EDGERS

FLEXIBLE SOLUTIONS TO BOOST PRODUCTIVITY

Efficiency and the ability to respond quickly to varying production requirements are essential in the primary and secondary wood processing sector. Companies must optimize the use of raw materials, minimize production costs and reduce waste without compromising process quality. In this context, flexible production lines are key to successfully meeting the challenges of a constantly evolving market.

Intuitive and designed to simplify every stage of the production process, CML edgers meet these requirements through solutions designed to ensure maximum operational versatility. Thanks to movable blade technology, the blades can be adjusted in real time to the geometry of the raw material, thus optimizing board usage and minimizing waste.

CML's approach improves the precision, efficiency and streamlining of every process, steering production towards higher-performing and more sustainable standards.

FULL RANGE OF CML EDGERS

E 350 R	SCA 450 R PRO	RS 600
J 350 R	SCA 450 R HITECH	RV 700
J 450 R	SCA 650 R T700	RV 700 HS
J 450 R PRO	SCA 650 R PRO	RV 700 2H
SCA 320 R T350	SCA 650 R HITECH	RV 700 4H
SCA 450 R T500	RH 600	RV 1000

RV 700 2H

EDGER

RV 700 2H

DESIGNED FOR CUSTOM-MADE CUTS. TAILORED TO SUIT EVERY NEED.

The RV 700 2H edger is a robust industrial machine designed for longitudinal chipping and trimming of solid wood boards. Its aim is to produce elements with parallel surfaces and controlled dimensions.

Thanks to its robust and compact mechanical structure, it can be integrated into automated production lines, ensuring high operational flexibility to meet various production requirements.

Automated loading is performed from the front of the machine, ensuring optimal safety, ergonomic and accessibility conditions.

The feed system consists of feed rollers designed to achieve high cutting speeds and ensure a stable, constant and synchronized feed.

The cutting unit comprises four tool shafts arranged orthogonally to the material feed system.

The first two shafts are fitted with specialized tools for removing excess material from the sides of the board; this configuration enables the preventive removal of offcuts, thereby reducing the need for waste management within automated production lines.

The next two shafts are dedicated to trimming and dimensional optimization of the cut, with the aim of producing semi-finished products that comply with the required nominal dimensions, ensuring precision and process repeatability.

The machine is equipped with a movable pressure unit that can automatically adapt to boards of varying thicknesses, and it can be configured with fixed blade solutions in combination with movable blades.

WHY CHOOSE THE RV 700 2H

Minimal clearance between the blades, allowing for a high degree of flexibility in operating configurations.

High cutting speed, capable of meeting the highest production demands.

Chipper unit, which enables the removal of waste material.

Telescopic trimmer series, to expand the range pof operational solutions.

Automatic lubrication, ensuring proper distribution of lubricant to moving parts.

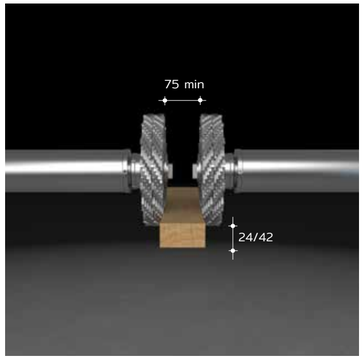
Automatic greasing, ensuring that the blade shaft bearings receive the correct amount of grease.

Continuous monitoring of the temperature of the blade shaft bearings, which provides an accurate diagnosis of the bearings.

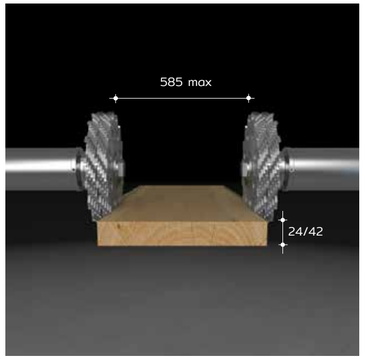
Pneumatic pressure, for rapid operation, safety and ease of adjustment.

Flexible configuration: can be used either as an edger with movable blades or as a multi-blade machine with fixed blades.

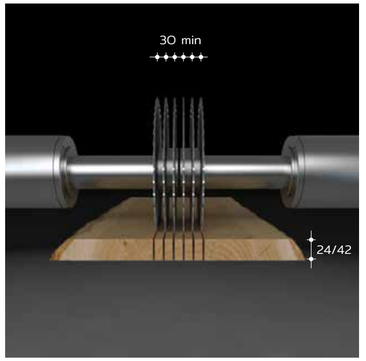
CHIPPERS



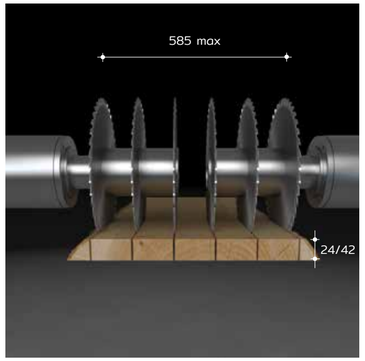
CHIPPERS



TRIMMERS



TRIMMERS



(All dimensions shown in the drawings are in millimetres)

WASTE-FREE TRIMMING: CHIPPING AT THE SERVICE OF AUTOMATION

The main advantage of chipping technology is its ability to remove excess material in a controlled manner before the trimming phase, converting it directly into sawdust.

Thanks to this process, the RV 700 2H eliminates the need to handle solid waste along the production line, enabling fully automated, cleaner and more efficient facilities.

The absence of scrap to handle or store simplifies the system, improves operational continuity and optimizes production flows, providing tangible benefits in terms of productivity, safety and operating costs.

WASTE-FREE TRIMMING: CHIPPING AT THE SERVICE OF AUTOMATION

Edgers with telescopic movable blades offer a highly versatile solution for the woodworking industry. Thanks to this technology, the RV 700 2H enables extremely narrow blade clearances and facilitates optimal utilization of the board: the blades adapt in real time to the geometry of the workpiece, ensuring precise cuts and minimizing waste.

This results in more efficient management of raw materials, with lower procurement and storage costs, and a more sustainable production process, thanks to the responsible use of natural resources.

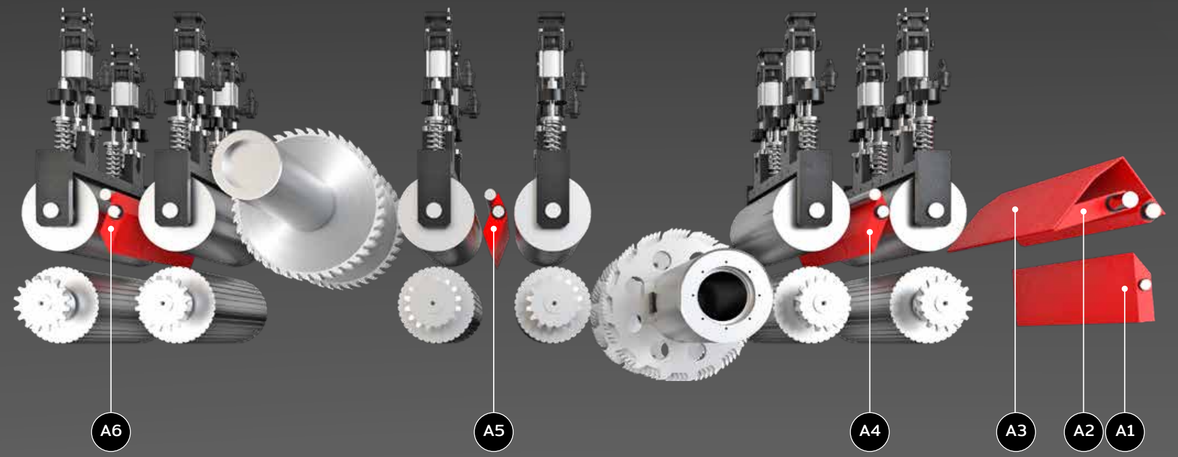
The RV 700 2H edging machine is designed to offer maximum operational flexibility, allowing it to operate both in floating blade mode – to optimize the use of timber – and in fixed blade mode, which is ideal for cutting to exact dimensions.

This dual operating configuration allows production to be quickly adapted to specific cutting requirements, combining the versatility and durability of movable blades with the precision and reliability of fixed blades.

EXTREME PROTECTION SYSTEM FOR TOTAL SAFETY

To ensure maximum operator safety, the machine is equipped with an anti-kickback protection system designed to prevent the workpiece from being thrown backwards.
The upper roller assembly can be raised automatically and comprises six independent pressure rollers to provide greater stability for the material.
The safety system consists of steel blades arranged in five rows: two upper rows with an anti-splinter function and three upper rows with an anti-kickback function, and a lower row with an anti-kickback function. This ensures maximum protection and precise guidance of the workpiece during cutting.

A1) Lower inlet anti-kickback
A2) 1st upper anti-splinter line
A3) 2nd upper anti-splinter line
A4) Upper inlet presser anti-kickback
A5) Upper inlet presser anti-kickback
A6) Upper outlet presser anti-kickback



CONTROL PRESSER: MAXIMUM LEVELS OF PRECISION

In woodworking, careful handling of the material is crucial for quality and productivity.
The pressure unit plays a fundamental role in this context by ensuring that the workpiece is properly secured throughout the feed phases. The application of uniform and constant pressure enables high standards of precision and safety to be maintained, thereby reducing the risk of errors even under the most demanding operating conditions.
The RV 700 2H enables you to work with maximum control at all times, even when handling complex timber.

ROLLER FEED: SPEED AND CONTINUITY

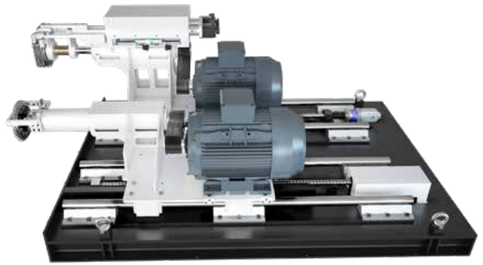
Fast, precise and continuous material transport is key to maximizing production efficiency and the quality of the final product. The RV 700 2H with roller feed is designed to enable very high feed rates while ensuring the tables move smoothly and under control. This solution significantly increases productivity while maintaining accurate cuts, reducing stress on tools and ensuring stable machining, even at high speeds.
Robust clamping systems and optimized roller feed mechanisms work together to ensure a continuous, high-speed flow of material, thereby improving operational safety and the overall performance of the line.

QUALITY LIES IN THE **DETAILS**

Every CML technological solution stems from a careful search for the right balance between innovation, material quality and attention to detail. However, it is our focus on technical aspects that directly impact the safety, operational efficiency and durability of the machines that sets us apart.

Each component is designed to guarantee maximum reliability over time, simplify maintenance tasks, and ensure consistent performance, even in the most demanding production environments. The precision of the design, production and assembly processes results in machines that can optimize resource utilization, reduce consumption and increase overall productivity.

Like all CML solutions, the RV 700 2H meets the highest safety, quality and regulatory compliance standards, offering businesses a reliable, high-performance machine designed to last.



POWER TRANSMISSION OF THE MAIN MOTORS

Power transmission is handled by four independent systems, each of which is fitted with high-performance toothed belts. This configuration optimally distributes the load between the four drive lines, ensuring smooth, vibration-free operation.
Using toothed belts for all transmissions ensures they fit precisely with the pulleys, preventing slippage and maintaining efficiency even under the most demanding operating conditions. The flexibility of the system reduces the risk of mechanical failure, thereby increasing its overall reliability and simplifying maintenance tasks.

FEED SYSTEM MOTOR

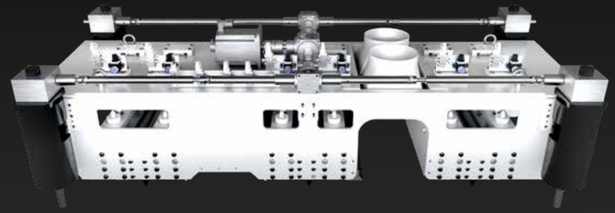
The feed system is driven by an inverter-controlled gear motor to ensure smooth and precise motion transmission.
The operator can easily adjust the speed of the feed track using a built-in potentiometer, with the value displayed directly on a dedicated digital device.

SPLINTER GUARD SAFETY RELEASE MECHANISM

The automatic lifting mechanism of the splinter guard safety system is operated by two pneumatic cylinders and is designed to facilitate and speed up routine and non-routine maintenance operations on the machinery.

PNEUMATIC PRESSURE ROLLER

The pneumatic pressure system integrated into the pressing unit is designed to provide a compact, functionally optimzed configuration that reduces the footprint and improves access to components. The pneumatic actuators' high response dynamics allow rapid adaptation to variations in material thickness, ensuring immediate adjustment of the applied force and continuous control of the feeding process.
The constant pressure exerted on the press rollers is maintained across a wide range of thicknesses to ensure a uniform and repeatable grip on the sheets. This limits slippage and reduces mechanical stress on the entire system. This configuration enables operational stability and consistent performance to be maintained even under variable working conditions, thereby optimizing the machine's overall production efficiency.



AUTOMATIC POSITIONING SYSTEM FOR THE PRESSURE UNIT

The pressing unit, which is essential for ensuring the boards are gripped correctly during feeding, is driven automatically by a brushless motor. Motion is transmitted to the entire unit via angular transmission belts and jacks, which are guided by four surface-treated guides to minimise wear on sliding components.

CHIPPING CONVEYORS

This heavy-duty steel structure is where the tool shafts are mounted. These perform the chipping phase on the waste material present on the sides of the tables. The movement system enables quick and frequent positioning changes, while the configuration of the tool shafts ensures stability and minimizes vibrations.

TRIMMING CONVEYORS

These highly robust metal structures are designed to support the shafts on which the movable blades are mounted. These blades are responsible for optimizing the board. The tool shafts have a reinforced design and a surface treatment to ensure smooth movement and precise positioning. Telescopic blade technology ensures the minimum clearance between the tools and maximum support for the cutting devices.

CONVEYOR HANDLING SYSTEM

The system uses high-efficiency brushless motors coupled with recirculating ball screws to ensure rapid movement. Hardened, chromium-plated and ground steel guides provide guidance and load support, offering high structural rigidity, wear resistance and long-term stability.

RV 700 2H
TECHNICAL SPECIFICATIONS

Minimum and maximum cutting thickness	24 - 42 mm
Minimum and maximum chipper cutting width	75 - 585 mm
Maximum chipper capacity	2 x 25 mm
Minimum and maximum trimmer cutting width	30 - 585 mm
Chipper diameter	350 mm
Blade diameter	350 mm
Chipper bore diameter	95 mm
Blade bore diameter	90 - 95 - 120 mm
Blade shaft speed	3.600 rpm 50 Hz
Feed roller width	650 mm
Minimum board length	1.700 mm
Belt conveyor speed	160 m/min
Maximum board width	750 mm
Work surface height from the floor	808 mm
Chipper shaft motor power	2 x 90 kW
Trimmer shaft motor power	2 x 75 kW
Roller feed motor power	3 x 11 kW
Trimmer motor power	1,5 kW
Presser motor power	4,4 kW
Conveyor motor power	2,3 kW
Pneumatic pressure	fino a 0,60 MPa
Extraction connection diameter	4 x 280 mm
Approximate weight	kg 24.000
Overall dimensions (WxDxH)	360 x 760 x 210 cm

CML ENGINEERING WOODWORKING MACHINERY

MADE IN ITALY

www.cml-engineering.it

CML Engineering reserves the right to make changes to images and technical specifications without prior notice.

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