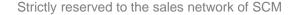


Information to the sales network





TWO HORIZONTAL INNOVATIONS



New horizontal **Human-Machine interface software (HMI)**, which has been unified across all SCM technologies.



IoT platform enabling value-added **services** for the customer.









Maestro active is the new horizontal 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.

FROM TODAY ANYONE CAN "DRIVE" A SCM MACHINE!

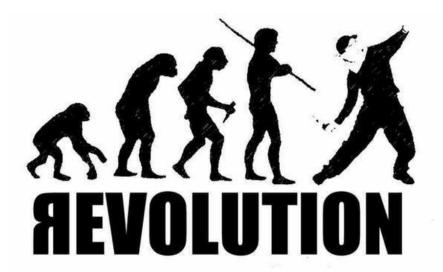


Maestro active cut – Evolution or Revolution??

Evolution

Maestro active in the field of the beam saws represents the point of arrival of a path started 2 years ago with Maestro cut.







HMI SW POSITIONING







TOP 5 QUALITIES



DEEP. Lots of features, lots of functionalities



INTELLIGENT. "Somebody understood my problem"



COMPLETE. Not just a machine control



EMPOWERING. Makes customers more productive, it enhances customers



ELEGANT. Cares about the user interface.



DESIGN PRINCIPLES

1. Minimal

WHAT WAS WRONG

"They are used so rarely that always displaying them only takes away space."

The old HMI, often too full of components, disoriented and blocked the operators.



DESIGN PRINCIPLES

1. Minimal

2. Readable

WHAT WAS WRONG

"If they wrote it smaller, not even the screen pixels were enough!"

Features of the old HMI:

- The used font was too small and only visible closely
- Lists and tables were not easily readable
- Alarms and notification were not enough visible



DESIGN PRINCIPLES

- 1. Minimal
- 2. Readable
- 3. Horizontal

WHAT WAS WRONG

"It is not clear what happens by clicking on the tool room button, since it has two different functions"

In the old HMI, similar buttons had different behaviour



DESIGN PRINCIPLES

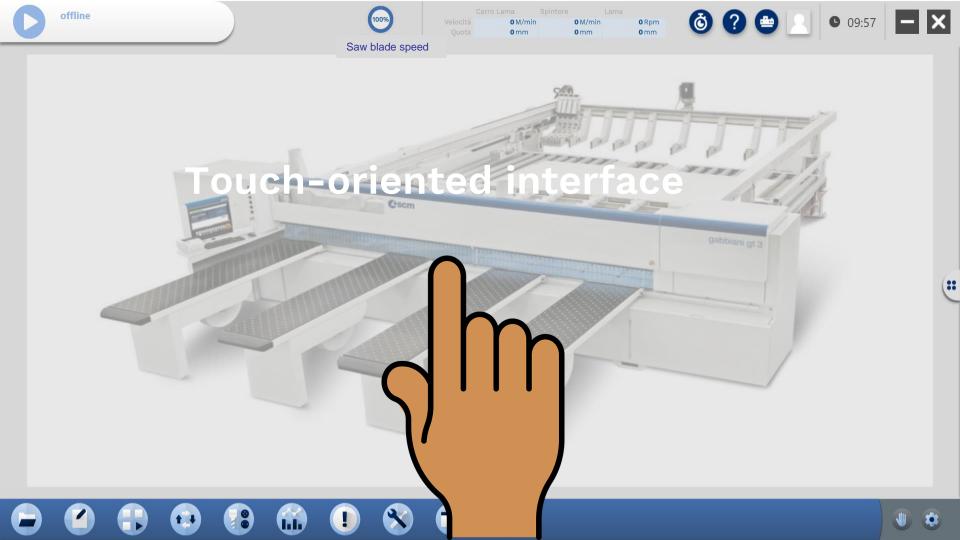
- 1. Minimal
- 2. Readable
- 3. Horizontal
- 4. Smart

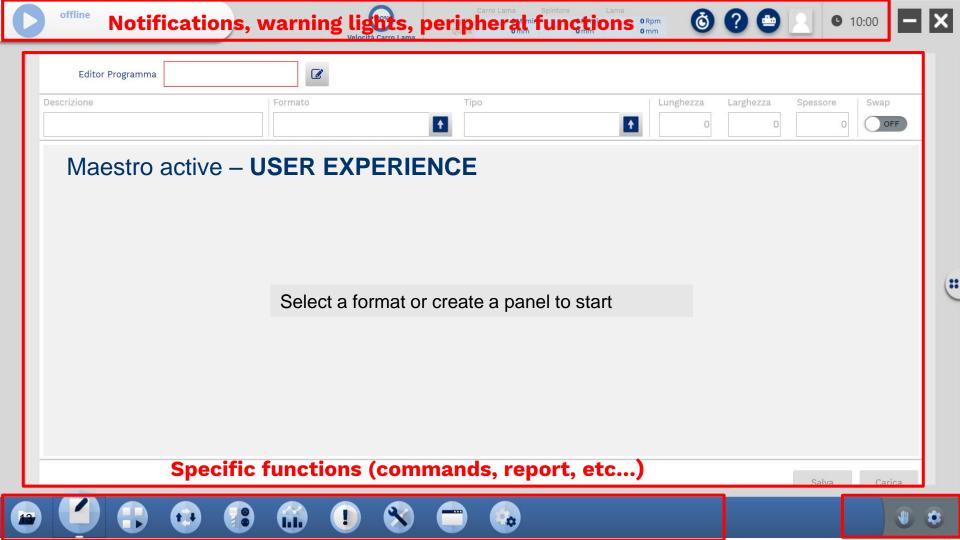
WHAT WAS WRONG

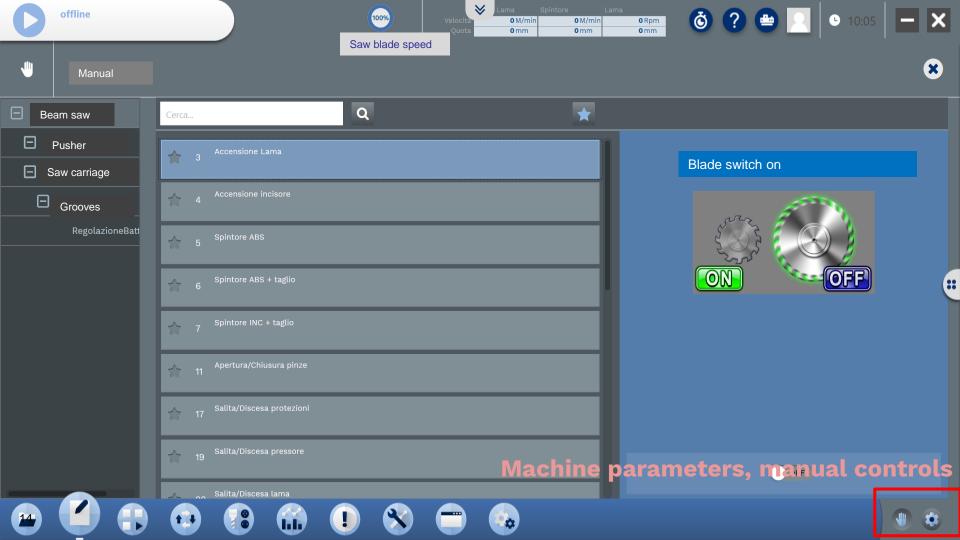
"You know it by heart or go get the paper."

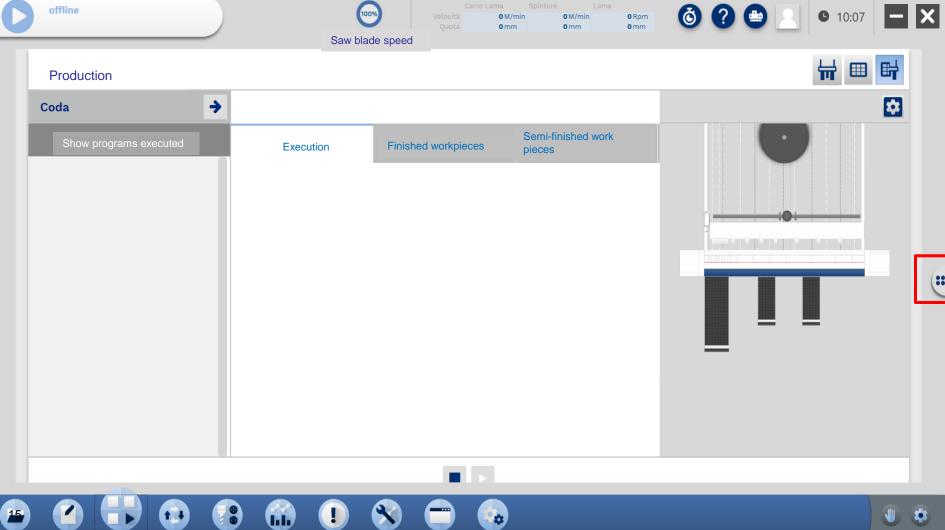
The old HMI for machining centers required the operator to enter ISO codes and tool codes to complete some procedures and operations.

























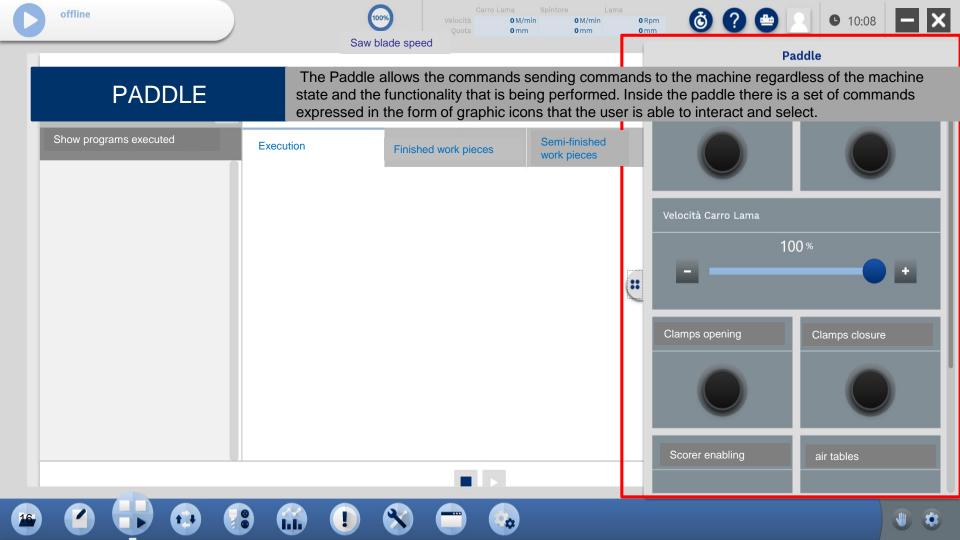




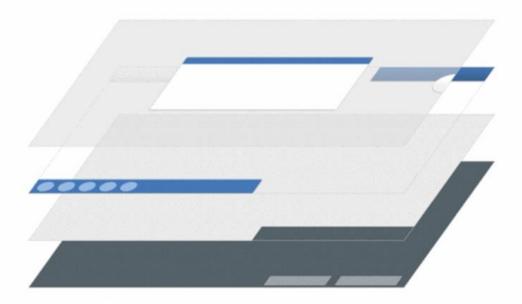








USER EXPERIENCE





HORIZONTAL FUNC



Reports



Alarms/warning signalling



Maintenance Management



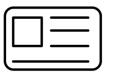
Users and access management



Shifts management



Languages management



Machine master data



HORIZONTAL FUNC

Reports

History **recording** concerning:

- 1. Production
- 2. Events
- 3. Alarms

Ability of reports **export** in xls format











0 m/min 23,5 mm

0 m/min

22,9 mm



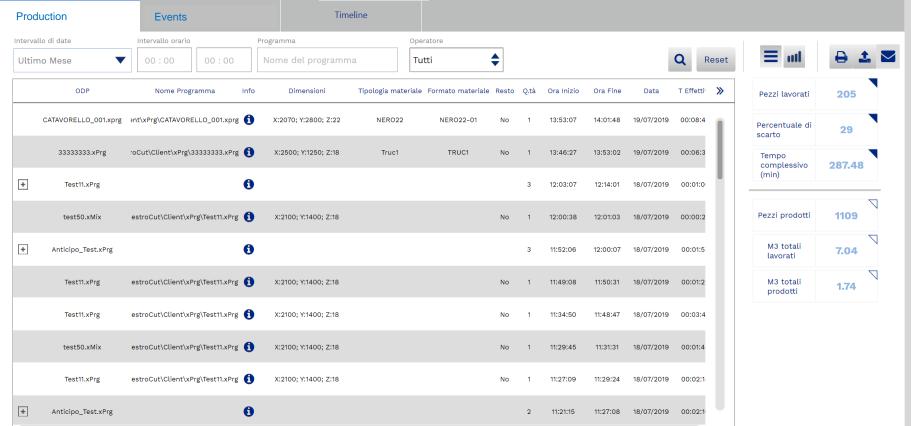








Saw blade speed

















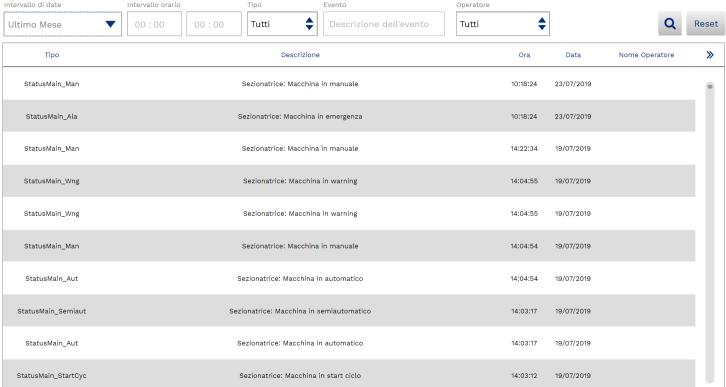








Production **Events** Timeline





















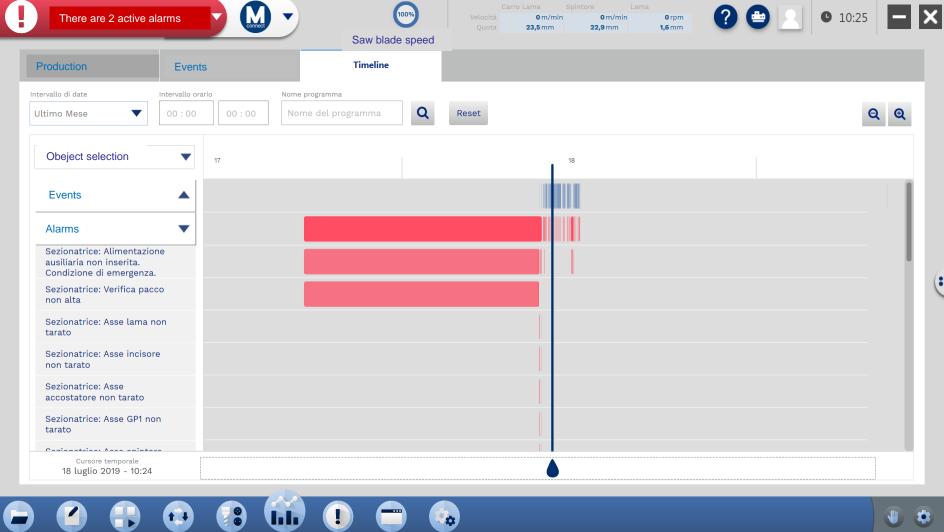






































0 m/min 23,5 mm

0 m/min

22,9 mm





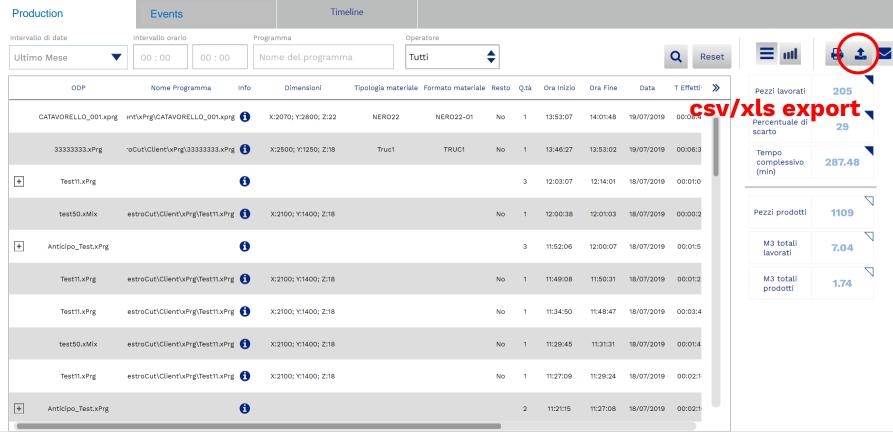








Saw blade speed

























HORIZONTAL FUNC

Reports



Maximum controls of production performance

It allows to monitor, optimize and improve the production trend.





HORIZONTAL FUNC

Signaling of current alarms/warnings



Alarms and warnings display in **real time**

Ability to add **notes and** customised **enclosures** for every alarm

























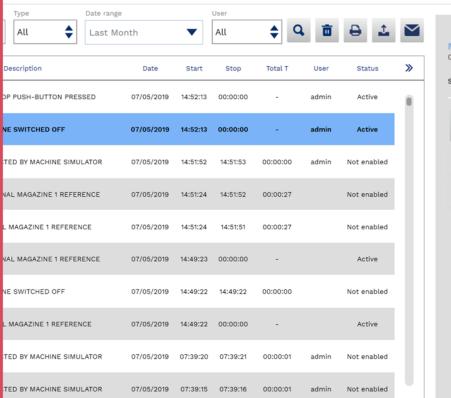




EMERGENCY STOP PUSH-BUTTON PRESSED

07/05/2019 - 14:52:13

See





Status: Active

See manual Get help

Attachments

(0) Notes























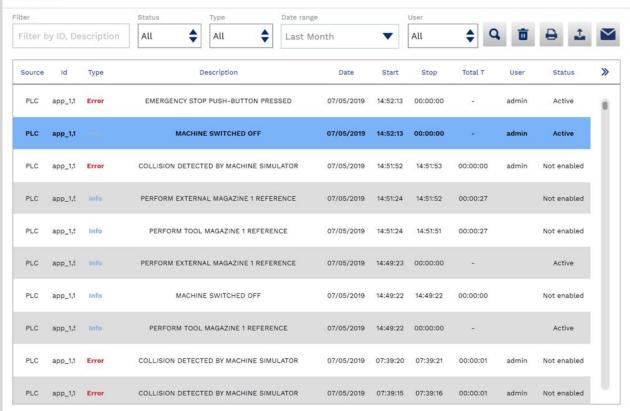


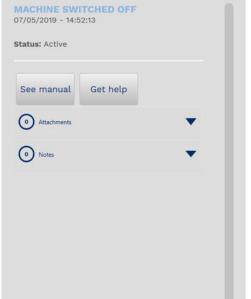






























HORIZONTAL FUNC

Signaling of current alarms/warnings





Decreasing of technical downtime

It allows you to display alarm reports and solve them in a short time



HORIZONTAL FUNC

Maintenance management



Ability of **monitoring** the status and deadlines of the maintenance interventions required by LUM.

Ability of adding new **customized maintenance** interventions by the user













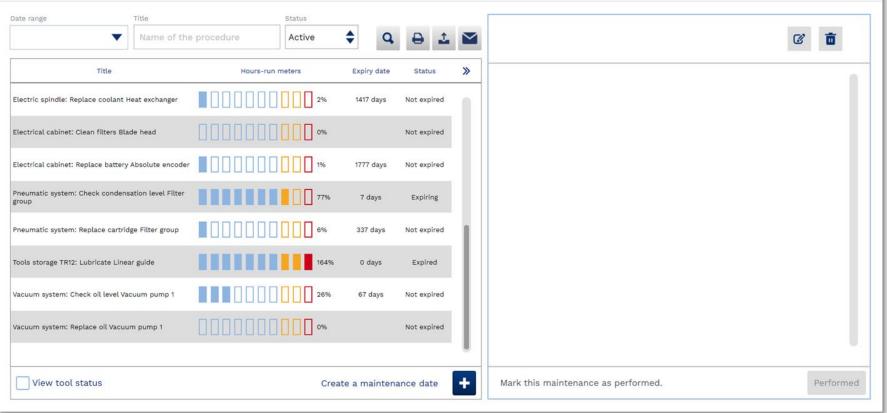








Maintenance































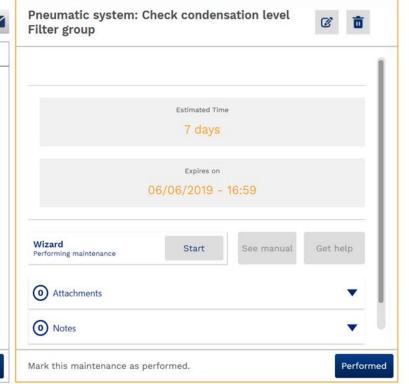






Maintenance

































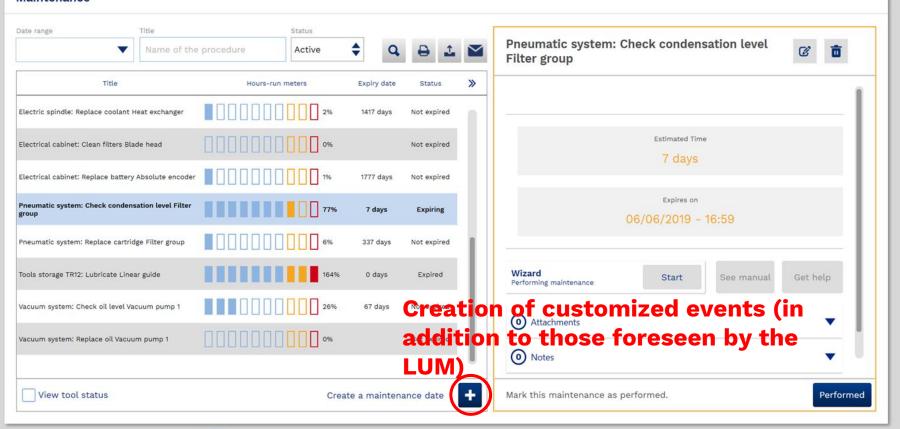


























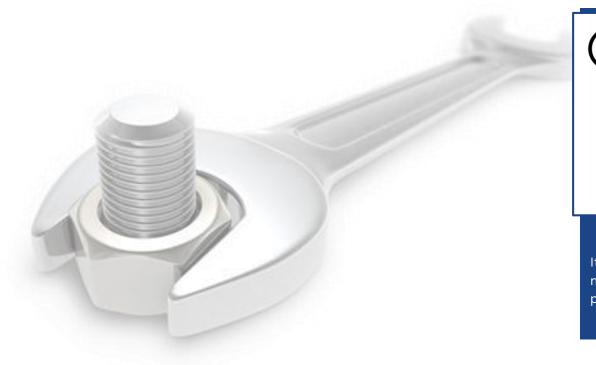






HORIZONTAL FUNC

Maintenance management





Maintenance reduction costs

It allows you to view the maintenance that is due to be performed in a short time



HORIZONTAL FUNC

Access management by user profile

Profiling of each user's experience in terms of:

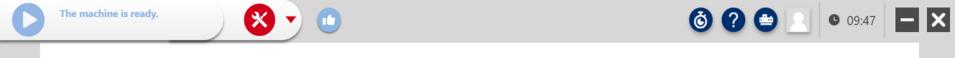
- Access privileges
- Languages
- Unit of measure

Registration of the user's log in reporting for **complete traceability.**

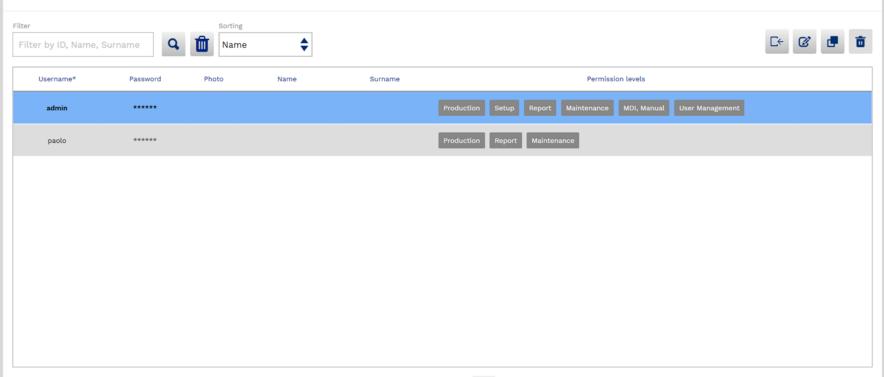








<u>Settings</u> > **User Management**



Create a new user +







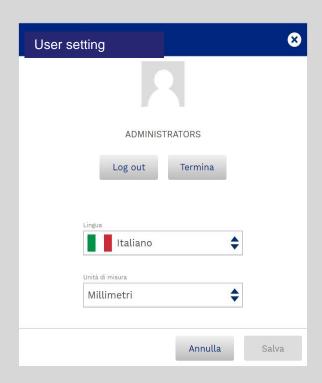












HORIZONTAL FUNC

Work shift management



Definition of work shifts on the machine, specifying:

- Coverage time
- Days of the week
- Validity period

The **Reports** are completely filterable by shifts.





HORIZONTAL FUNC

User management Shift management



Selling point

Advanced production organization

It allows the customization of user experience and control of activities, productivity and events occurring in each shift.





HORIZONTAL FUNC

Language management



Display of texts in the logged **operator language.**

Alarm reports translated into the language of the operator logged at the moment





HORIZONTAL FUNC

Machine master data

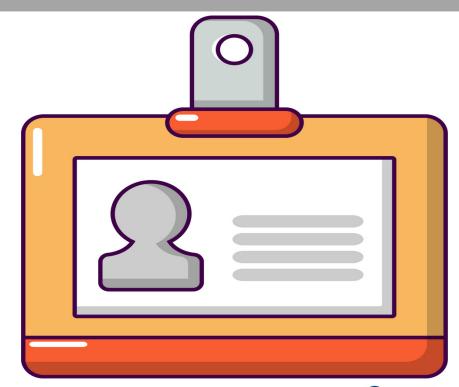
Display of the machine Info ID:

- Model
- Serial Number
- HMI version
- Programming software version
- PLC version

Ability to **export backup** of machine information.

Maestro active

Advanced Human Machine Interface









0 M/min 0 mm

O Rpm 0 M/min **0** mm















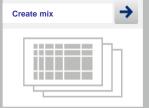


Management







































Machine information Touch-ori MachName§§§ Matricola nr. HMI123 Versione Maestro Active: 1.0.0.0 Versione PLC: ↑ Esporta backup © 2000-2019 SCM Group Maestro Active

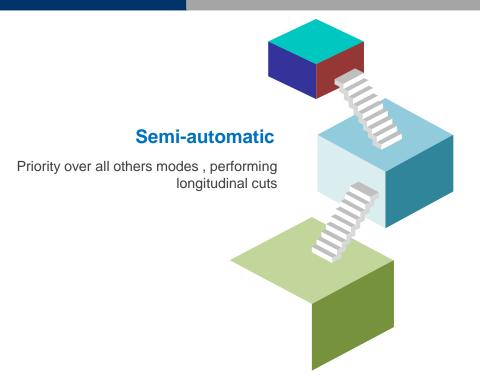
BEAM SAWS MODELS

Beam saws	gabbiani	gt3 / g3	S	
	gabbiani	gt2/g2	S	
	gabbiani	SZ PLAST	S	standard pc
	gabbiani	st / s	S	
	gabbiani	pt / p	S	
	gabbiani	cfx	N	
	gabbiani	a3	N	
	gabbiani	cubo	N	
	sag	stc	N	
	sag	st	N	
	sag	sl	N	
	sag	sml	N	



Working modes

Three different working modes



Manual

It allows manual commands to be sent to the PLC.

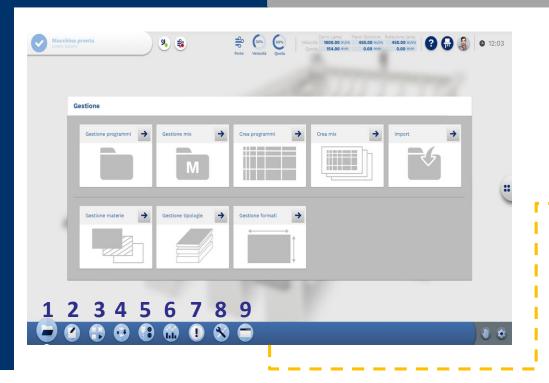
Production

The production function allows the execution of cutting and/or mix patterns in the beam saw



SURFING

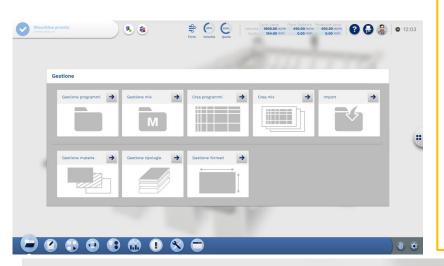
A series of pages that allow you to access a set of features collected in them



- 1.Management
- 2.Editor
- 3.Production
- 4.Semi-Automatic
- 5.Tool
- 6.Report
- 7.Allarm
- 8.Maintenance
- 9. Utilities
- 10.Settings



Management



- Program management: it allows to browse the file system in search of programs
- Mix management: it allows to browse the file system in search of mix
- XPRG Editor: XPRG program editor
- XMIX Editor: XMIX editor
- Import : import functions
- Matters: magazine materials editor
- Types: magazine materials editor
- Formats: magazine materials editor

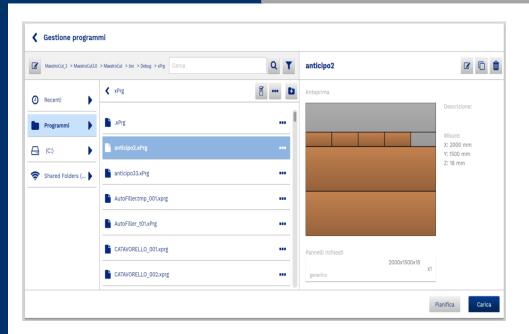




Maestro active cut – ADVANCED BROWSING

Browsing

Browser folder pages include all those pages that allow navigation through the file system in order to search and manage all cutting patterns



Preview tools for XPrg and XMix



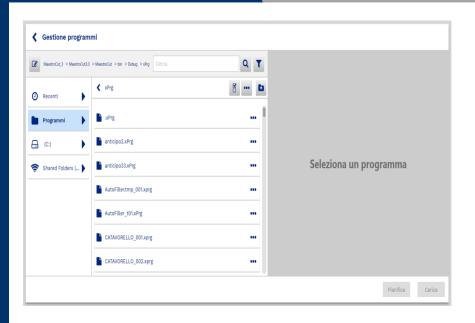
- Description
- Size

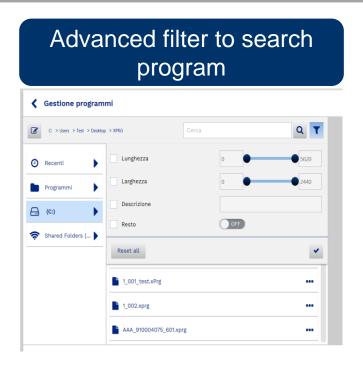


Maestro active cut – ADVANCED BROWSING

Browsing

Browser folder pages include all those pages that allow navigation through the file system in order to search and manage all cutting patterns



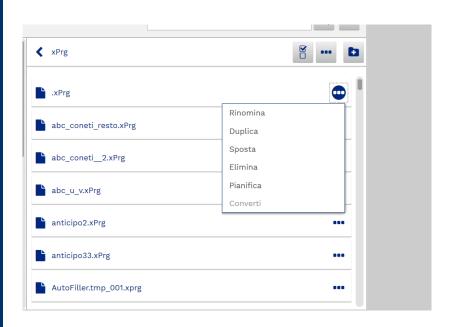




Maestro active cut - ADVANCED BROWSING

Browsing

Browser folder pages include all those pages that allow navigation through the file system in order to search and manage all cutting patterns



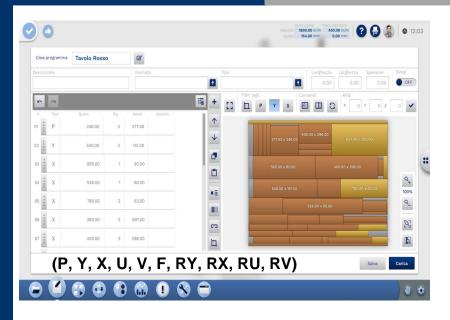
Integrated file system management environment





EDITOR XPRG

XMix editing tools, XPrg programs guided intuitive and fast



- Input validation
- Guided editing



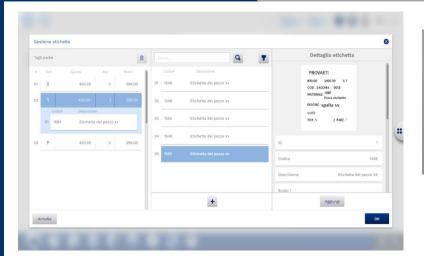
- (E3.1): List of cuts
- (E3.2): Advanced cutting pattern editing commands
- (E3.3): Graphic area (Preview)

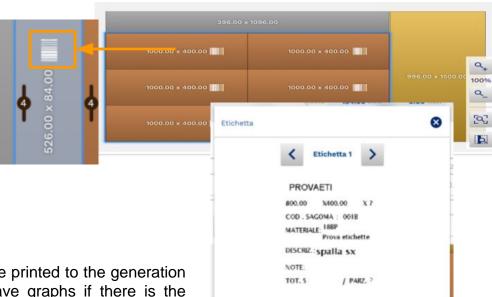


Maestro active cut – LABELS

LABEL

Advanced functionality for editing, templating and previewing.





At each cut it is possible to associate a label that can be printed to the generation of the shape generated with that cut and you will have graphs if there is the information of edging.

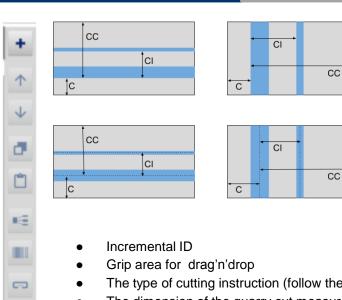


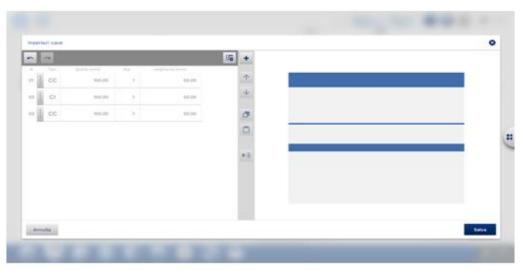
Modifica

Maestro active cut – SPECIAL MACHININGS

SPECIAL PROCESS

Grooving (OPTION)





- The type of cutting instruction (follow the types of instructions available and their use)
- The dimension of the guarry cut measured from the edge (or from the tail): must be greater than or equal to zero
- The number of repetitions, normally placed at 1, can be greater than 1 only for the instructions CI (Incremental groove)
- The width of the groove: it must be greater than or equal to the thickness of the blade
- The depth of the groove (option): numerical value greater than zero. This field is present only in the presence of dedicated mechanical options



Maestro active cut - SPECIAL MACHININGS

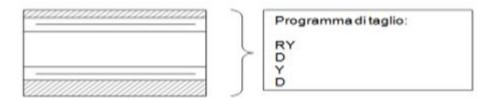
SPECIAL PROCESS

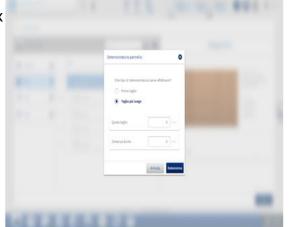
De-tensioning cuts (OPTIONAL)



De-tensioning cuts are special processes, i.e. they are passive cuts that have the purpose of eliminating the internal ribs and tensions that occur through the processes of veneering and/or pressing.

A short tap on the icon (E3.3.1.7) shows the dialog box for inserting the de-tensioning cuts.







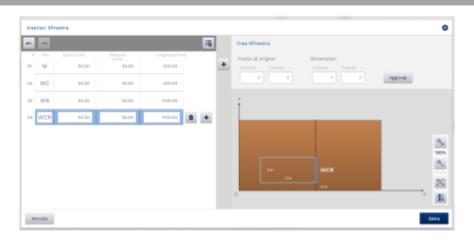
Maestro active cut – SPECIAL MACHININGS

SPECIAL PROCESS

Insertion of windows, are internal workings of the panel. They can only be programmed according to YXUV instructions and can be rotated or not rotated. (OPTION)







WIZARD

(ES2.3.1): Coordinates of the point of origin X

(ES2.3.2): Coordinates of the point of origin Y

(ES2.3.3): Dimension along the X axis

(ES2.3.4): Dimension along the Y axis

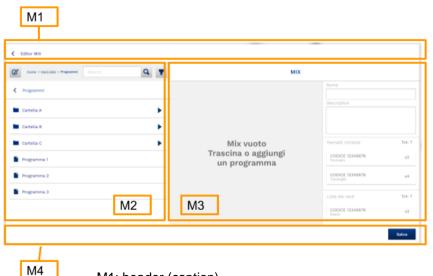
(ES2.3.5): Command 'Apply'



Maestro active cut – EDITOR

EDITOR XMix

Smart and fast editing tool for XMix,XPrg and semi automatic program





M1: header (caption)

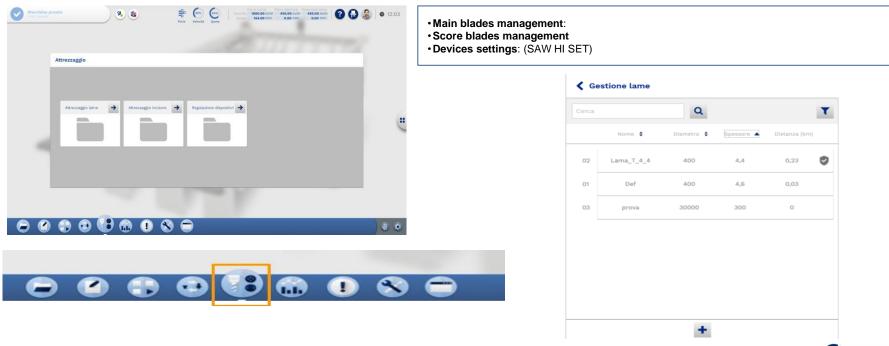
M2: Folder browser section

M3: Preview section

M4: footer (command and button section).

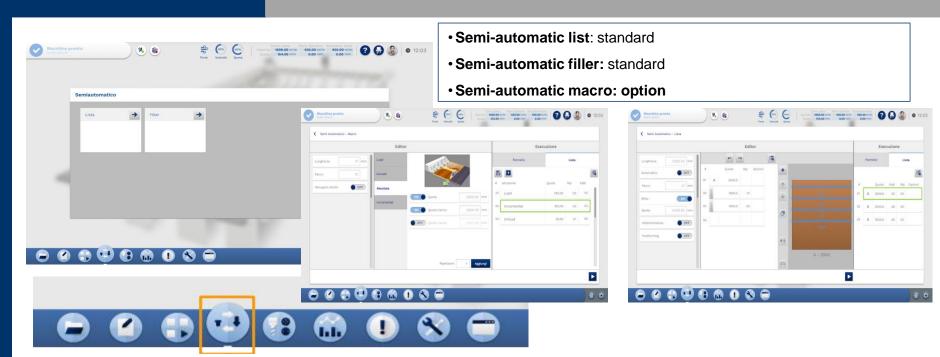


TOOLS STOCK





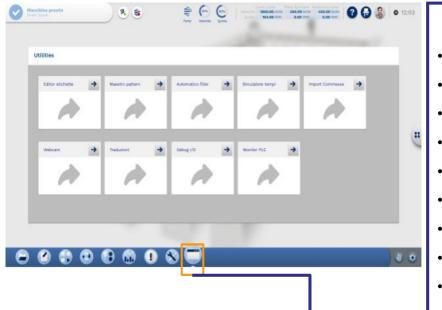
Semi-automatic





Maestro active cut – UTILITIES

Utilities

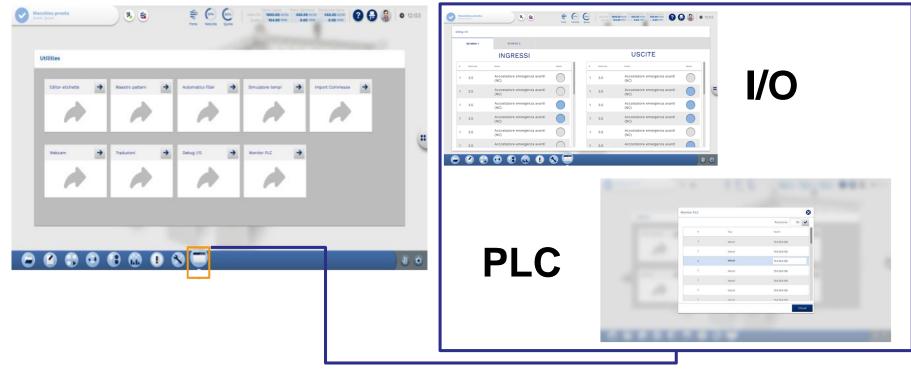


- Label editor: external program for editing the label layout
- Maestro pattern
- Automatic Filler: optimizer on panel
- ETA
- Import
- WebCam
- Transation
- **Debug I/O**: Display of PLC inputs and outputs
- Monitor PLC: allows access to PLC memory areas



Maestro active cut – UTILITIES

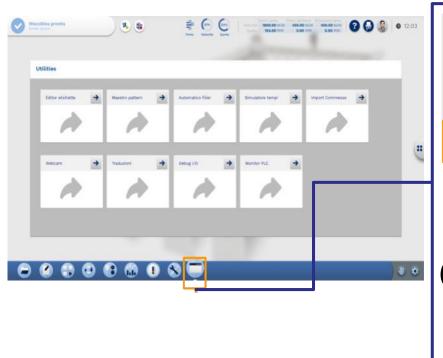
Utilities

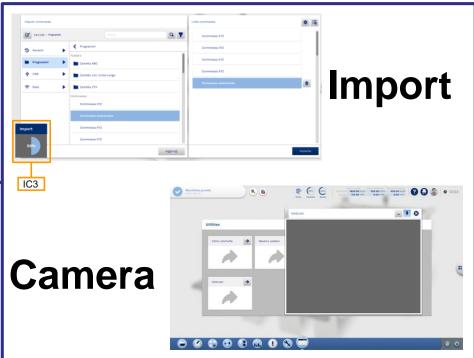




Maestro active cut – UTILITIES

Utilities







Maestro active cut – PRODUCTION

PRODUCTION

This is the mode in which the machine executes the cutting diagrams elaborated by the optimizer or edited through the tools made available by the HMI.



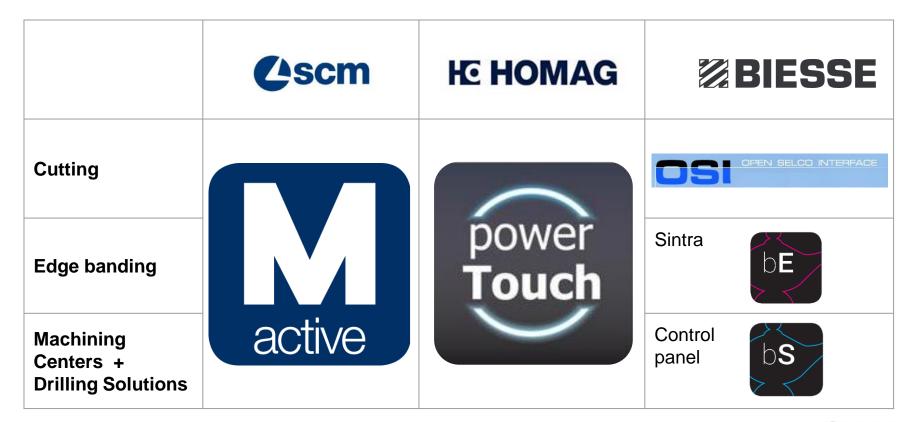
Fullscreen view of running scheme



- 1. Preview of the running scheme
- 2. Preview of finished parts
- 3. Preview of semi-finished products



Maestro active - COMPETITION COMPARISON





Maestro active cut – MANUAL CONTROLS

Benchmark

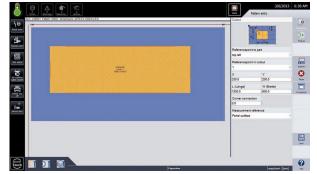
in line with the latest technological innovations in the field of HMI













MODULES

Editor

- **Graphic editor -** Additional modes for editing programs
- Label Software operating on the machine board for the production of labels by means of graphic editor. Possibility to insert logos (black and white bitmap format), descriptive fields and bar codes for panel identification and subsequent processing.
- Panel editor Software integrated in the machine management program for manual filling of the cutting pattern. Insertion of the pieces from database and from external files with information for flame cuts.



MODULES

Utility

 De-tensioning cuts - In Semi-automatic and automatic mode it is possible to apply between 2 longitudinal cuts a sequence of de-tensioning cuts, which allow to reduce the tensions inside the panel.



• Dynamic editor for editing cutting patterns and trimmings - All cutting patterns and their trimmings can be modified runtime before execution.



- Automatic Filler Optimisation of a cutting list starting from the manual selection of the panels and the remains inside the Maestro active warehouse
- Offcuts management It allows the management and automatic conversion of waste into off-cuts,



MODULES

Manager

 ETA (Estimated time of action)- Simulated execution of job/multi-job cutting diagrams to check the machine time required

- Job scheduling by date and priority Functionality that allows the operator to assign priority or date to propose them automatically
- Advanced report Cross functionality for simple and intuitive visualization of event sequencing



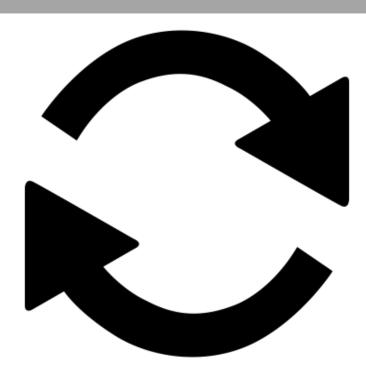


Maestro converter cut

CONVERSION

All transfers to SCM saws by 3rd Party Optimization Software should go through the PTX file format.









Maestro ottimo import

IMPORT

Old Easy Cut

Maestro ottimo import is a software tool that runs in MS EXCEL environment and eases operators when using the optimisation cutting programme for saving data related to all pieces to cut in one or more excel worksheets.

Just a simple click to export and consequently optimizing in a very rapid time without errors, that may occur when copy the selected pieces list, independently from the way they are organized in the worksheet.





Maestro ottimo import - Software eemo

Maestro ottimo cut

Demonstration of the cutting plans optimisation program with reference to one or more panels or sub format lists to produce, raw material stock management and the conversion of the optimised cutting patterns into programs for the beam saw control.

CONFIGURATION

OPTIMISATION PARAMETER, SETTING/UP AND TIME CONFIGURATION

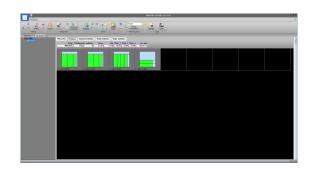
MATERIALS MANAGEMENT

TYPE, FORMAT, EDGE AND OFF-CUTS

ORDER MANAGEMENT

SINGLE OR MULTI-ORDERS EDITING, MATERIALS ASSOCIATION, PROCESSING, ANALYSIS AND PATTERNS EDITOR

IMPORT/EXPORT/PRINTING





Maestro ottimo cut





Many thanks For your kind attention!

