I x w x h:	erall dimensions: I x w x h: 4200 x 1800 x 1850 mm		
Weight:	eight: 1020 kg		

#### MT Block Marking Machine







The MT machine is used for heat branding pallet blocks, which are essential for building pallets. It includes thermostat, thermal probe and timer to control and maintain the set temperature and adjust the needed time for the marking, which can vary depending on the type of wood used and its moisture level.

Blocks are loaded manually and positioned, marked and ejected automatically. The machine is adequately guarded to protect against unintentional contact with the marking area.

SPECIFICATIONS	
BLOCK:	min-max length 80-145 mm min-max width 60-100 mm min-max height 60-100 mm
Hourly output	approx. 1000
Max. overall dimensions: I x w x h	1380x550x1800 mm

• This information is subject to change without notice and is not binding on CEMIL IMPIANTI.

#### MB Pallet Marking Machine



Our automatic pallet marking machine is the best solution for meeting phytosanitary requirements. It not only simplifies and speeds up block branding in pallets, be them new or used/repaired, but also makes operations safer.

The machine features a modular construction, being composed of several work stations and a programmable mobile bridge. It marks rows of stacked pallets automatically and allows the operator to continue loading and unloading the pallet rows in the work stations even while the marking process is taking place.

### **SB1** Pallet Dismantling Machine



Our **SB 1** pallet dismantler is used to reclaim the wood from pallets, cases, crates, covers, etc. by cutting the nails that hold the elements together. The machine is equipped with a double, height-adjustable work bench and a system of conveyor belts that gather and discharge the dismantled parts. The **SB 1** pallet dismantler is flexible and easy to use, requires only one operator for all processes, and thanks to its simple mechanics, it is reliable over time and maintenance-free. These qualities make it an essential piece of equipment in the wood packaging industry.



SPECIFICATIONS		
Blade motor power:	3 hp	
Belt motor power	0.5 hp	
Max. cutting width	1600 mm	
Max. overall dimensions: L x W x H	5700 x 2100 x 1650 mm	
Weight	800 kg	

• This information is subject to change without notice and is not binding on CEMIL IMPIANTI.

#### T Plank Cross-cutting Machine



Our IT plank cross-cutting machine cuts the reclaimed wood from pallets, cases, crates, covers and other elements to size. The machine includes a work bench complete with cut-off gauge and a feed system that moves the boards to the cutting position and then to the automatic discharge area. The IT cross-cutting machine is flexible

and easy to use, requires only one

operator for all processes, and offers maintenance-free and safe operation. These qualities make it a perfect choice when reclaiming wood from packaging.



SPECIFICATIONS		
Blade motor power:	7.5 hp	
Transport chain motor power:	1 hp	
Max. cutting width:	1200 mm	
Max. overall dimensions: L x W x H	7500 x 2200 x 1500 mm	
Weight	1500 kg	

## **BRP** Pallet Repair Bench





The pallet repair bench is designed and built to assist operators during the repair of used EPAL pallets.

The bench has a tubular steel frame and sheet metal work bench and is equipped with corner retaining supports on the two sides, central plate for pallet lifting and

rotation, front tilting units to help overturn the pallet on the bench, and front compartment to hold the needed tools. All controls are pneumatically operated.

The bench also includes two pneumatic lifter-nail removers to help remove the nails from the lead boards.

#### **SPECIFICATIONS**

Sheet metal work bench thickness

15 mm

Max. overall dimensions:

w x I x h (machine body) 1500x1500x2600 mm

• This information is subject to change without notice and is not binding on CEMIL IMPIANTI.

#### **Work Benches**





We custom produce work benches to the customer's needs.



# Sorting/Repair Line



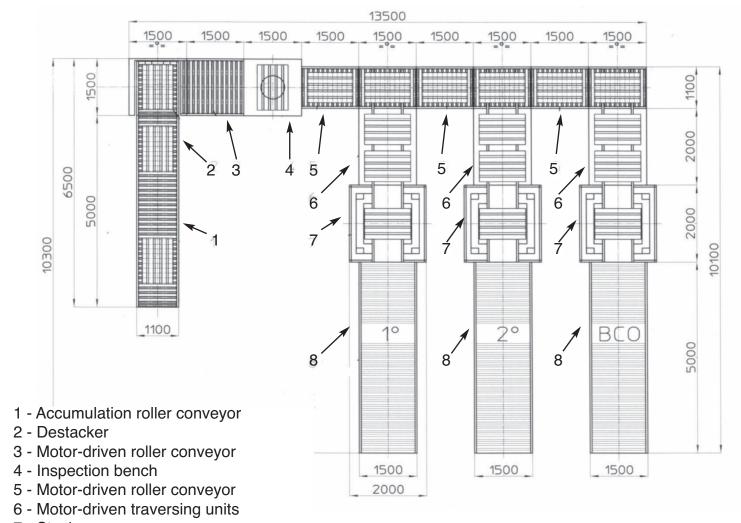


Our repair and/or sorting lines are always designed and produced according to the customer's requirements and expectations.

All lines can be equipped with robot cells.

N.B.: The sample layout is provided for illustration purposes only.

### Sample Layout

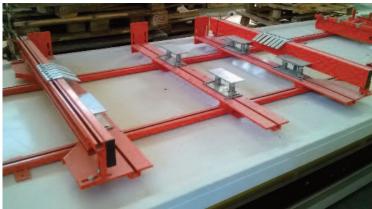


- 7 Stacker
- 8 Slat chain storage

#### **Accessories**

### Universal Templates for Automatic Nailing Machines





#### Belt Conveyor



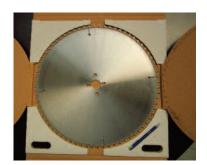
Belt conveyor made from pressed sheet metal with PVC belt, applied to a woodworking machine and used for conveying the finished pieces.

Advanced techniques go into our belt conveyors, which are conceived and built to be versatile, take up a small amount of the available space, and offer greater safety and appealing design.

They are made to the customer's requirements as this enables to resolve problems in a faster and more functional way, based on the application.

The belt conveyors are driven by fixed- or variable-speed motors rated for the specific use.

#### Blades



Circular wood blade



Pallet dismantling band saw blade



Circular wood/nail blade



Hacksaw blade



Universal circular blade (joinery type)

N.B.: other types of blades available on request.

# CRA 1 Automatic Plank Arrangement-Trimming Machine





Our **CRA 1** machine simultaneously arranges and trims the planks that make up cases and/or closed pallets. The machine is equipped with gauge, self-adjusting presser, variable-speed drive belt, automatic return of excess trimmed material, and rear hydraulic stacker with automatic lowering of arranged layers. The **CRA 1** plank arrangement-trimming machine is extremely functional and versatile, requires only one operator to perform multiple operations at the same time, and is maintenance-free. These qualities make it unique in the wood packaging industry.

SPECIFICATIONS	
Max. arrangement width	1200 mm
Max. cutting thickness	40 mm
Circular blade diameter	ø 400 mm
Blade rpm	3000
Blade motor power	5.5 hp
Installed motor power	8 hp
Hydraulic stacker (capacity)	1000 kg
Max. overall dimensions: w x I x h	1800 x 4500 x 1300 mm
Weight	1200 kg

• This information is subject to change without notice and is not binding on CEMIL IMPIANTI.

Notes			





CEMIL

via Ugo Dozzio, 11 27011 Belgioioso (PV) - Italy +39 348.5166404 info@cemilimpianti.it