throughfeed moulders

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# superset tm

automatic throughfeed moulder




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woodworking technology

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**automatic throughfeed moulder**

The ideal solution for making large frames, semi-finished parts for the construction sector, structural work joists and profiles, wide parquet and squared lengths of timber in general.
The Superset TM automatic throughfeed moulder was developed to guarantee high quality finishing and to limit production costs, making it advantageous to work on both small batches and big orders.

- **NO COMPROMISES FOR HEAVY DUTY STOCK REMOVAL:**
  Superset TM allows machining even for more than one shift per day, always guaranteeing excellent surface quality.
- **SIMPLE, FAST MACHINE SET-UP**
  even for less expert operators.
- **HIGH PRODUCTION RATES WITH FEED SPEED OF UP TO 60 M/MIN.**





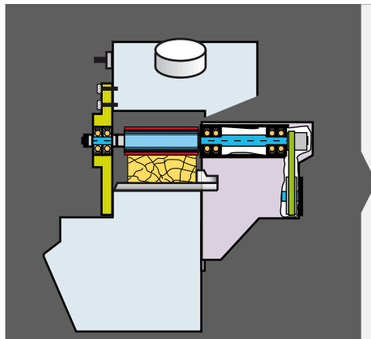







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## technological advantages



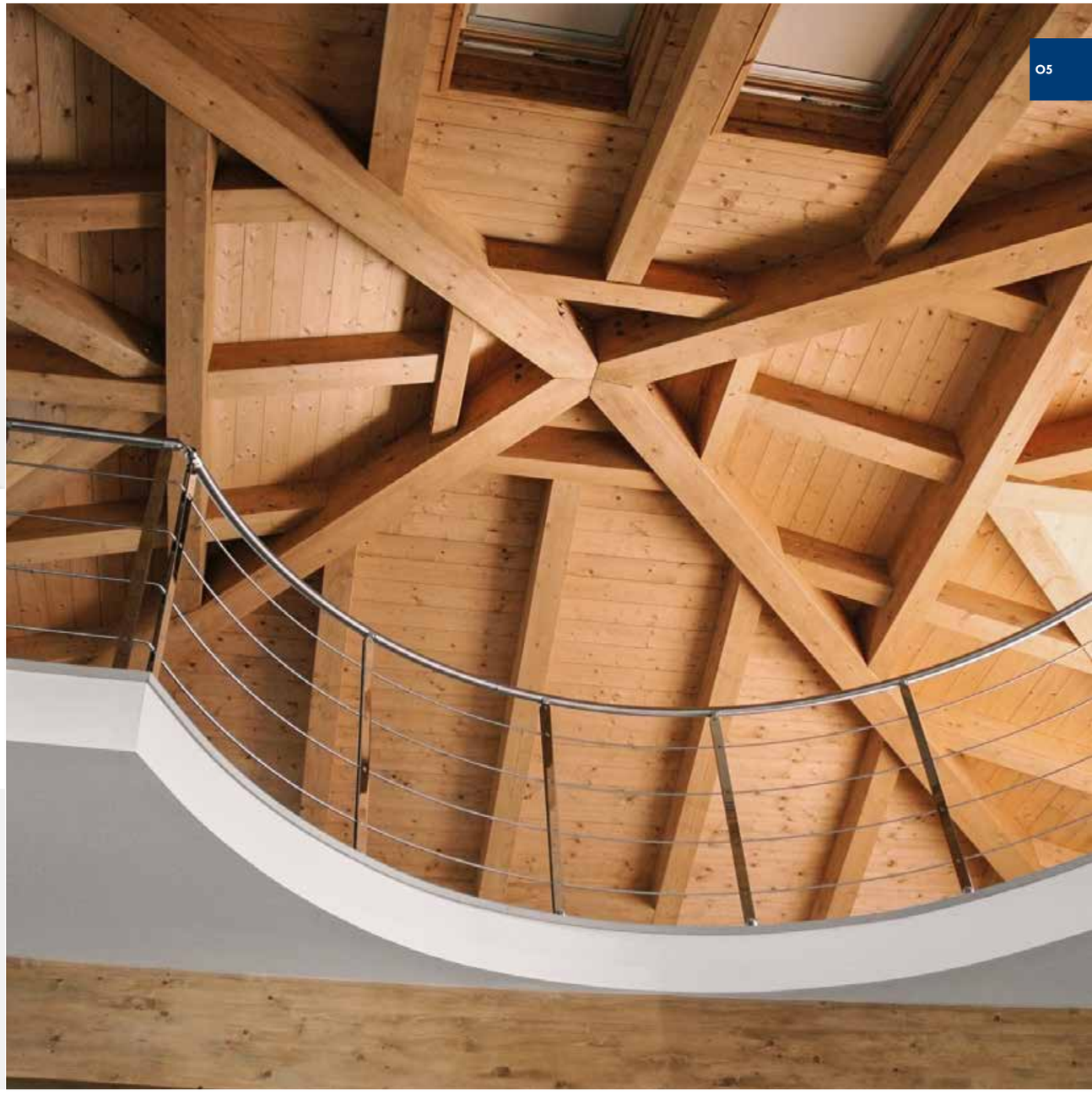
**“HD” SPINDLES**
with three pairs of bearings (for a total of 6) preloaded with high precision to guarantee a top quality finish, for heavy duty stock removal, maintaining lasting precision and repeatability.



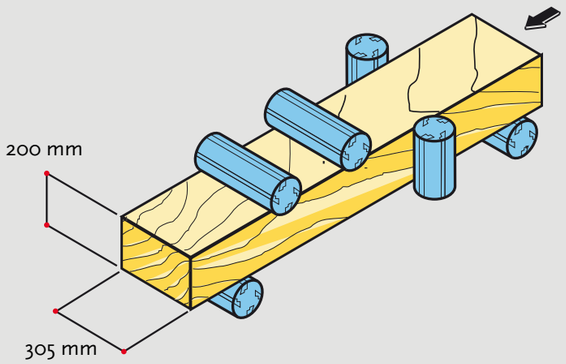
**RAPID MACHINE SET-UP SYSTEM**
With an adjusting screw, locking operations are made fast and easy without the need for equipment such as grease nipples.

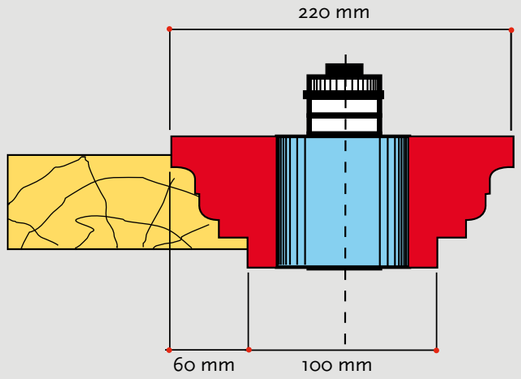


**ON-BOARD SHARPENING DEVICE (JOINTER) FOR STRAIGHT KNIVES ON HORIZONTAL SPINDLES**
This device uses an electronically-operated automatic system for axial and radial movement of the stone to guarantee high quality finishes, even at high feed speeds, extreme precision and repeatability.



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## machine structure




### MACHINING CAPACITY
Ideal for sectors such as construction, structural work, contracting, outdoor indoor furniture and squared lengths of timber in general, this machine can work on max. cross-sections of 305x200 mm and remove up to 60 mm of stock spindle.

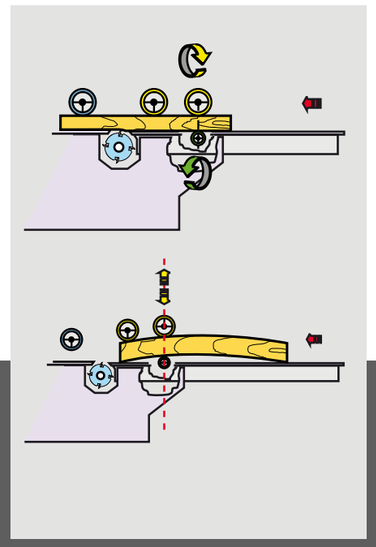



### BASE
To get a good quality finish good tools and sturdy spindles aren't enough.
A machine structure that doesn't generate vibrations is needed. The single-block structure of the Superset TM is suitably sized using CAD systems able to check its behaviour in response to machining stresses.



### FEED SYSTEM
To guarantee good feed capacity irrespective of the material machined, level of stock removal or feed speed, a large number of feed wheels is provided, increasing the contact surface between rollers and workpiece.
To reduce friction between the workpiece and worktable and to further promote feed, there are motor-driven rollers on the worktable.

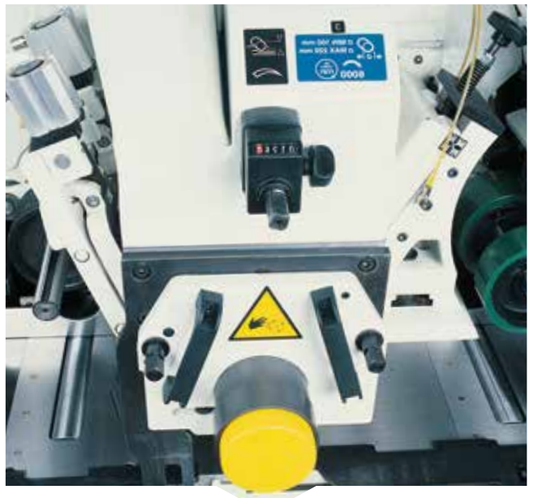


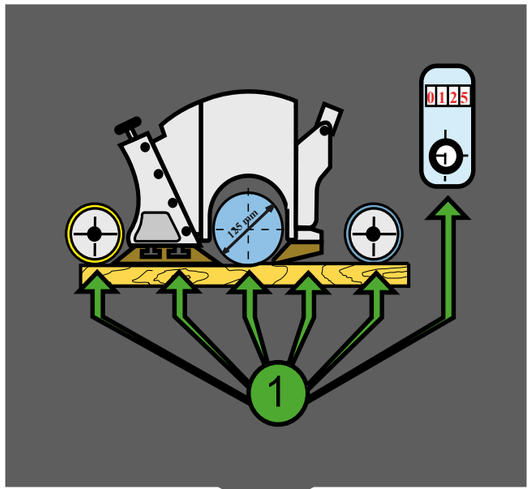


### PHT
When machining resinous, wet or warped wood, there is a greater risk that the workpieces will come to a stop in the machine. This risk increases as the feed speed rises and in the presence of automatic feeders, with consequent wasted time and increased reject material. Superset TM has a pair of top/bottom powered floating rollers (PHT system) at infeed which guarantee efficient feed under any conditions.

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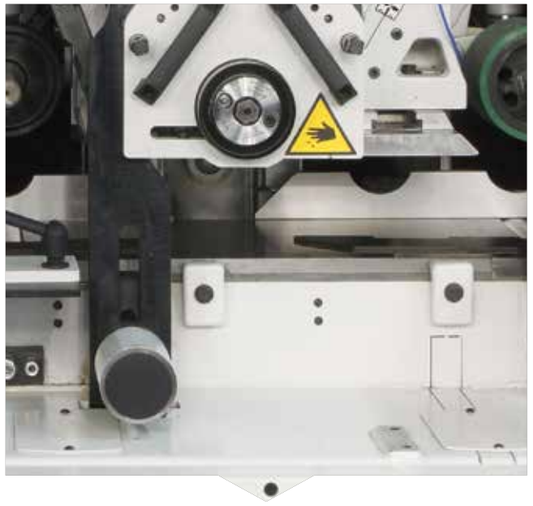
**tool holder spindles**



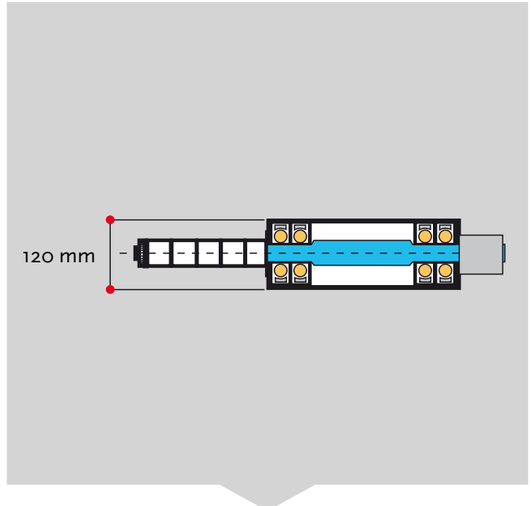



**SET-UP**

Each tool substitution requires many operations which take time and skill. To make it advantageous to produce small batches and have negligible tooling times without the need for experts, we developed a rapid “Setup” system.
In the case of an upper horizontal spindle, for example, by simply setting the minimum tool diameter the presser shoes located before and after the tool and the workpiece feed chain are automatically aligned.



To avoid manual operations with the risk of operator error and wasted time, every time a change of thickness is needed, the hydraulic counter-support is automatically released/locked.

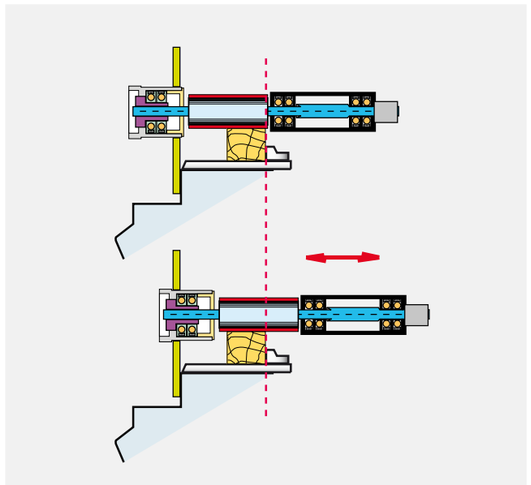



Working in challenging conditions, with hard woods, considerable stock removal, fast feed speeds, calls for sturdy, reliable spindles.
The 120 mm spindle holder cylinders can house two pairs of bearings preloaded with a high level of precision.



**SPINDLE COUNTER-SUPPORTS**

When a tool change is needed on the horizontal spindles, to speed up operations and make them easy in complete safety, on the counter-support there is a precision centring system, a rapid locking system and a safety system which, if the counter-support is not fitted or locked, prevents spindle start up.

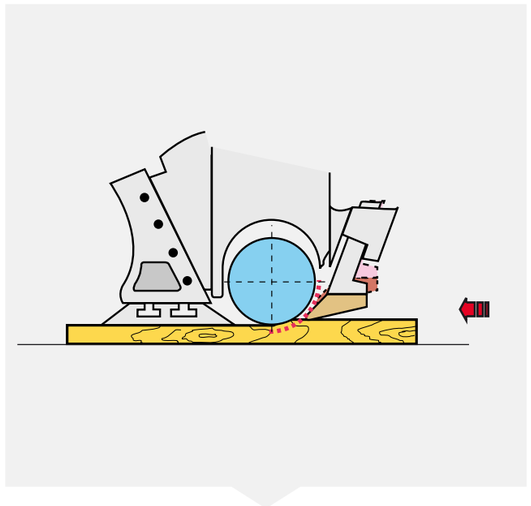


To save even more time, axial positioning of the horizontal spindles takes place with the spindle moving and machine operating.



**PRESSER SHOES**

To further reduce the risk of the workpiece jamming in the machine irrespective of the machining allowance to be removed, the presser shoes located in front of the upper spindles and left vertical spindle have four-bar linkage movement and pneumatic pressure.

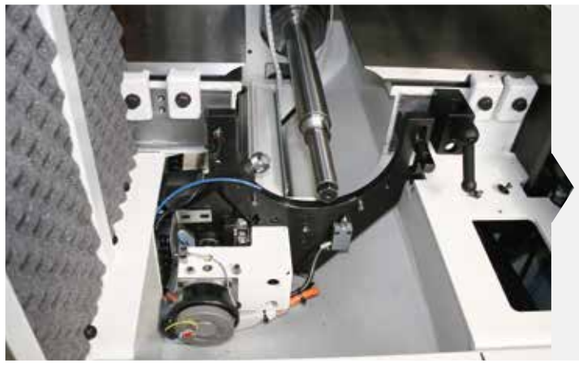


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**options**





**JOINTER**
To obtain a good finish with feed speeds higher than 15÷20 m/min, on-board tool sharpening (jointer) is required.
This significantly increases production rates.
On Superset TM on-board sharpening is possible on horizontal spindles, for straight knives tools.



On-board sharpening operations usually take a long time and must be performed by experts. To make these operations simple, fast and precise, on Superset TM the stone automatically moves both axially and radially thanks to an electronic system with speed that can be preset depending on the type of stone/tool and stock removal.

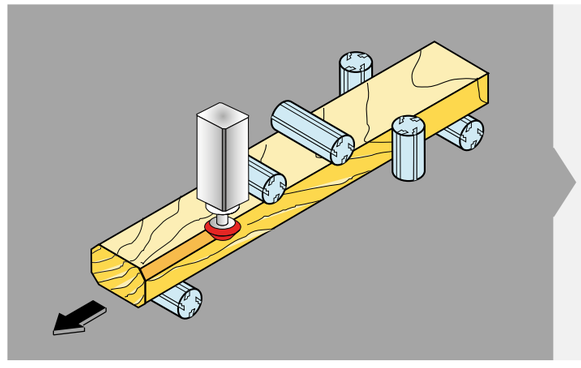




**SPINDLES WITH HSK TOOL HOLDER**
To make it advantageous to also machine small batches, with very low set-up times and risk of errors, the vertical tool holder spindles can be equipped with an HSK tool holder.



**FEED**
To increase production rates, Superset TM is capable of feed speeds up to 60 m/min.



**CORNER CHAMFERING UNIT**
For workpieces with variable cross-section which need chamfering, to avoid having to make a series of adjustments each time or managing a large set of tools, an additional unit can be supplied for automatically performing top left chamfering irrespective of the cross-section.



**AUTOMATIC FEEDERS**
To facilitate loading operations and continuously feed the machine without production down times, loading and unloading systems can be provided according to the workpiece dimensions and production rates.

# **Maestro** Digital Systems

**SMART SOFTWARE AND DIGITAL SERVICES TO ENHANCE PRODUCTIVITY OF WOODWORKING AND FURNITURE INDUSTRIES.**

SCM accompanies woodworking companies throughout their whole process combining machines with matching software solutions and digital services, with a constant strive to enhance company productivity.

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

**Maestro** active

**Factory**

## SOFTWARE

**Simple, smart and open.**
Maestro software are tailored on the machine technology as well as on the entire process. All Maestro 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.




**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 HD LCD (21.5") display to ensure an effortless, convenient experience.



# **Maestro** active 4-side

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.

**EASE OF USE**
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.

**"ZERO" ERRORS**
Improved productivity thanks to guided procedures that reduce the possibility of error from the operator's side.

## SOFTWARE

Factory

# **Maestro** active 4-side

The MOBILE PC electronic control allows intuitive machine programming, combining the eye-M console and the Maestro active 4-side software.

### 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

Maestro active 4-side allows to create different users with different roles and authorizations (e.g.: operator, maintainer, administrator, ...).
Any user can only execute the functions whose permissions have been assigned to him. It is also possible to define the work shifts on the machine and then detect activities, productivity and events that occurred in each shift.

### TOTAL QUALITY OF THE FINISHED PRODUCT

With Maestro active 4-side the quality of the finished piece is no longer put at risk by worn tools. The new Maestro active Tool Life Determination system sends notification messages as the tool reaches its end of life and recommends its replacement at the most appropriate time.

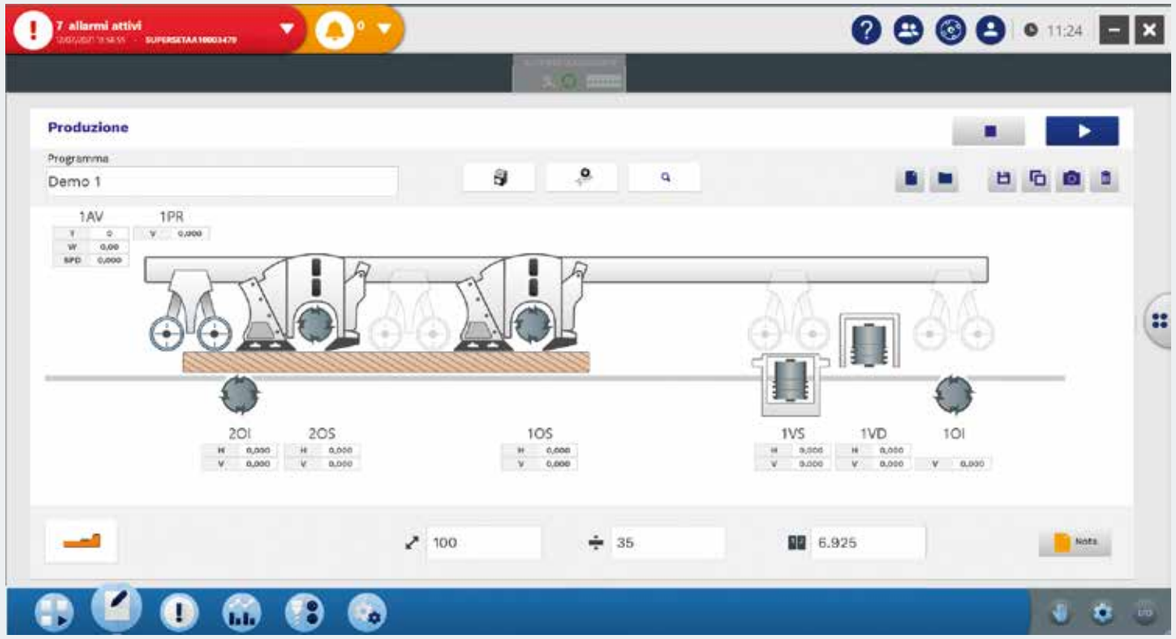
### TOOLS? NO PROBLEM!

Maestro active 4-side guides the operator during the tool change phase, taking into account the programs to be executed.

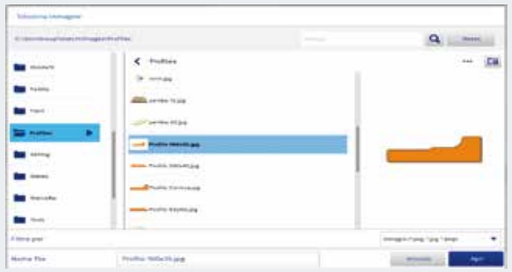
### EASY TO USE

Main functions:

- customization of layout and options, specific to each machine composition
- tool library without number limits, with import of profile image
- work programs without number limits, with import of profile image
- MDI (Memory Data Input) function for guided manual adjustment of axes
- axes management with electronic adjustment, speed of towing, power on/off of motors, spindle rotation speed (if the inverter is provided)
- tele-service and input/output display
- detailed reporting on the machine use
- guided operations by software during manual machine set-up




Customization of layout and options, specific to each machine composition.



Profile image management.



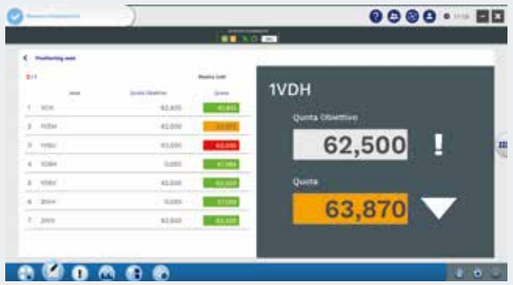
Tool image management.



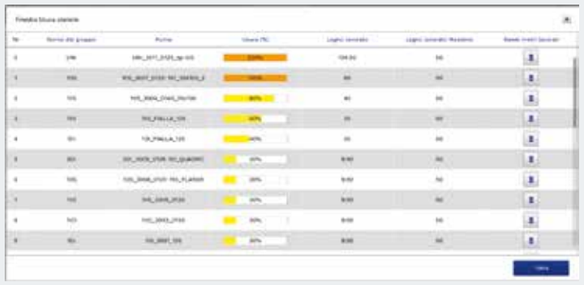
Tele-service and input/output display.



Guided operations by software during manual machine set-up.




MDI (Memory Data Input) function for guided manual adjustment of axes.



Display of the tools wear status.

# superset tm
## electronic adjustments



### CONTROL 10
Electronic control based on industrial PLC, with 7" colour touch screen monitor.

Main functions:

- programming by menu with icons
- customization of layout and options, specific to each machine composition
- management of up to 8 electronic axes
- pre-arrangement for tele-service and input/ output display
- backup for data saving and restoring
- storage of 999 programs
- storage of 999 tools



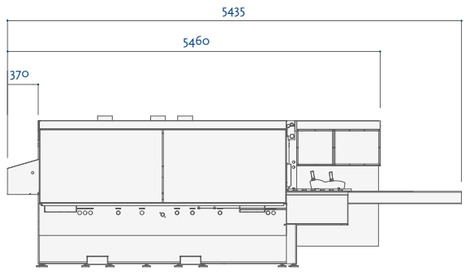


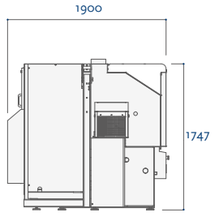




### PRESET 50
Device for measuring min./max. tool diameter and tools axial position.
Thanks to "GT SOFT" software, it is possible to elaborate the data and directly update the tool charts of the machine with MOBILE PC.

| SUPERSET TM | | |
|---|---|---|
| Min./max. machining width (finished cross-section) | mm | 25÷305 |
| Minimum machining height (finished cross-section) | mm | 10÷200 |
| Minimum length of single workpiece | mm | 640 |
| Feed speed | m/min | 6÷36 |
| Motor power | HP (kW) | 10 (7,5) |
| Spindle speed of rotation | rpm | 6000 |
| Tool holder spindle diameter | mm | 40 |
| Axial adjustment of vertical spindles relative to the worktable | mm | 80 |
| Axial adjustment of horizontal spindles relative to the right-hand fence | mm | 45 |
| Min./max. diameter of surface planer tool | mm | 120/140 |
| Min./max. diameter of profiling tool | mm | 100÷220 |
| Diameter of spindle holder cylinders | mm | 120 |




### MAIN OPTIONS
- Motor power up to 25 HP (18.5 kW)
- Speed up to 60 m/min.
- "Jointer" on-board sharpening device
- Spindles with HSK tool holder
- Chrome-finish tables and fences
- Grooved worktable
- Automatically adjusted left-hand vertical spindle
- Spindle speed of rotation 8300 rpm
- Set-up for cutting with multiple blades
- Electronic control

| Operating conditions | NOISE - DUST | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Noise emission in accordance with ISO 7960-95/H | | | | Dust emission in accordance with DIN-33893-2 | | | |
| model | Operator position LAeq [dB (A)] | | | | [mg/m3] | | | |
| | Workpiece infeed | | Workpiece outfeed | | 1st position | 2nd position | 3rd position | 4th position |
| | Vacuum | Machining | Vacuum | Machining | | | | |
| superset tm | 74,3 | 81,2 | 71,3 | 77,5 | 0,34 | 0,32 | 0,20 | 0,37 |

**COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV**
**ISO 9001**

For demo purposes some photographs show machines complete with accessories. Technical data may be amended without notice, without the changes affecting safety as per CE requirements.




scm | service

# WE'LL GO THE EXTRA MILE FOR YOU

SCM OFFERS A FULL RANGE OF **HIGHLY SPECIALISED SERVICES** WITH A QUALITY AND RELIABILITY THAT STEM FROM 70 YEARS OF EXPERIENCE IN THE INDUSTRY.

From installation and production start-up to services and maintenance. From training to the supply of specific original spare parts: **we provide solutions designed around you!**

### SERVICE AND MAINTENANCE

- Remote support
- Scheduled maintenance contracts
- Warranty extension

### TRAINING SERVICE

- Courses for machine operators
- Software and programming courses
- Training in production start-up

### SPARE PARTS

- Recommended spare parts list
- E-shop
- Interactive spare-parts catalogues
- Repairs on electronic parts, glue tanks and electro-spindles

### DIGITAL SERVICES

- Maestro Connect - IoT platform to be constantly connected with your machines
- Smartech - assistance with augmented reality
- My Scm portal - opening of service ticket and single point of access to the apps and Services tools

CONTACT

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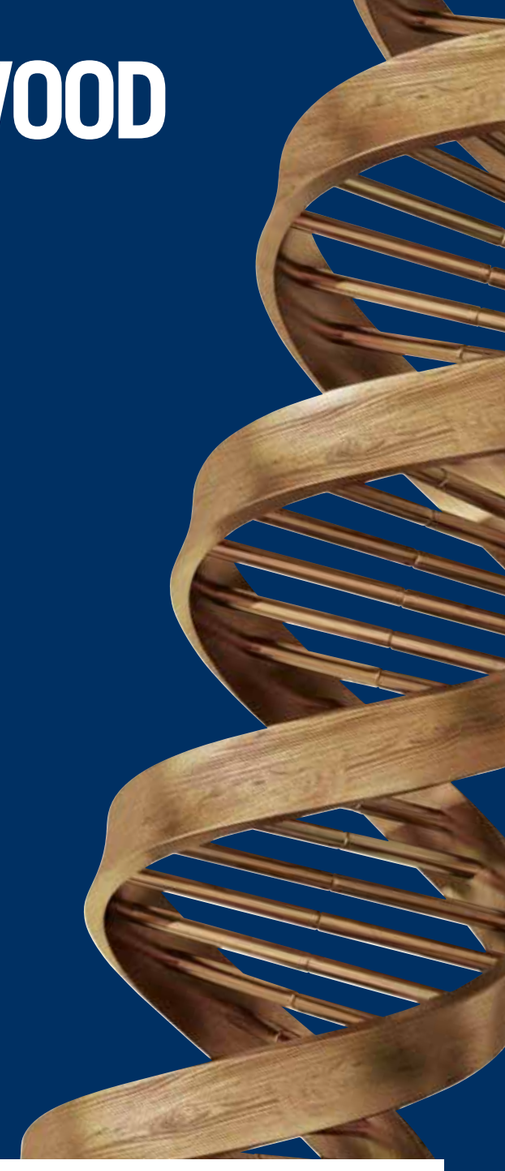
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My Scm

# THE STRONGEST WOOD TECHNOLOGIES ARE IN OUR DNA

**SCM. A HERITAGE OF SKILLS IN A UNIQUE BRAND**
70 years of success gives SCM the centre stage in woodworking technology. This heritage results from bringing together the best know-how in machining and systems for wood-based manufacturing. SCM is present all over the world, brought to you by the widest distribution network in the industry.

**70** years history
**3** main production sites in Italy
**300.000** square metres of production space
**20.000** machines manufactured per year
**90%** export
**20** foreign branches
**400** agents and dealers
**500** support technicians
**500** registered patents



**In SCM's DNA also strength and solidity of a great Group.** The SCM Group is a world leader, manufacturing industrial equipment and components for machining the widest range of materials.

## SCM GROUP, A HIGHLY SKILLED TEAM EXPERT IN INDUSTRIAL MACHINES AND COMPONENTS

### INDUSTRIAL MACHINERY

Stand-alone machines, integrated systems and services dedicated to processing a wide range of materials.

- scm — WOODWORKING TECHNOLOGIES
- Cms — TECHNOLOGIES FOR PROCESSING COMPOSITE MATERIALS, ALUMINIUM, PLASTIC, GLASS, STONE, METAL

### INDUSTRIAL COMPONENTS

Technological components for the Group's machines and systems, for those of third-parties and the machinery industry.

- HITECO — SPINDLES AND TECHNOLOGICAL COMPONENTS
- es — ELECTRIC PANELS
- steelmec — METALWORK
- scmfonderie — CAST IRON

scm woodworking technology | is more