Software

Open, Smart and Simple Software
to enhance productivity of woodworking industry

M
Maestro
Digital Systems

SCM
woodworking technology

SMART SOFTWARE SOLUTIONS TO ENHANCE PRODUCTIVITY OF THE WOODWORKING INDUSTRY

SOFTWARE DESIGNED TO BE OPEN, SMART AND SIMPLE.

The software solutions powered by SCM are developed to optimize machine usage as well as the entire process, also providing integration with the other software existing in the company.

Tailored on the machine technology as well as on the entire process, all SCM software share a common mission:

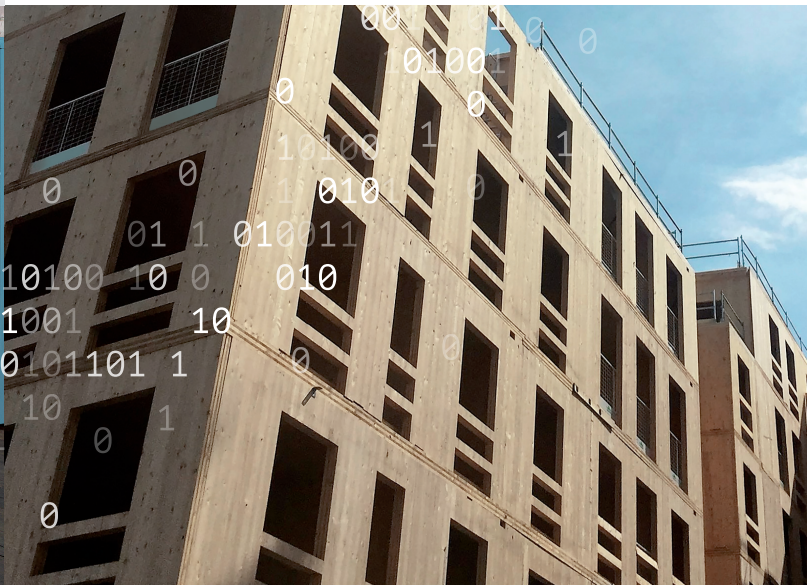**Easy to use**, so that any operator can easily and confidently learn and use the software;

Smart, with algorithms and computing modules aiming at the best possible result;

Open, in order to integrate existing software, and provide customer the coverage of all his process.

Software

MAESTRO OFFICE AND MAESTRO ACTIVE,
A STREAM FLOW OF SOFTWARE FROM THE DESIGN UP TO THE PRODUCTION

FROM THE OFFICE TO THE MACHINE

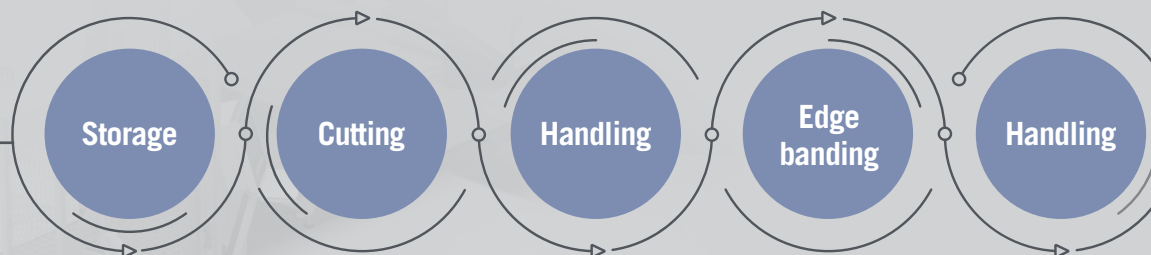**Maestro** office

Maestro active

The SCM software covers all the **SCM technologies**, throughout the different stages of woodworking processes:
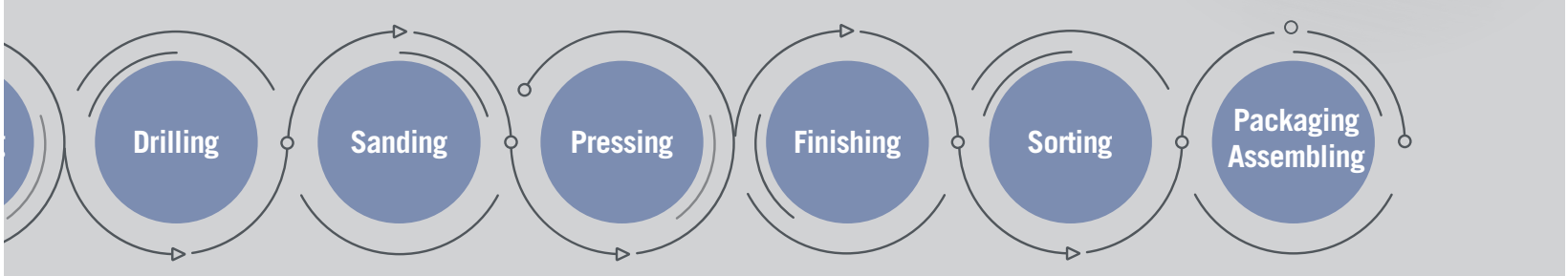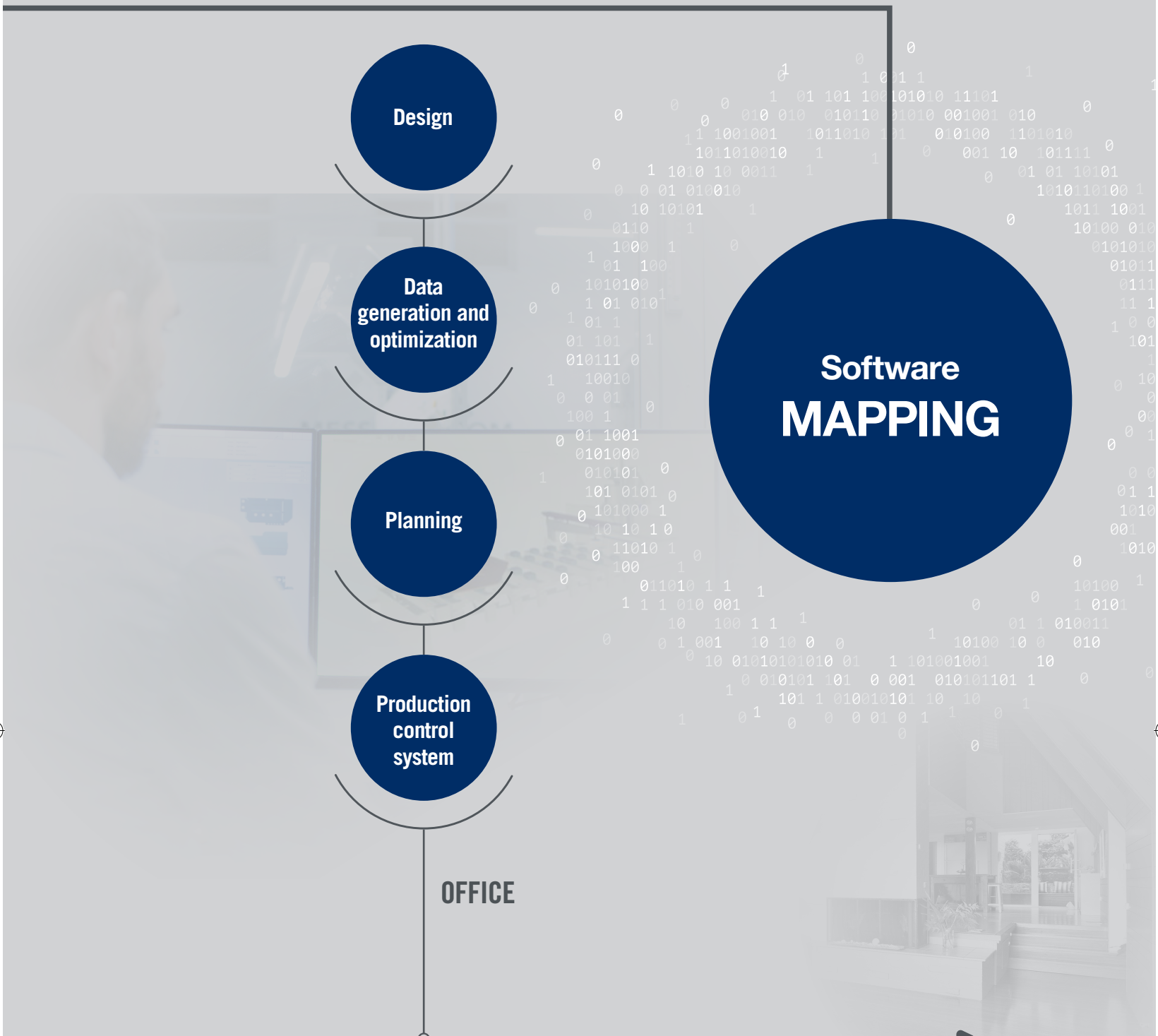
Maestro office embodies software that are used in the office for the different machine technologies.These software are used during the design, optimization, simulation stages, before the production. Given a technology these software perfectly communicates with their HMI software heading to the Maestro active family.

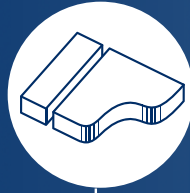**Maestro active** refers to the different HMI software of the SCM machines, sharing a common look and feel and interaction modes.

MACHINE

Storage Cutting Handling Edge banding Handling
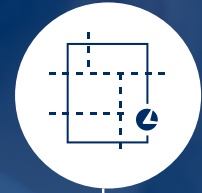
Design

Data generation and optimization

Planning

Production control system

OFFICE

Software MAPPING

Drilling

Sanding

Pressing

Finishing

Sorting

Packaging Assembling

OFFICE

Maestro cnc

Maestro ottimo cut
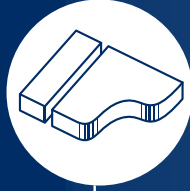
Maestro cnc
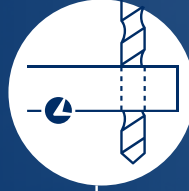
Maestro powerset

Maestro beam&wall

Maestro pattern

Maes edg

CNC MACHINING CENTRES FOR PANEL AND SOLID WOOD

DRILLING SOLUTIONS

CNC MACHINING CENTRES FOR TIMBER CONSTRUCTION

BEAM SAWS

EDGE BA

Maestro active cnc

Maestro active cnc

Maestro active beam&wall

Maestro active cut

Maes active

MACHINE

Maestro office

Maestro edge

... BANDERS   **WIDE BELT SANDERS**   **THROUGHFEED MOULDERS**   **DOUBLE-END TENONERS**   **STORAGE SYSTEMS**   **AUTOMATIC LINES AND CELLS**
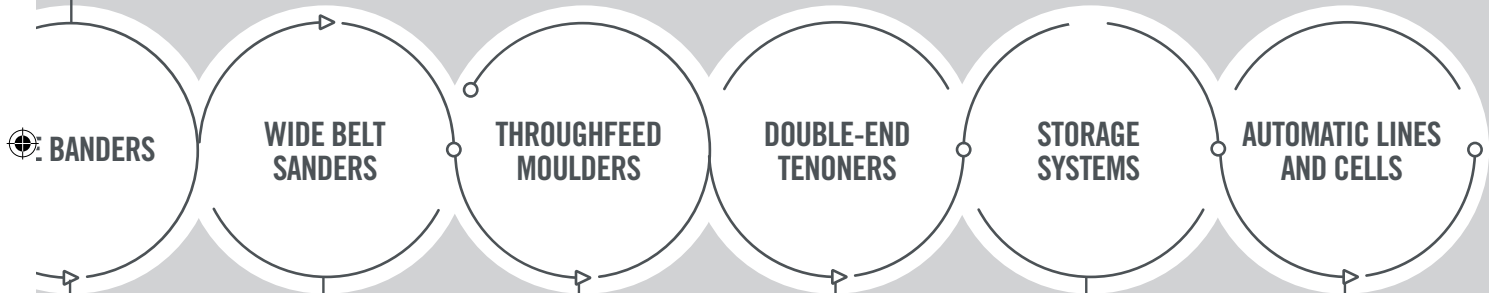
Maestro active edge   **Maestro active sand**   **Maestro active 4-side**   **Maestro active square**   **Maestro active store**   **Maestro active watch**

Lines and cells

Maestro active

Maestro office

office

PROGRAMMING SOFTWARE FOR

- CNC MACHINING CENTRES FOR PANEL AND SOLID WOOD

- DRILLING SOLUTIONS

- CNC MACHINING CENTRES FOR TIMBER CONSTRUCTION

- BEAM SAWS

- EDGE BANDERS

MAESTRO CNC
SOFTWARE FOR CNC PROGRAMMING

According to Maestro's software mission, SCM CNC machining centres can offer software that assist customer from the design of the workpiece up to the production.

Maestro cnc. In the office, before the production, the design and programming system **Maestro cnc** ensures that all the wood workings are quickly and easily programmed thanks to smart functions (app and macros libraries) built to program any machine operation with a mouse click. Another click away and cnc programs are automatically generated.

Software mapping

Design

Programming and data generation

Maestro cnc

OFFICE

MACHINE

Cutting

Drilling/Routing/Edge banding

Maestro active cnc
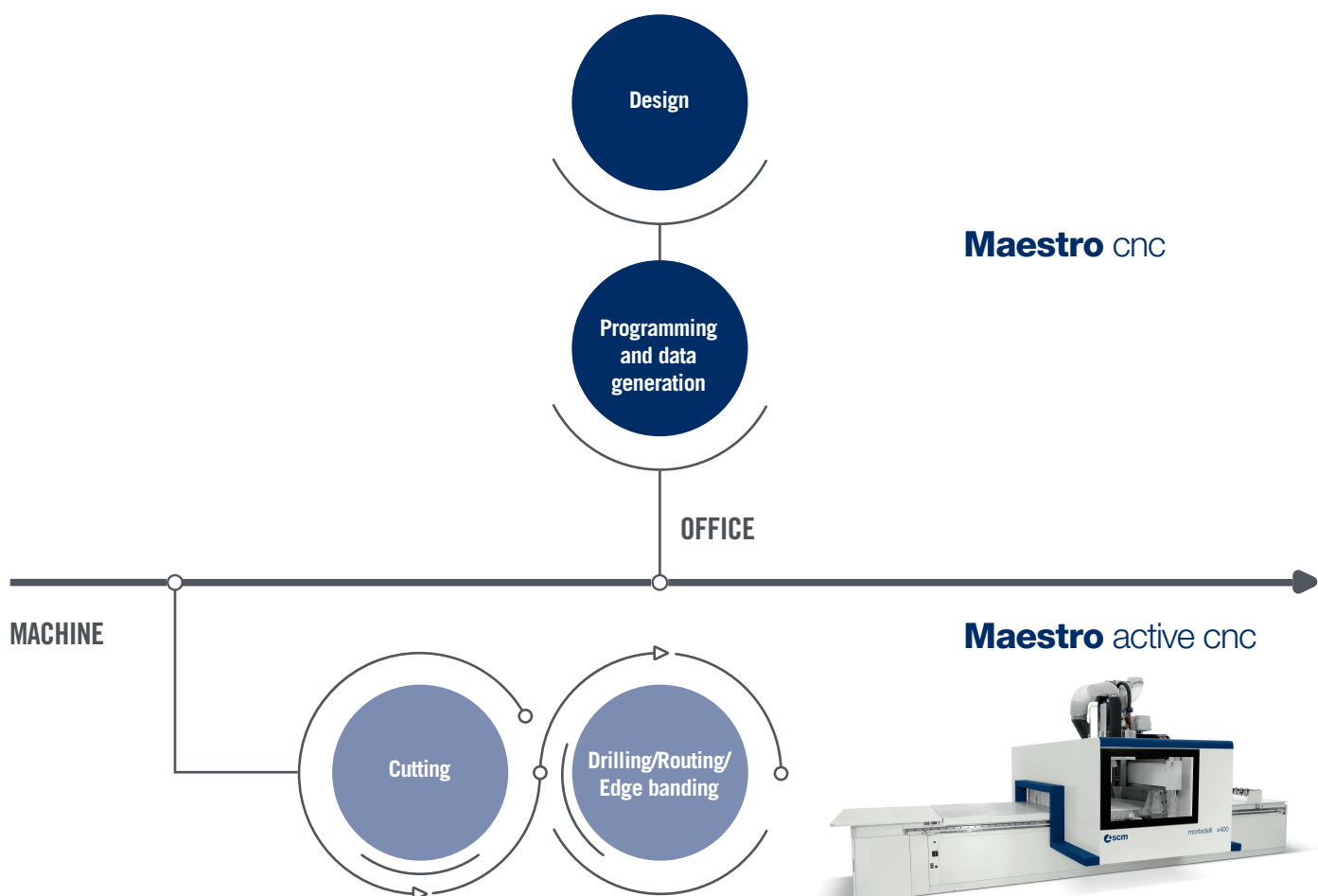
CNC MACHINING CENTRES FOR PANEL AND SOLID WOOD

Maestro cnc is the software for the design of the work piece, to program SCM machining centres. Large graphic previews of the work piece with its wood workings, of the machine and of the tools, together with immediate functions ensure the most comfortable use and best result.

BASIC FUNCTIONS

Workpiece drawing. The CAD module makes the creation of the geometry of the piece easy and quick.

DXF import. With the DXF import, 2D CAD drawings can either be imported or converted directly into complete programs via layer assignment.

Tools management and tool path simulation. Tools can be easily managed and tool path can be simulated beforehand.

Working table management. Working table is also graphically programmed and configured.

Cycle time can be calculated before starting the production.

Apps and Macros. Maestro cnc contains a library of programming functions that are always available and easy to use, developed by SCM for the production of parts for doors, windows, stairs, furniture and furnishings.

Technology database. The database allows customer to save machinings. Once the machining has been saved it can be applied any time on different geometries.

BENEFITS AT A GLANCE

Complete. Function completeness as well as a specific CAD-CAM software in the market, but whose uniquely optimized for your SCM machine.

Accurate. Great accuracy in programming, thanks to the 3D visualizations of workpiece, machines, tools and clamping aids.

For everybody. Very easy to use, any operator can learn and start up quickly to use Maestro design tool.

MAESTRO CNC
SOFTWARE FOR CNC PROGRAMMING

ADDITIONAL FUNCTIONS

Maestro 3d - Unique in the creation of 3D objects
Integrated module designed to program three dimensional objects on 5 axes machining centres.
Import and processing of the most used 3d file formats: STEP, IGS, 3D-DXF, STL.
Automatic detection of holes and channels in the 3d module.
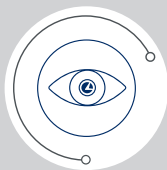
Maestro pro view - Unique 3D display
3D Simulator that allows users access to a three dimensional model of their machine in their office and view the operations that will be carried out during the production in advance on their PC.

Maestro mls connector - Total integrability
Connector for third-parties design software.

SPECIALIZED MACHINING

Maestro nest - Unique nesting process
Maestro nest is the new nesting optimizer. It imports cutting lists provided in any format (.csv, dxf, etc.) and generates the optimized cutting pattern. Available in "rectangular" or "free form" module.

Maestro label - Unique labeling process
Integrated module to manage label's models, which develops labels by inserting texts, images, parameters and the main barcode formats.

Maestro cabinet - Unique in the creation of furniture
This application is designed for the home and office furniture sector to design furniture and program cabinet production step by step.

DRILLING SOLUTIONS

Maestro powerset is SCM's tooling creation and optimization software for morbidelli pwx100 drilling centres.

Maestro powerset is a unique solution in the market born from the need to stop **wasting time** on tooling study procedures and to reduce human **mistakes** maintaining the **know-how** of the process.

Maestro powerset is the solution developed by SCM to provide the customer with the most efficient combination of tools according to different production mixes.

BASIC FUNCTIONS

Optimized drilling head's tooling creation

Production simulation

Creation of a detailed report of processing steps and cycle time of any single panel and the relative batch

MAESTRO POWERSET
SOFTWARE FOR DRILLING OPTIMIZATION

BENEFITS AT A GLANCE

Convenient. Greater **production efficiency** and **saving of time** for the machine tooling.
Time saving. Avoid wasting time on tooling study procedures.
No human error. Reduce human mistakes maintaining the know-how of the process.

Software mapping

Design

Programming and data generation

Maestro cnc

Drilling and tooling optimization

Maestro powerset

OFFICE

MACHINE

Drilling

Maestro active cnc
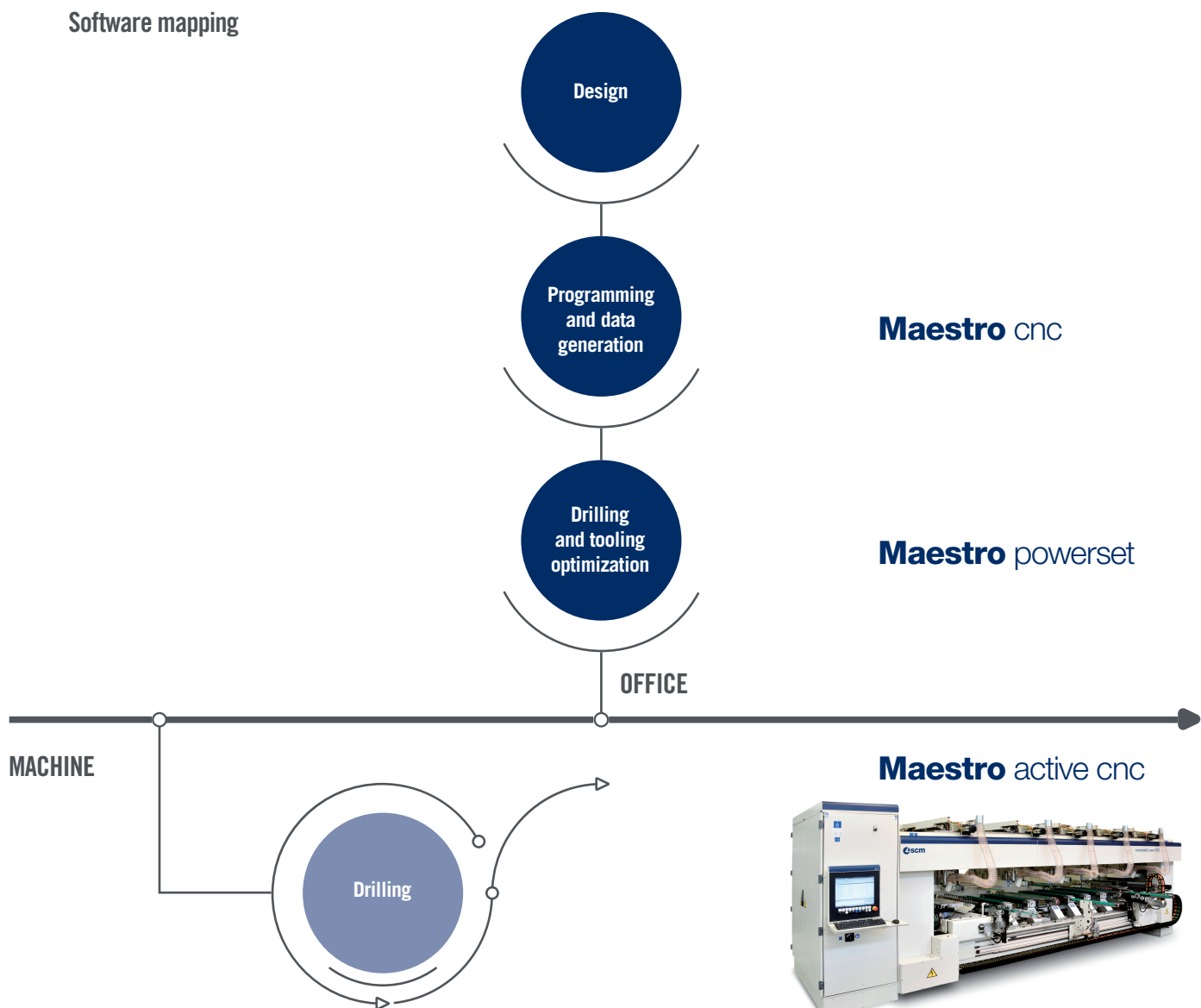
CNC MACHINING CENTRES FOR TIMBER CONSTRUCTION
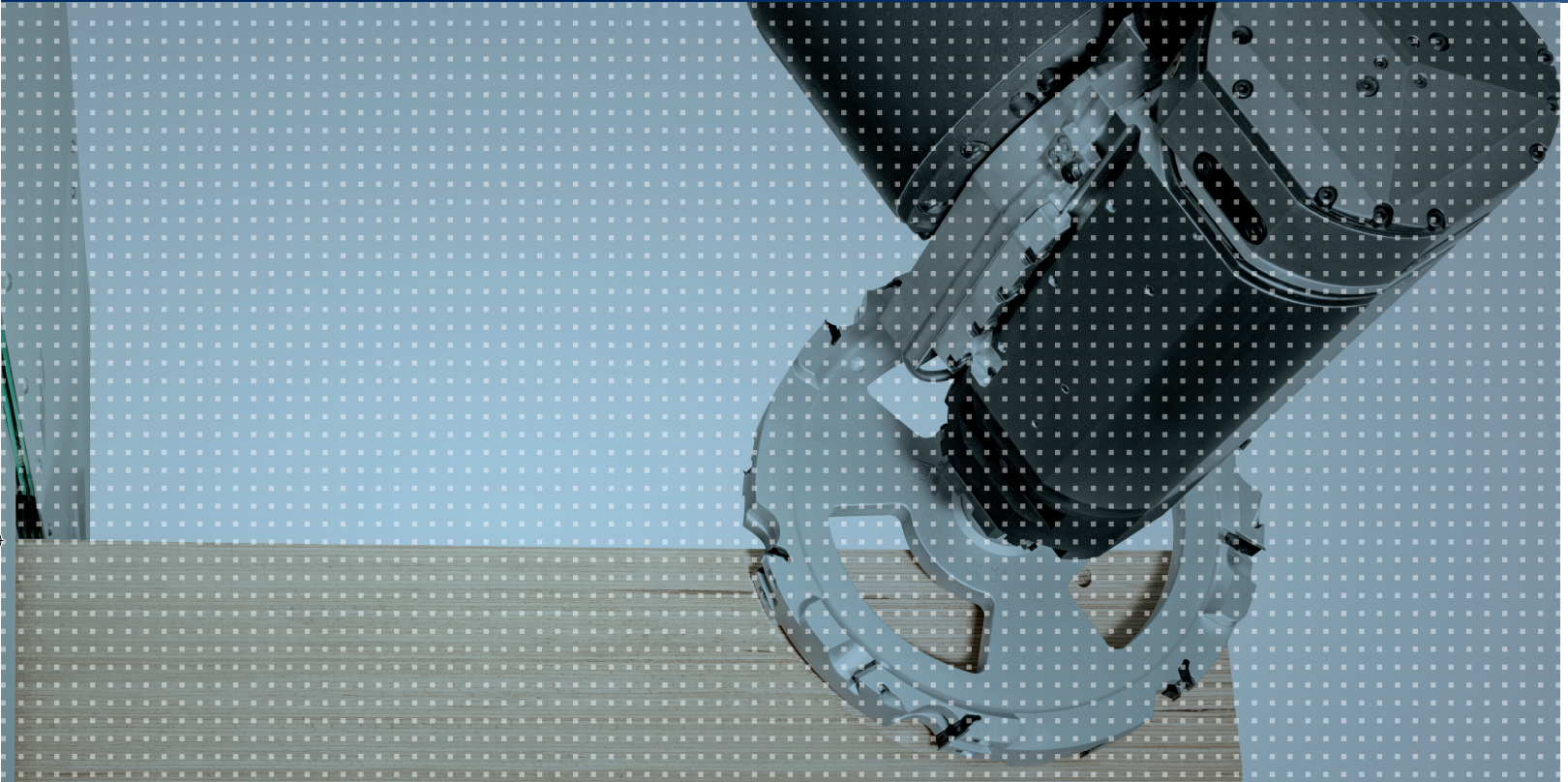
Maestro beam&wall is the software for programming and management of SCM carpentry machines.

Maestro beam&wall plays different roles throughout the timber construction process:

- **Import.** Possibility to import BTL format and convert it to part programs. Simple import and processing of even very complex projects thanks to the integrated "nesting function".

- **Workpiece design**. Maestro beam&wall provides a clear 3D representation of workpieces and processing steps. Alternative processing strategies can be selected if needed to ensure fast and tear-free processing.

- **Simulator.** The chosen strategy can then be simulated by Maestro beam&wall to check every processing step and to detect any potential collisions between tools and clamping equipment in advance.

- **Execution.** CNC data is automatically generated and can be executed on Maestro beam&wall machine panel PC.

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MAESTRO BEAM&WALL
SOFTWARE FOR BEAM AND WALL PROCESSING

BENEFITS AT A GLANCE

Accurate. Clear 3D representation of workpieces and processing steps.

Open and integrated. Compatibility with the most popular CAD used in the carpentry sector.

Freedom. Possibility to program manually and realize automatically any type of geometry.

No errors. Fully automatic tool assignment for each processing step.

For everybody. Easy to use menu-driven user interface.

Software mapping
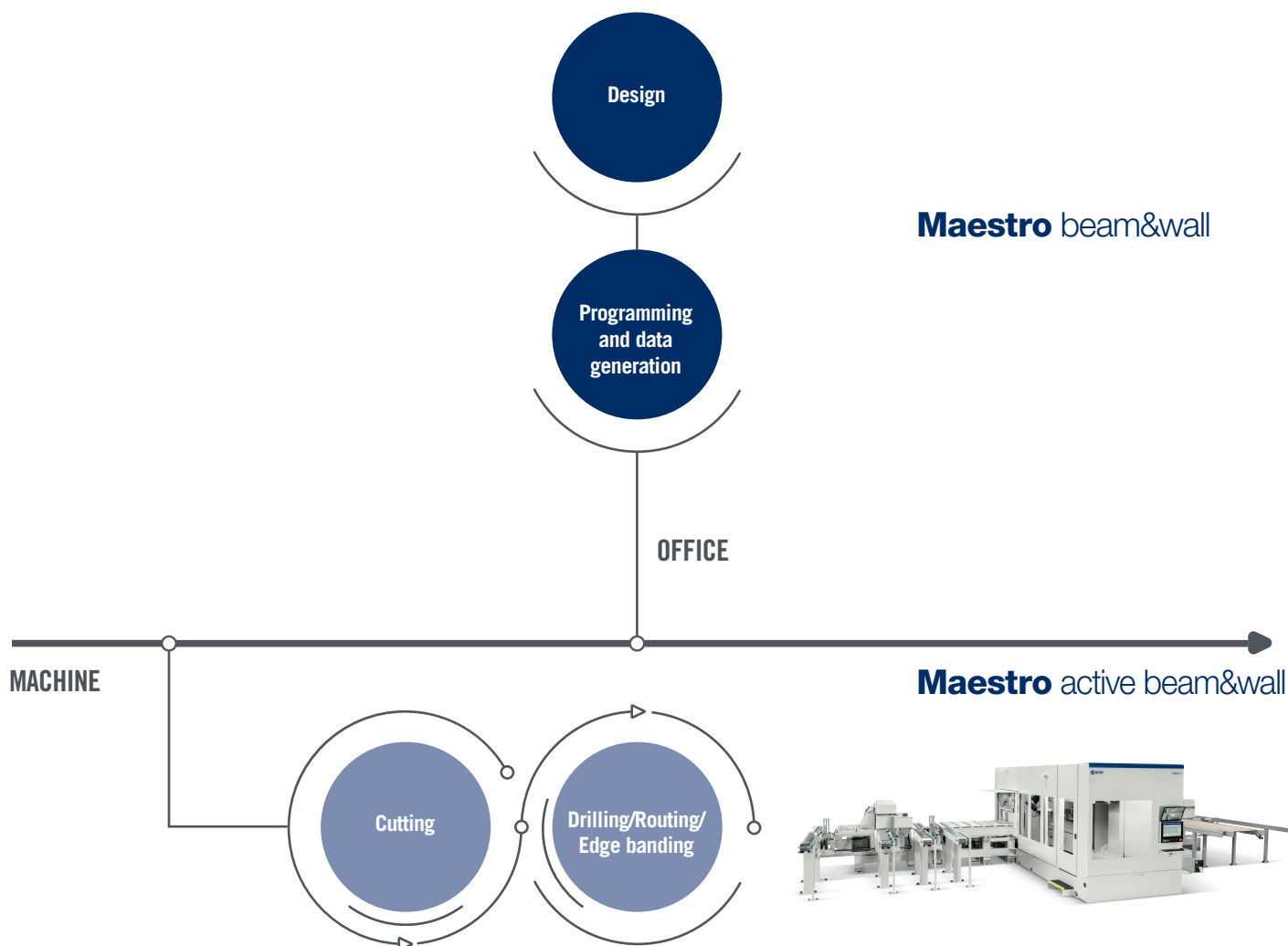
Design

Maestro beam&wall

Programming and data generation

OFFICE

MACHINE

Maestro active beam&wall

Cutting

Drilling/Routing/Edge banding

BEAM SAWS

MAESTRO PATTERN OFFICE AND MAESTRO OTTIMO CUT
SOFTWARE FOR BEAM SAWS CUTTING OPTIMIZATION

SCM beam saws offer software that assist customer from optimizing the cutting of panel-shaped materials to the execution of the cutting programs.

SCM Cutting optimizers: Maestro pattern office and Maestro ottimo cut. In the office, before the production, after uploading the parts list Maestro ottimo cut provides different choices of optimized cutting patterns depending on requirements: this way results can be based on reducing waste or focus on the shortest production time. An easier optimization tool is also provided with the machine (Maestro pattern office).

Software mapping

Cutting lists

Optimized cutting patterns

Maestro pattern office
Maestro ottimo cut
Maestro converter cut

OFFICE

MACHINE

Cutting

HMI SOFTWARE
FOR BEAM SAWS

Maestro active cut
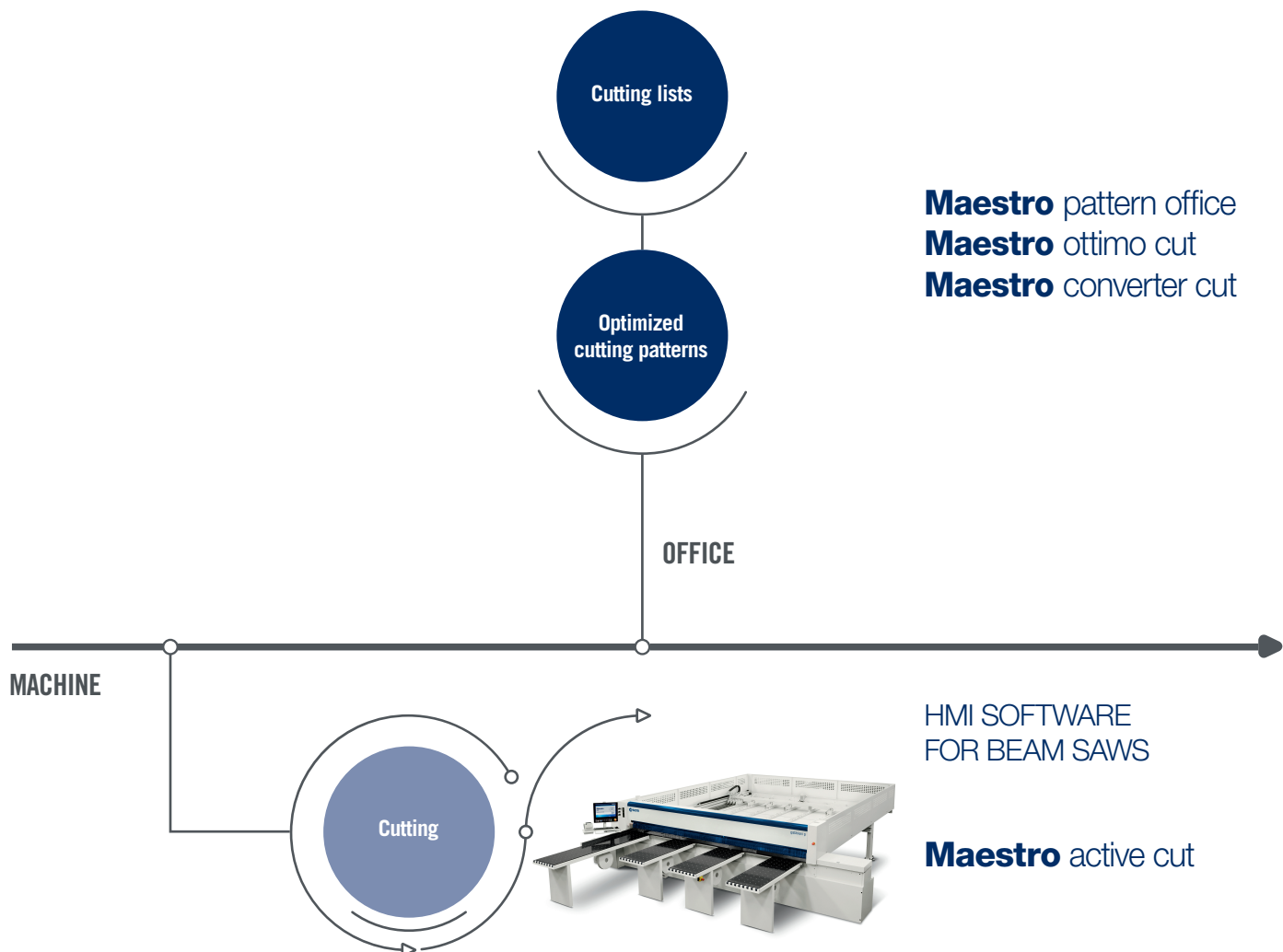
BEAM SAWS

SCM beam saws are always provided with **Maestro pattern office**, the standard entry-level optimization software. In addition, with **Maestro ottimo cut** we offer our customers user-friendly scalable software for optimizing the cutting of the materials shaped from the panel.

Whether reducing the time or the waste, the overall cost of cutting is optimized.

Finally, **Maestro converter cut** allows to integrate any beam saws optimizer with SCM beam saws.

MAESTRO PATTERN OFFICE

Maestro pattern office is the Linear cutting optimization program that can be used in the office for simple and efficient creation of cutting programs.

ADDITIONAL MODULES

Maestro pattern import is the optional plug-in module which enables Maestro pattern importing production data directly from an MS excel file.

BENEFITS AT A GLANCE

Cost reduction. Waste reduction.

Get started in a click. Fast parameters set-up and configuration.

More productivity. Optimization capacity up to 15.000 pieces.

MAESTRO PATTERN OFFICE AND MAESTRO OTTIMO CUT
SOFTWARE FOR BEAM SAWS CUTTING OPTIMIZATION

MAESTRO OTTIMO CUT

Maestro ottimo cut is the professional software for controlling the entire costing and optimization process of the beam saw.

FUNCTIONALITIES

- Materials, pieces and edges stocks management
- Grained panels management (longitudinal and cross)
- Optimization of orders and multi-orders
- Preventive calculation of costs and machining time
- Customized report printing with statistical production 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
- Expansible data base with Maestro ottimo import add-on

MAESTRO CONVERTER CUT

Maestro converter cut is a conversion program that allows to integrate via .ptx format any optimizer for beam saws.

BENEFITS AT A GLANCE

Easy to use. Quick and easy data entry.

Full integration. Open optimizer can import data from csv list.

Fast optimization results. Processing huge lists - quick response time.

Reporting. Standard and customizable.

Automatic post processing to the machine. Send results immediately to the machines.

EDGE BANDERS
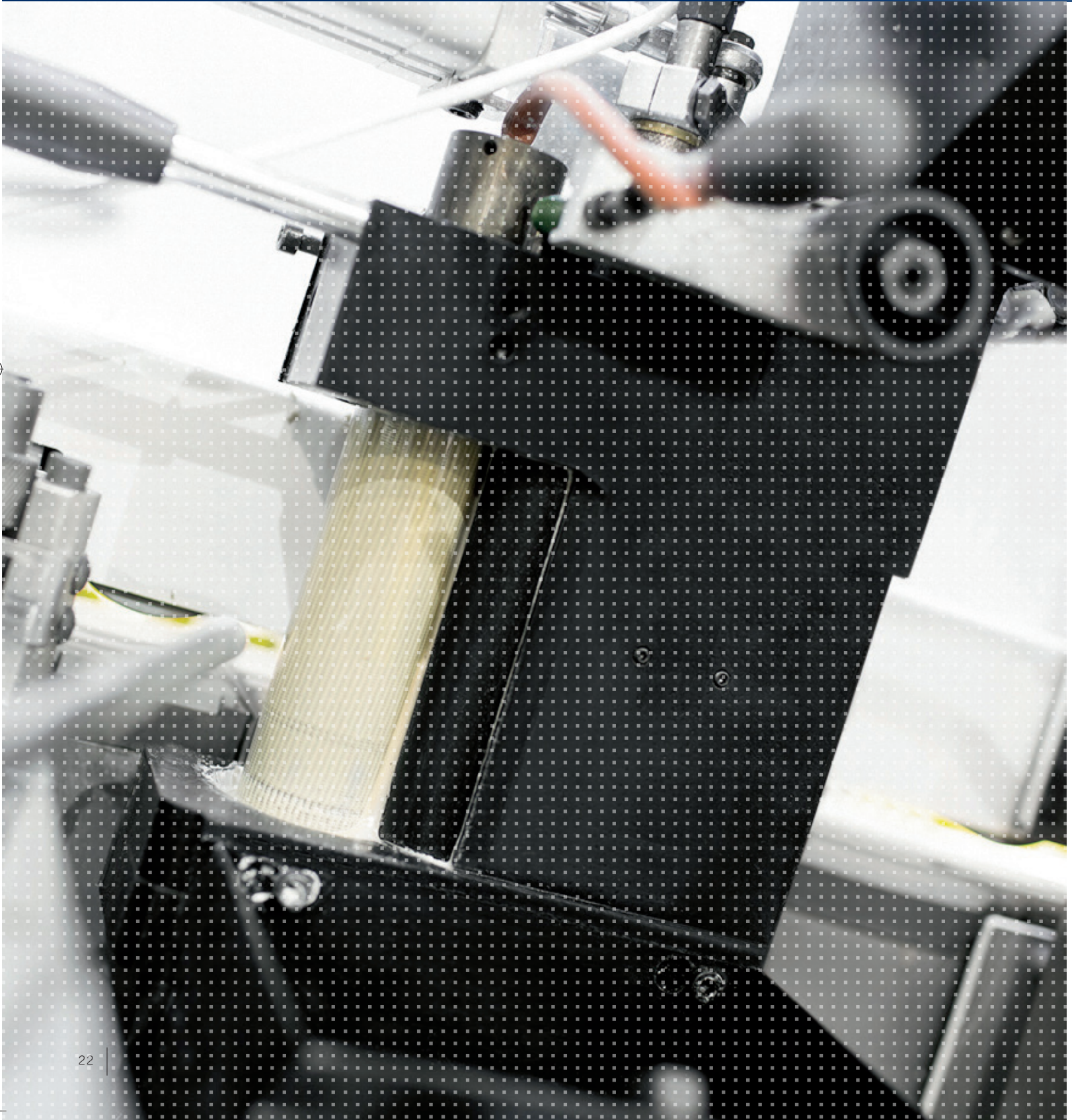
MAESTRO EDGE
SOFTWARE FOR EDGE BANDING PROGRAMMING

SCM edge bander software assists customer from the programming to the execution of edge banding programs.

Maestro edge. In the office, before the production, it is possible to program and generate edge banding programs directly from the office.

BENEFITS AT A GLANCE

Reduced programming times, thanks to the possibility to anticipate the edge bander programming in the office.

Full integration between the software in the office and Maestro active, the software on the machine.

Software mapping

Programming and data generation

Maestro edge

OFFICE

MACHINE

Maestro active edge

Edge banding
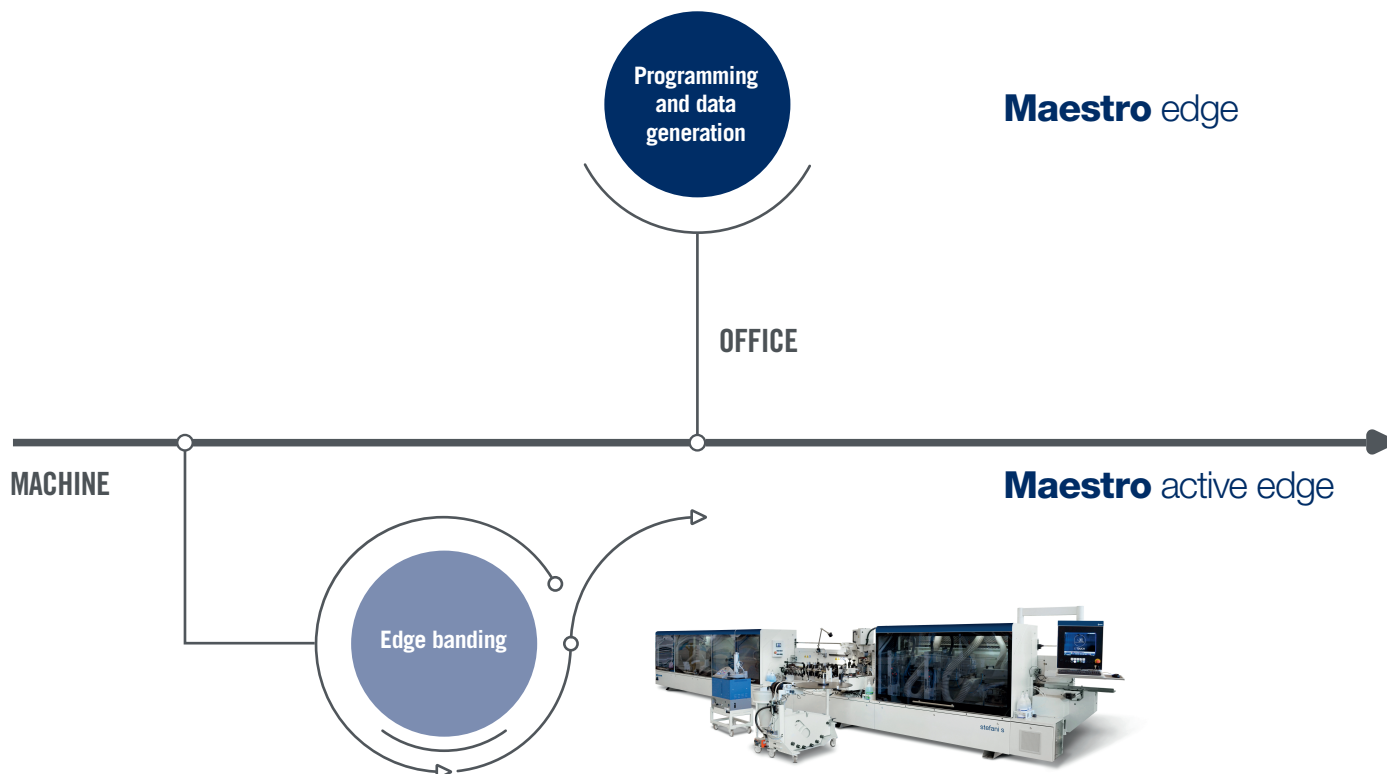
M

Maestro active

machine

HUMAN–MACHINE
INTERFACE SOFTWARE

CNC MACHINING CENTRES FOR PANEL AND SOLID WOOD	DRILLING SOLUTIONS	CNC MACHINING CENTRES FOR TIMBER CONSTRUCTION	BEAM SAWS	EDGE BANDERS	WIDE BELT SANDERS	THROUGHFEED MOULDERS	DOUBLE-END TENONERS	STORAGE SYSTEMS	AUTOMATIC LINES AND CELLS
Maestro active cnc	Maestro active cnc	Maestro active beam&wall	Maestro active cut	Maestro active edge	Maestro active sand	Maestro active 4-side	Maestro active square	Maestro active store	Maestro active watch

Lines and cells

MAESTRO ACTIVE:
UNIFIED HMI SOFTWARE FOR MACHINE CONTROLLING

MAESTRO ACTIVE. A REVOLUTIONARY APPROACH TO INTERACT WITH YOUR SCM MACHINES

Maestro active is the new operator interface software which has been unified across all SCM technologies. A single operator can easily and confidently run multiple machines due to controller and interface consistency: regardless the machine, Maestro active maintains the same look&feel, with many identical icons and navigation buttons, thus ensuring the same approach to interaction.

The new interface has been specifically designed and optimized for immediate use via touch screen.

Graphics have been redesigned for simple and comfortable navigation, with tablet-like icons on touch screen controller.

Improved productivity thanks to integrated help and recovery procedures that reduce the possibility of error from the operator's side.

OFFICE

For each machine technology the software used in the office talks with its Maestro active.

| CNC MACHINING CENTRES FOR PANEL AND SOLID WOOD | DRILLING SOLUTIONS | CNC MACHINING CENTRES FOR TIMBER CONSTRUCTION | BEAM SAWS | EDGE BANDERS | WIDE BELT SANDERS | THROUGHFEED MOULDERS | DOUBLE-END TENONERS | STORAGE SYSTEMS | AUTOMATIC LINES AND CELLS |

MACHINE

| Maestro active cnc | Maestro active cnc | Maestro active beam&wall | Maestro active cut | Maestro active edge | Maestro active sand | Maestro active 4-side | Maestro active square | Maestro active store | Maestro active watch |

Lines and cells

BENEFITS AT A GLANCE

Different machines, one user interface. Immediate access to the programming of all SCM machines.

Full control of production performances. The creation of customizable reports by operator, shift, program, forecast period (and much more) allows to monitor, optimize and improve the production performance.

Organize your production, thanks to the possibility to create different users with different roles and work shifts.

Console eye-M: smart, fair, interactive, effortless, revolutionary.
SCM innovative touch screen console eye-M allows a comfortable easy navigation and use of the standardized user interface Maestro active. Console eye-M is characterized by a full widescreen monitor (21.5") to ensure an effortless, convenient experience.

INTERFACE SOFTWARE, SUPERVISOR AND CONTROL FOR STORAGE SYSTEMS
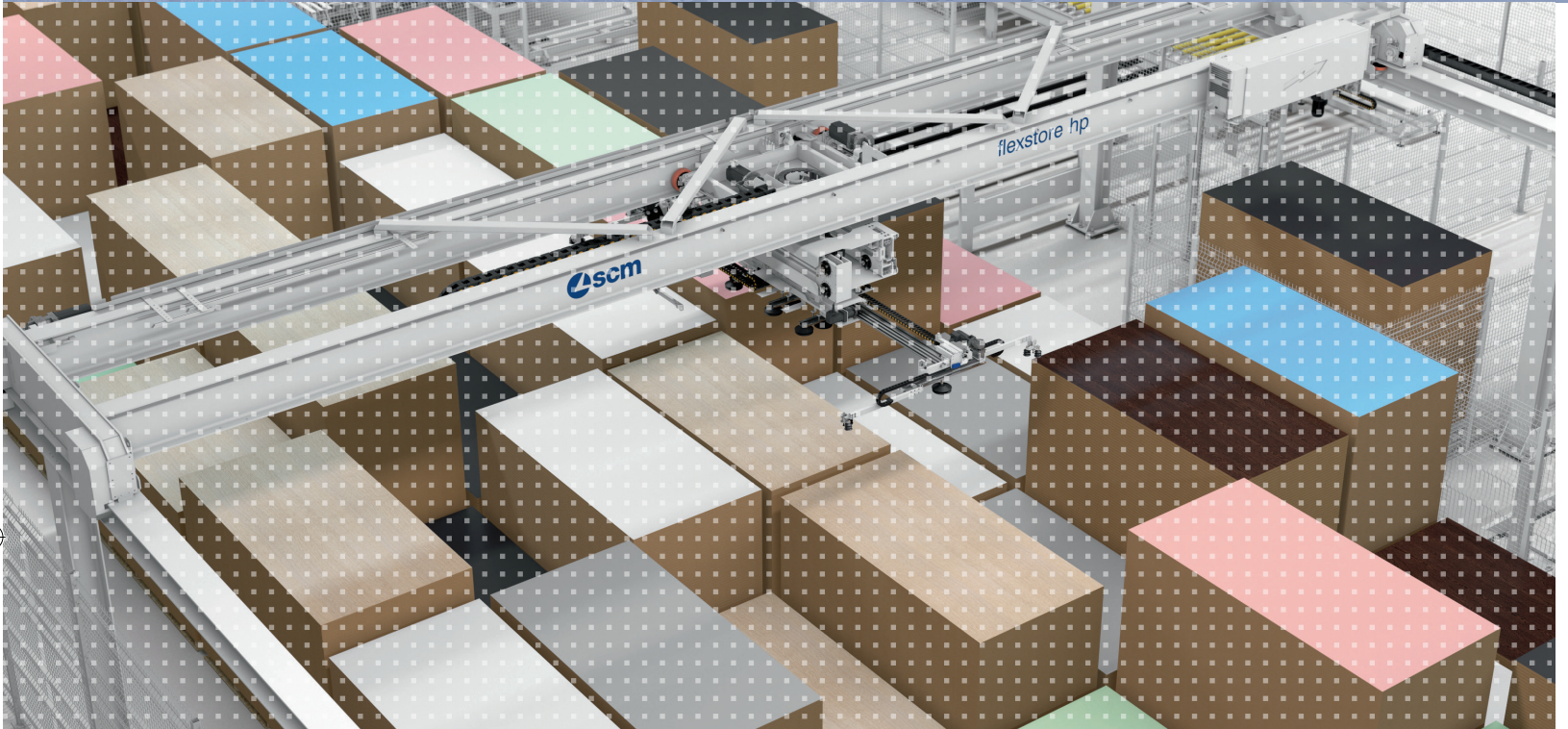
Maestro active store is the software that fully supervises and controls SCM storage systems.

Maestro active store optimizes all processes in the storage:

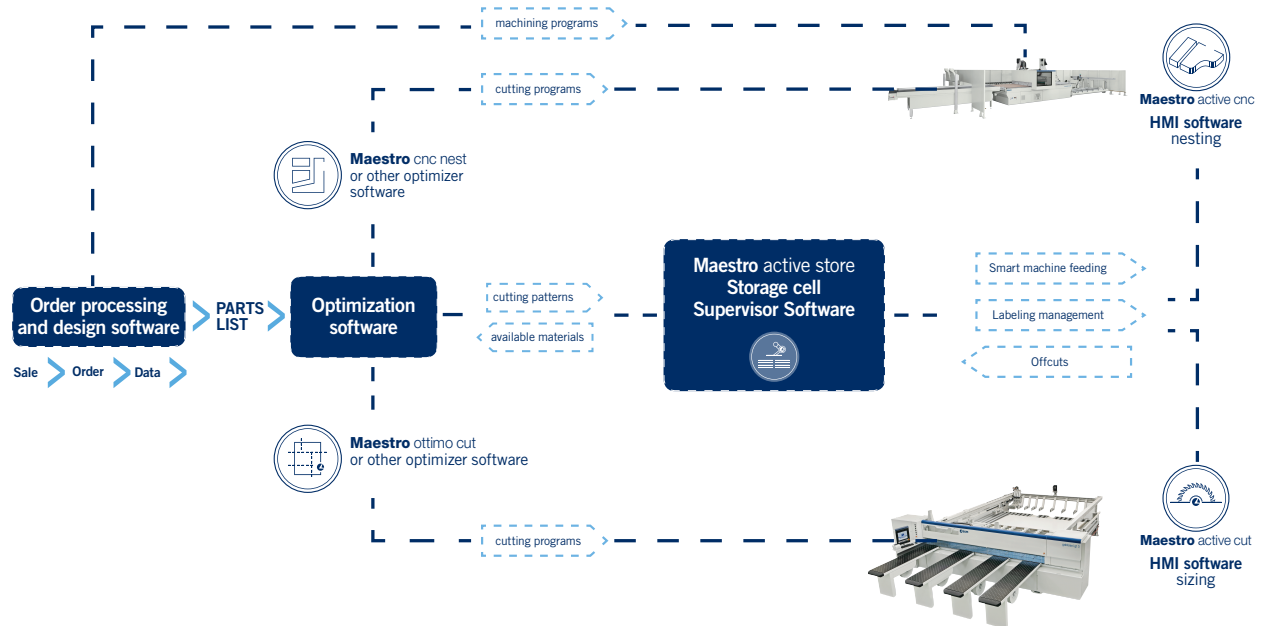- Optimizing the material movements;
- Managing the offcuts;
- Real-time controling the status and the operations of the whole cell managed by SCM flexstore storage system
- Integrating the storage order processing with the purchase system

Maestro active store directly communicates with:

- The cutting optimizer, receiving from the optimizer the optimized cutting patterns and returning to the optimizer the material availability for further optimizations.
- Beam saws and CNC nesting machines, optimizing the material movements between the storage and the machines.

MAESTRO ACTIVE STORE
SOFTWARE FOR STORAGE SYSTEMS

Process software map

machining programs

cutting programs

Maestro active cnc
HMI software
nesting

Maestro cnc nest
or other optimizer
software

Order processing
and design software

PARTS
LIST

Optimization
software

cutting patterns

available materials

Maestro active store
**Storage cell
Supervisor Software**

Smart machine feeding

Labeling management

Offcuts

Sale   Order   Data

Maestro ottimo cut
or other optimizer software

cutting programs

Maestro active cut
HMI software
sizing

Maestro active store: smart storage management system

FUNCTIONS AND BENEFITS AT A GLANCE

Adjustable optimization for maximum storage productivity. Smart machine feeding to maximize the productivity of the cell.

**Full integration.** Full integration with customer ERP, MES and other optimization software.

Full control of real time storage management. Materials location real-time visualization for real-time process monitoring.

Productivity enhancement. Dynamic storage sorting and optimal stocks planning according to customer material use in order to minimize picking time.

Cost reduction. Offcut management with offcut availability and location display even if stored in external storage.

Full control of production performance. Report generator to analyze data and enhance the line productivity.

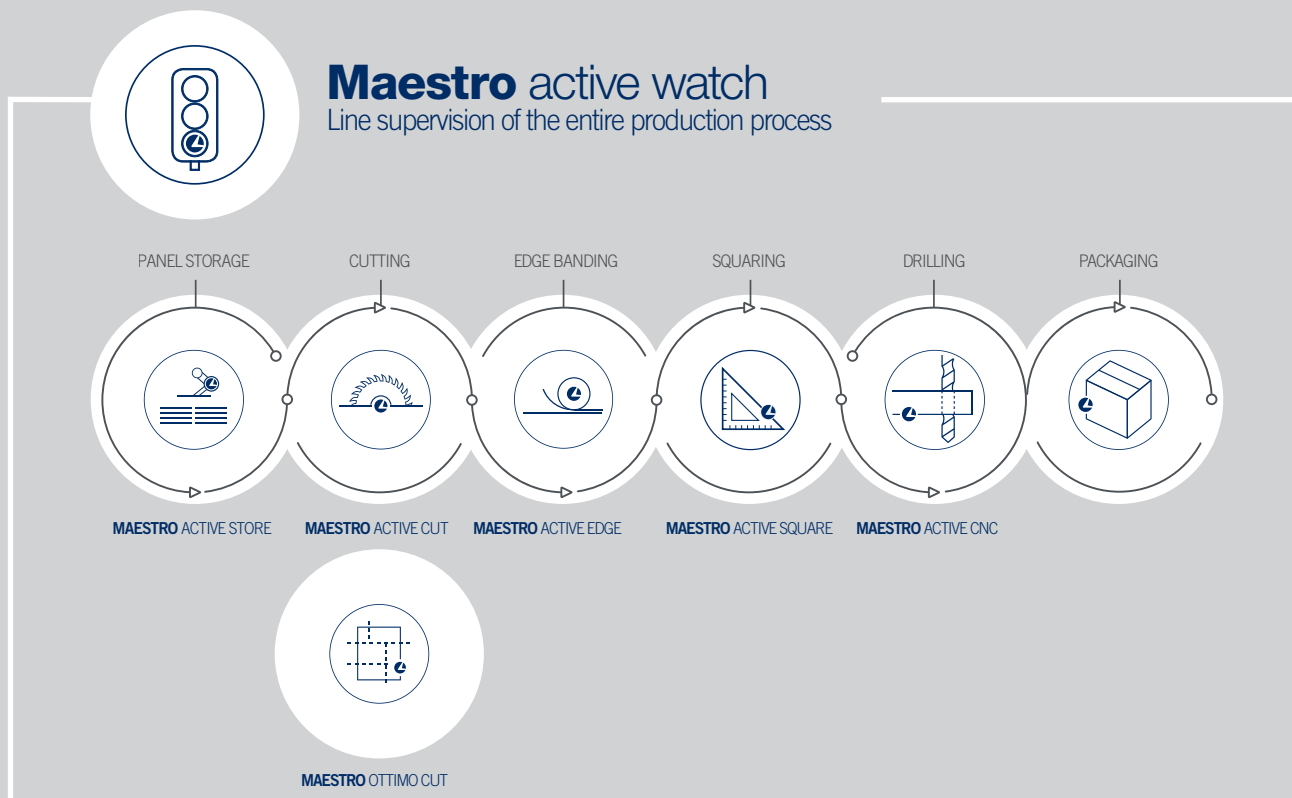# INTERFACE SOFTWARE, SUPERVISOR AND CONTROL FOR AUTOMATIC LINES
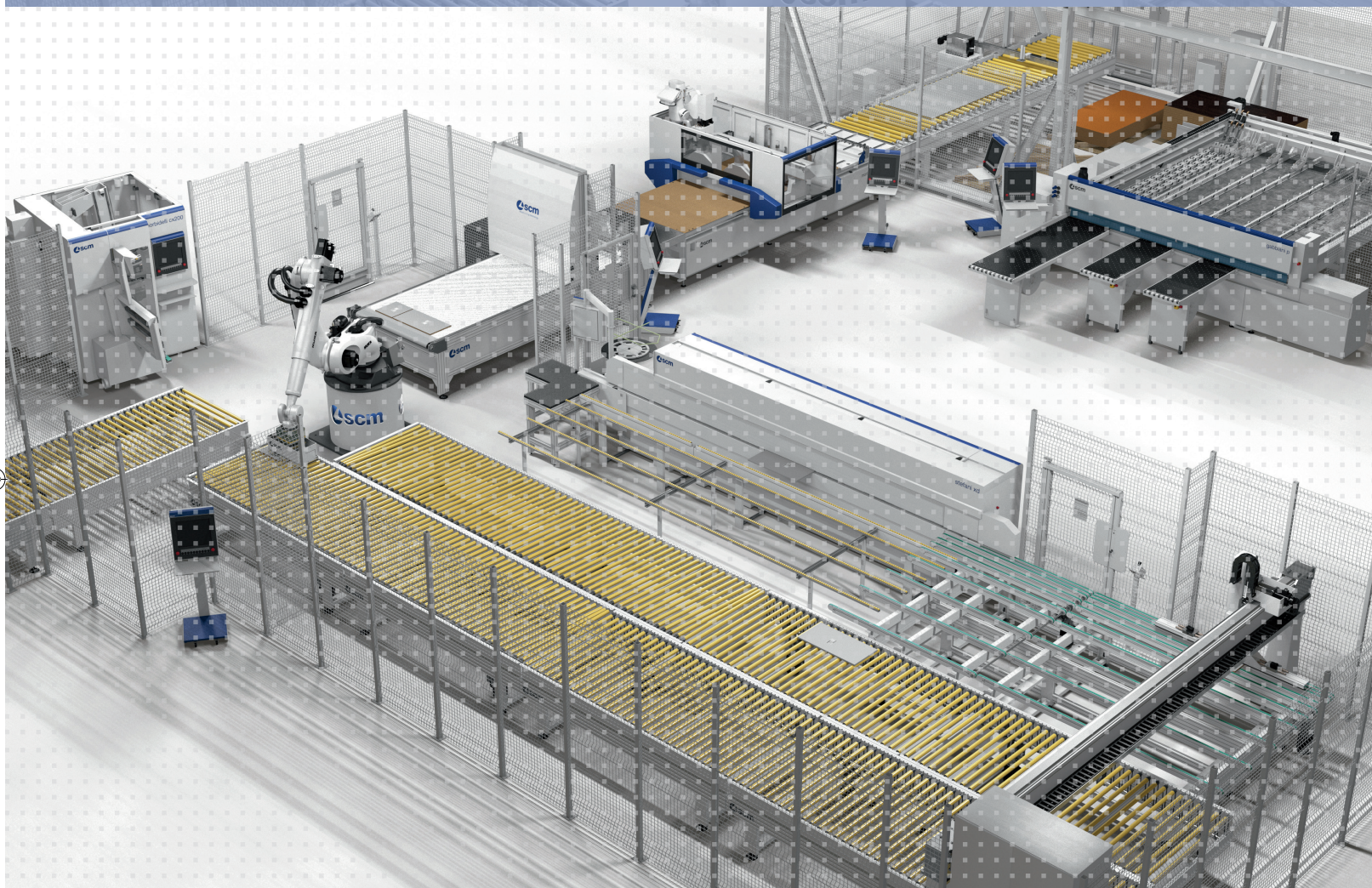
Maestro active watch is the supervisory system managing and controlling the production of automatic lines.

Maestro active watch can be fully integrated with existing customer informative system (i.e. ERP including design management systems and MES), realizing a bidirectional data flow:

- Receiving programs and schedule from the ERP system to launch the production.
- Feed backing data about production to the company ERP.

MAESTRO ACTIVE WATCH
SUPERVISOR AND CONTROL SYSTEM FOR LINE AND CELLS

PROCESS MAP AND DATA FEEDBACK

Maestro active watch
Line supervision of the entire production process

PANEL STORAGE   CUTTING   EDGE BANDING   SQUARING   DRILLING   PACKAGING

MAESTRO ACTIVE STORE   **MAESTRO** ACTIVE CUT   **MAESTRO** ACTIVE EDGE   **MAESTRO** ACTIVE SQUARE   **MAESTRO** ACTIVE CNC

MAESTRO OTTIMO CUT

Maestro active watch: full control and productive management of production equipment

FUNCTIONS AND BENEFITS AT A GLANCE

Total control of the process. Continuous monitoring of the entire process, with information about machine status, line status, layout as well as possibility to adjust machining operation list of programs.

Productivity under control. Alarms detection and management.

Performance under control.

Reporting. Real-time and historical data available both as export file as well as charts (alarms report, productivity, status, tracking, etc.).

Data feedback. Information and data back to company ERP/MES for further analysis.

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Work simple. Work digital

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