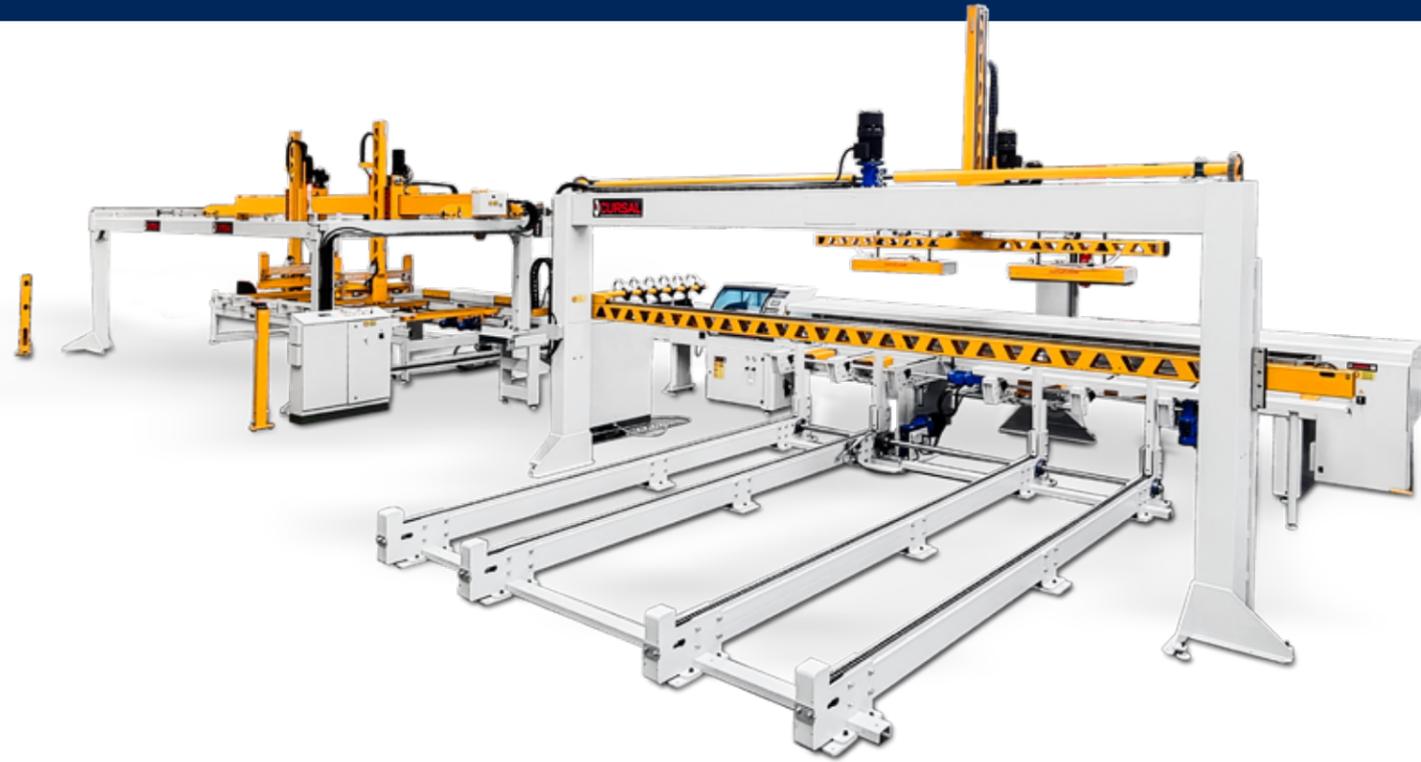




The Quintessence of Cross-Cutting

OPTIMIZING CROSS-CUT SAWS with belt / roller / push-feed system
SEMI-AUTOMATIC cross-cutting lines
Automatic LOADERS / UNLOADERS
OPTICAL defect SCANNING
Infeed and outfeed ACCESSORIES





LOADING
CUTTING
OPTIMIZATION
UNLOADING
ACCESSORIES
SCANNING

CURSAL designs and manufactures complete systems for wood cutting, ranging from manual cross-cut saws to high-performance automatic cutting lines.

We manage all stages in-house: design, wiring, programming, assembly, testing, customer installation, and after-sales support.

For spare parts, our customers rely on a warehouse with over 45,000 components and a dedicated e-commerce portal: www.ricambimacchine.com.

Our solutions easily integrate with existing machinery, thanks to modular handling systems—such as transfers, conveyors, rollers, turntables, and chains—compatible with log saws, multi-rip saws, planers, moulders, finger jointing lines, and CNC centers.

For nearly 50 years, we've been investing in technology to offer strong machines with excellent value for money. This is possible thanks to a design approach that prioritizes long-term interchangeability and compatibility, a concrete choice to ensure efficiency, operational continuity, and lasting value.

Unlike standard software packages, our cut optimization systems are developed in Cursal. Our algorithms are custom-built based on real customer needs. This allows us to offer extremely complete, accurate, and adaptable programs—even for the most complex production flows.

Every machine is designed to protect the operator. Regardless of customer specifications or market configuration, CURSAL views safety as a main requirement, integrated into the design and supported by both active and passive devices to ensure true protection in every phase of operation.

We support both artisanal and industrial operations in their path toward technological and productive growth, offering customized solutions that range from sawmills and carpentries to manufacturers of pallets, flooring, furniture, windows, doors, and general construction.

CONTINUOUS CYCLE OPTIMIZATION WITH BELT FEEDING: MAXIMUM SPEED FOR HIGH VOLUME OUTPUT

TRV 1200 – TRV 1700 – TRV 2200 – TRV 2700 – TRV 2000

Our belt-feed optimizing cross-cut saws are a complete range of continuous feed machines designed to deliver accuracy and reliability even in demanding production environments.

Board positioning is managed by pre-tensioned motorized belts and precision-ground rubber pressure wheels with tight spacing, ensuring smooth, stable, and controlled feeding—even with curved, rough, or moist timber.

This mechanical configuration allows for very high-speed operation without losing control, maintaining consistent alignment and cut quality.

The integrated software processes real-time data from manual chalk marking or optical scanner, optimizing each piece based on the selected cutting mode.

Machines are equipped with blades \varnothing 500, \varnothing 550, \varnothing 600, and \varnothing 700 mm, tailored to any production need.

CURSAL optimizing saws can be used either as standalone units or within fully automated systems, offering maximum application flexibility and process control in line with Industry 4.0 standards.

BLADES OF VARIOUS DIAMETERS FOR ALL PRODUCTION NEEDS

MAXIMUM INTEGRATION FLEXIBILITY

CONSTANT GRIP, FLAWLESS FEEDING

HIGH SPEED, PERFECTLY CONTROLLED CUTS

SMART REAL-TIME OPTIMIZATION

ADVANCED MECHANICS, NUMERICAL SYNCHRONIZATION



CONTINUOUS CYCLE OPTIMIZATION WITH ROLLER FEED: WHEN THE WOOD RESISTS

ROLLER FEED: CONSTANT GRIP ON EVERY BOARD

REINFORCED STRUCTURE FOR HARD, WET OR WARPED WOOD

UP TO 120 M/MIN: HIGH SPEED AND CONTINUITY EVEN WITH DIFFICULT TIMBER

SIAX SOFTWARE: ADVANCED MANAGEMENT OF JOB ORDERS, MEASUREMENTS, PRODUCTION CYCLES, AND TRACEABILITY



TRV 2000 R – TROA – TROE

These optimizing saws equipped with motorized toothed rollers are designed to ensure continuous and reliable feeding, even under the toughest conditions - irregular, knotted, damp, twisted, or warped timber.

The hardened steel rollers deliver powerful and consistent traction.

Each wheel applies independent pressure, adapting automatically to the board's geometry and thickness.

Adaptive pneumatic clamping systems ensure stability even on wet, frozen, or longitudinally cracked wood.

Thanks to this unique mechanical setup, the machine can reach feed speeds of up to 120 meters per minute (depending on model), while maintaining high precision and production continuity – even during heavy-duty operations.

The integrated SIAX control software, also available in the A-EVO version, manages fixed and optimized cuts, reads defects markings, simulates the ideal cutting pattern, and oversees the entire production process.

Frequently combined with numerically controlled stops for fast and accurate positioning, these saws are ideal for high-precision cutting with minimal length variation.

Touchscreen programming enables fully automated, continuous operation without interrupting the process.

TRSI 500 – TRSI 600 – TRSI 700 TRGSI ANGLED CUT

CURSAL push-feed cross-cut saws combine high precision, cutting speed, and exceptional flexibility, adapting efficiently to a wide range of production needs.

The TRSI series, designed for 90° straight cuts, have become a standard in the wood industry. They are widely used in sectors such as windows and doors, packaging, construction, custom furniture, and woodworking in general.

The TRSI 500 model covers over 80% of typical daily requirements. For larger cross-sections or more intensive applications, the TRSI 600 and TRSI 700 offer larger blades and reinforced frames, ensuring stability and durability under heavy workloads.

With feed speeds of up to 250 m/min and cutting accuracy of ± 0.25 mm (upgradeable to ± 0.15 mm upon request), TRSI saws perform precise, real-time length or dimension cuts.

They manage length optimization, detect defects, execute automatic drilling, prioritize cut sequences, and provide complete traceability.

They guarantee consistent performance on both single boards and bundled packs.

When the process requires angled cuts, the TRGSI series comes into play. It handles angles from 20° to 160°, thanks to rotating pressure units, synchronized aligners, and advanced software capable of managing up to 1,400 different measurements with continuous precision.

Both TRSI and TRGSI lines feature a compact footprint, user-friendly touch interfaces, and seamless integration with customers' production and management software.

When integrated with CURSAL's automatic loading and unloading systems, TRSI and TRGSI ensure a continuous production flow, where every step is synchronised with every stage of the process aligned for maximum efficiency.

AUTOMATIC PUSH-FEED CROSS-CUT SAWS TRSI AND TRGSI – MAXIMUM VERSATILITY IN A SINGLE MACHINE

PRECISION 90° AND ANGLE CUTTING

INTEGRATED AUTOMATIC DRILLING SYSTEM

IN-LINE PRINTING AND LABELING FOR EACH PIECE

IN-LINE LOADERS AND UNLOADERS



CLASSIC SEMI-AUTOMATIC CROSS-CUT SAWS WITH OPERATOR CONTROLLED CUTTING



TVM 400 – TVM 500 – TVM 600 – TVM 700 – TOM 500

The TVM–TOM series combines robust construction, cutting precision, and great operational flexibility. Designed to handle single boards or packs of varying dimensions, these saws are available with Ø 400, Ø 500, Ø 600, and Ø 700 mm blades.

The TOM version also includes vertical and horizontal cutting, making it a valuable option for sawmill operations.

Unlike fully automated lines, here the operator evaluates each workpiece and confirms the cut manually, providing a higher level of control in the decision-making process.

A wide range of optional accessories is available to configure each system according to specific production needs.

These are low-maintenance machines with standardized components, easy to source even in regions with limited technical support.

These modular, custom-configurable systems are ideal for companies seeking reliability and continuity without depending entirely on automation.

AUTOMATIC CUTTING OF FIREWOOD AND WASTES



TRV 1200L – TRV 1600L

The TRV 1200L and TRV 1600L automatic cross-cut saws are engineered to turn wastes and trimmings into productive output, handling even irregular, overlapped, or disordered pieces with continuous cutting cycles.

Equipped with Ø550 and Ø700 mm blades, reinforced structure, and a sectional clamping system with independent cylinders, these models are built to handle the toughest material flows without interruptions.

The cutting process is fully managed by an industrial PLC, which controls cut sequences, feed rates, and productivity – with no manual intervention required.

Thanks to mechanical reliability, minimal maintenance, and readily available components, the TRVL series are a practical solution for eliminating waste storage and instantly boosting yield.



CV – SV – ACN: CURSAL AUTOMATED HANDLING SYSTEMS EFFICIENT – MODULAR – CUSTOM-BUILT

CURSAL's automated handling solutions – CV/SV series for vacuum-based loading/unloading, ACN series for unloading with mechanical grippers – are designed to ensure continuous workflow, high-speed cycles, and perfect integration with cross-cutting and optimizing lines.

Vacuum systems can be configured with suction bars with articulated supports divided into independent sectors, auto-shutoff valves, low-consumption metal ejectors, and unidirectional-cell rubber suction pads. Movements are precise and fluid, guided by recirculating ball bearings, with adjustable speed and CNC for maximum positioning accuracy.

The ACN models are built for automated stacking across multiple stations, using self-centering grippers, servo-assisted arms, and a reinforced steel frame designed for 24/7 industrial use. All systems are modular and ready for the integration of optional components such as automatic air blowers, batten dispensers, batten lifters, roller conveyors, and chain conveyors. CURSAL automation ensures uninterrupted operation – no breaks, no shifts, no downtime. It guarantees uninterrupted productivity, with a fast and measurable return on investment.



**ENGINEERED ACCESSORIES:
WHERE THE MACHINE ENDS,
THE SYSTEM BEGINS**

CURSAL accessories are the result of decades of technical refinement.

They are engineered to seamlessly integrate into production lines, offering a modular and configurable architecture that turns each unit into a strategic asset for improving efficiency and automation.

Each component is designed to enhance the overall production flow making it smoother, more synchronized, and responsive to process variability.

**CURSAL:
UNCOMPROMISING SAFETY**

At CURSAL, safety is not an option—it's built into the design.

Every machine complies with Directive 2006/42/EC and incorporates certified solutions that protect operators and ensure adherence to international safety standards.

Our extensive industry experience has positioned CURSAL as an active contributor in the development of European regulations for cutting machinery—among the most complex in terms of risk management.

**CURSAL SUPPORT:
GUARANTEED OPERATIONAL
CONTINUITY**

The value of a CURSAL machine goes far beyond installation.

Our after-sales service ensures long-term performance, backed by a digital technical archive active since 2000, giving instant access to machine drawings, configurations, and service records.

We provide real-time remote assistance, targeted technical support, and regular software updates, to ensure your system stays aligned with the latest industry standards

**RICAMBIMACCHINE.COM:
YOUR DEDICATED SPARE PARTS
PORTAL**

RicambiMacchine.com is CURSAL's official platform for sourcing original spare parts for cross-cutting systems.

The platform is designed for fast, intuitive navigation, allowing you to locate components by code, serial number, category, or machine model, with full compatibility guaranteed.

In addition to spare parts, the portal also provides instant access to your order history for efficient stock management.

**INTELLIGENT SOFTWARE
SOLUTIONS
ENGINEERED BY CURSAL**

CURSAL develops its own in-house software for cutting optimization and inventory control, aimed at reducing waste, maximizing efficiency, and ensuring smooth, uninterrupted production.

Our numerical control systems are paired with intuitive user interfaces that simplify operations and minimize downtime.

Every workpiece is tracked and linked to its processing data, allowing for full traceability and streamlined production management.



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**SELECT THE RIGHT SYSTEM FOR SMALL, MEDIUM, OR LARGE CROSS-SECTIONS
BASED ON YOUR SPECIFIC PRODUCTION REQUIREMENTS**

