

topset xxi

automatic throughfeed moulder





YOUR XXL
SOLUTION
FOR HIGH
PERFORMANCE

topset xxi

TOPSET XXL

DESIGNED TO GRANT THE BEST



STRENGTH



High accuracy

Machine bed designed and manufactured with advanced technological systems to provide performance in “XXL” format.

QUALITY



Top performance

The “HSK” spindles rotating speed up to 12.000 rpm ensures excellent finish quality even at high working speeds.

VERSATILITY



Increased working sections

The machine structure enables managing a wide range of widths and thicknesses for the work-pieces, to carry out a great variability of products.

ACCURACY



Perfect stability of the work-pieces

The machine is fitted with new worktables, easily interchangeable, specifically designed for a quick and accurate positioning, depending on the profile to be executed.

EFFICIENCY



Wide flexibility

Feed system with a large number of wheels and powered rollers on the worktable, to manage even the most demanding conditions.

RELIABILITY



No possibility of error

The MOBILE PC electronic control makes machine programming intuitive. Clear and precise information are always available, thanks to detailed reports.

20

SOFTWARE

27

TECHNICAL DATA

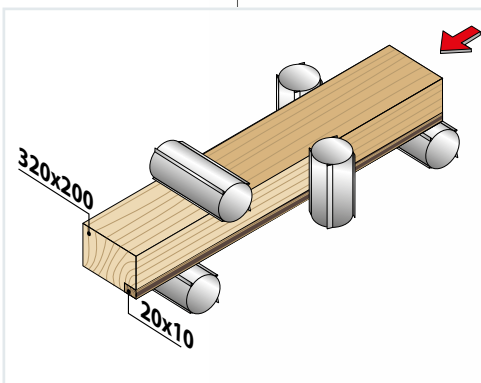
TECHNICAL FEATURES OVERVIEW

TECHNOLOGICAL ADVANTAGES



"HSK" spindles
Top performance.

Machine structure
High accuracy.



Increased working sections
Great variability of work-pieces.



Worktable
Perfect stability of the work-pieces.

xxl

topset xxl

automatic throughfeed moulder



MOBILE PC electronic control
No possibility of error.



Feed system
Wide flexibility.

STRUCTURE



Machine bed designed and manufactured with advanced technological systems to provide top performance. Thanks to the lifting bridge integrated into the machine bed, the structure is extremely sturdy, guaranteeing superior finish quality.



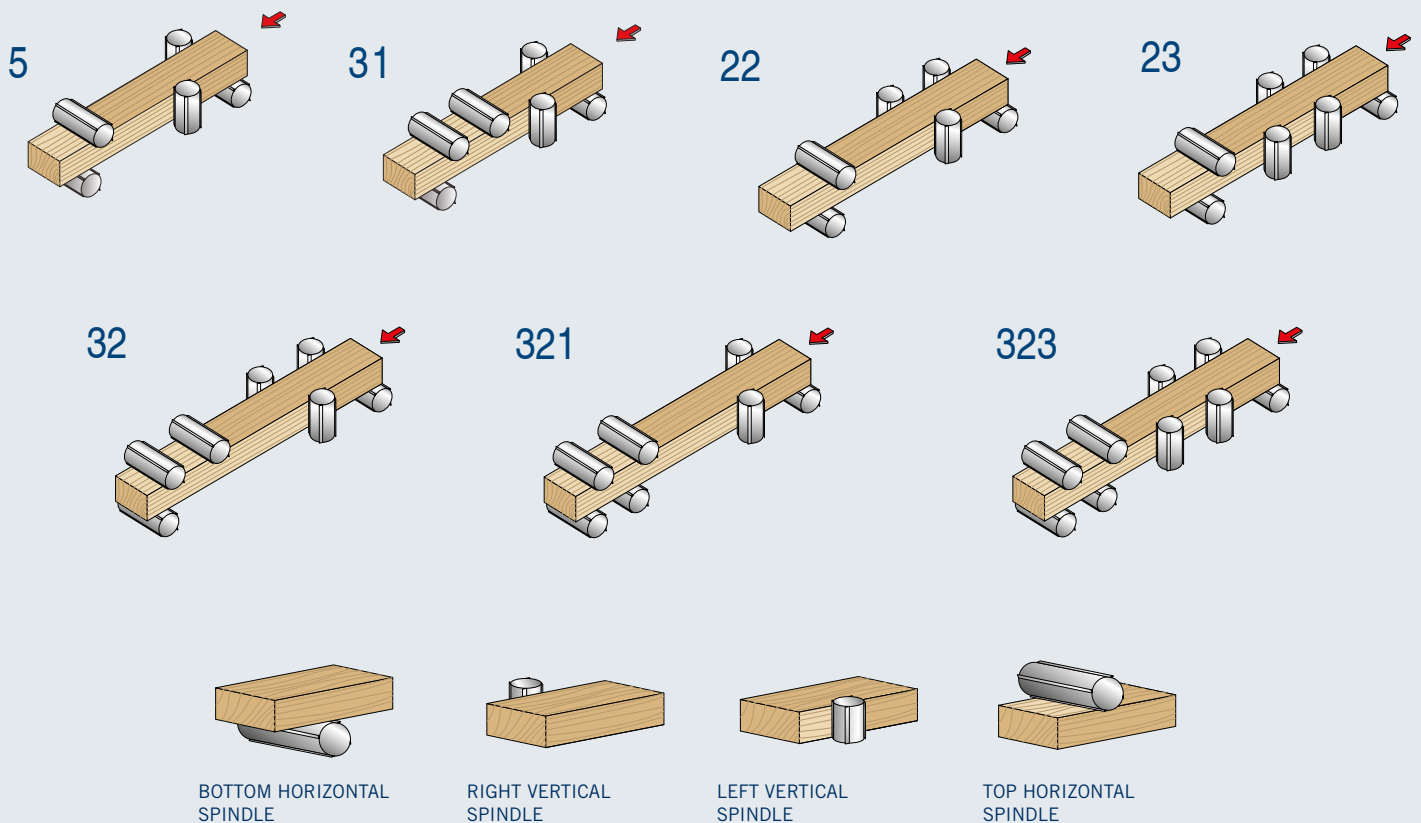
To facilitate tool change operations, the dust extraction covers are embedded in the machining unit structure and they can be comfortably opened and closed.



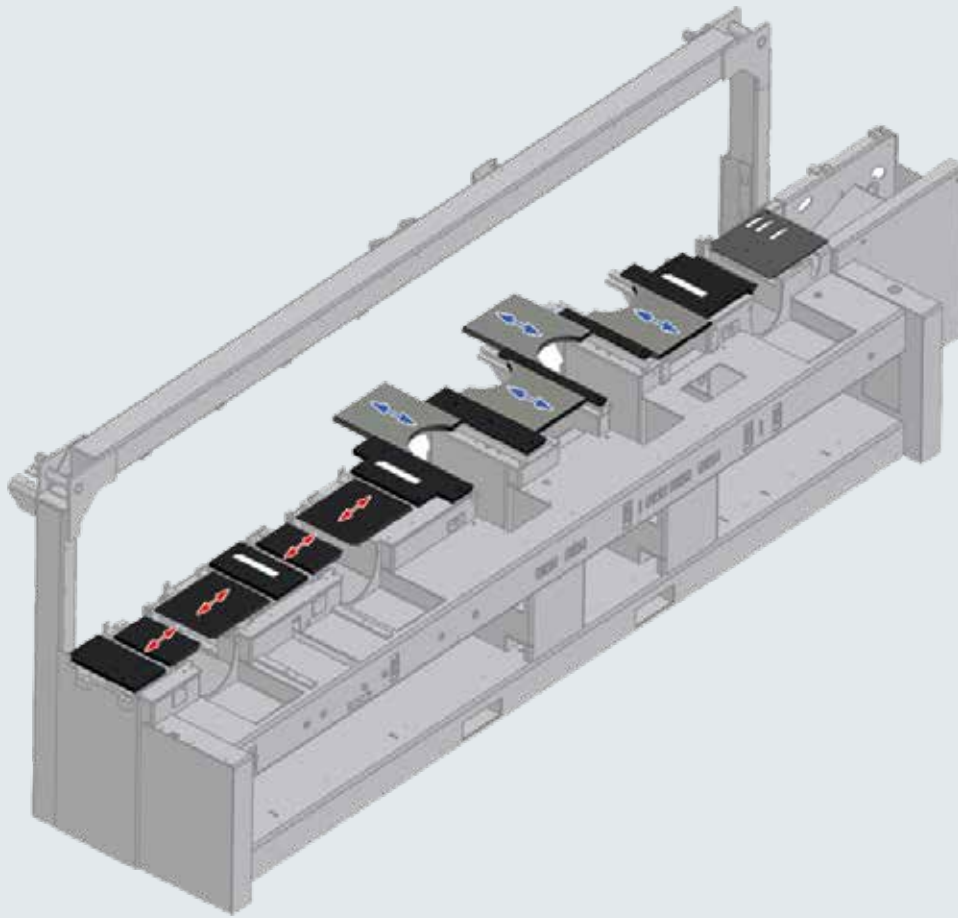
High ergonomic with the pressure regulators of the work-piece feeding wheels, positioned on the machine front.



The machine is available in 7 different compositions to offer the best configuration according to the customer's needs. All spindles can be doubled: right and left vertical units, top and bottom horizontal units.



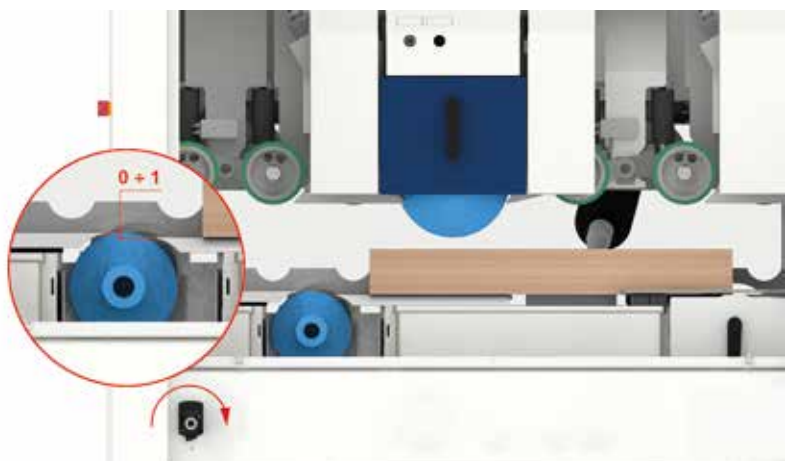
WORKTABLE

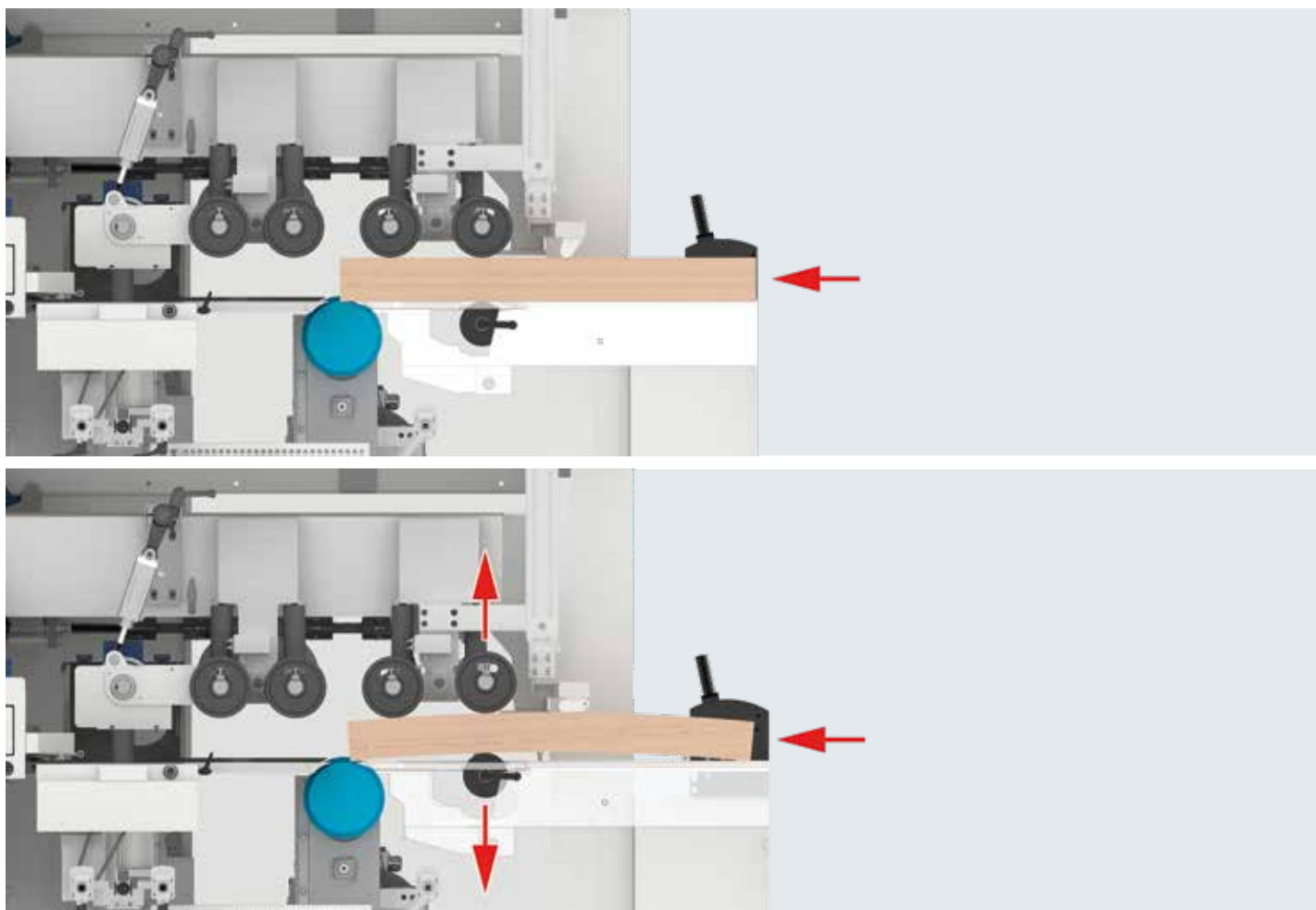


Quick set-up and optimal processing quality with the new adjustable worktables, placed in front of each machining unit.

WORKTABLE MICROMETRIC SETTING

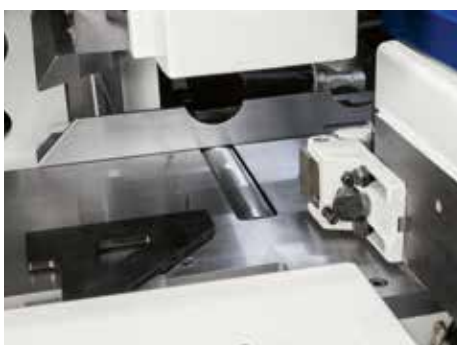
It is possible to set the height of the worktable after the bottom horizontal spindles, to execute partial or complete machining, grooving, re-planing, even with these units.





POWERED FLOATING ROLLER AT MACHINE ENTRANCE

The device, combined with the traditional feed system, allows for smooth work-piece movement, in all working conditions, with resinous, wet or warped woods.



For uniform advancement of the piece on the machine, in compositions 5, 31, 22 and 23, two powered rollers in the table are available as an option; while in compositions 32, 321 and 323, the powered rollers become three.

RIGHT AND LEFT FENCES



RIGHT FENCE WITH ADJUSTABLE SECTOR

By using a pneumatic selector, the operator can quickly adjust the fence to the correct position, according to the tool dimensions.



RIGHT FENCE WITH "ON/OFF"

Pneumatic horizontal positioning of the fence between the right vertical spindles, in order to execute partial or complete profiles, grooving, re-planing, on the 2nd right spindle.



ELECTRONIC LEFT FENCE

Independent electronic horizontal positioning with reference to the left vertical spindle, to guide the component into the optimal position.

FEED SYSTEM



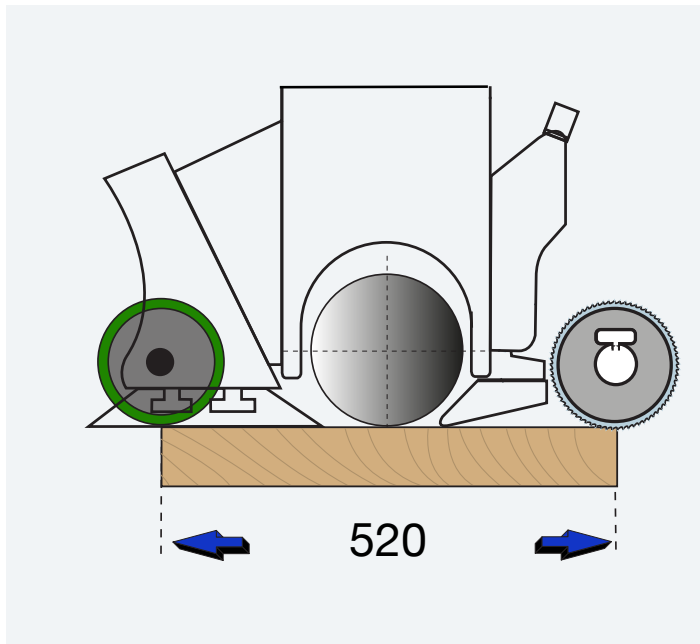
The work-piece feed system is anchored to the machine bed by means of support columns, which slide on linear guides with recirculating ball bearings.

Powering on the top side of the structure and the lifting screws help make the feeding more stable for better managing torsional stresses.



TELESCOPIC WHEELS

The wheels are placed in front of the left vertical spindle(s), with manual or electronic positioning and stroke up to 100 mm to achieve the ideal position, depending on the work-piece width to be machined.

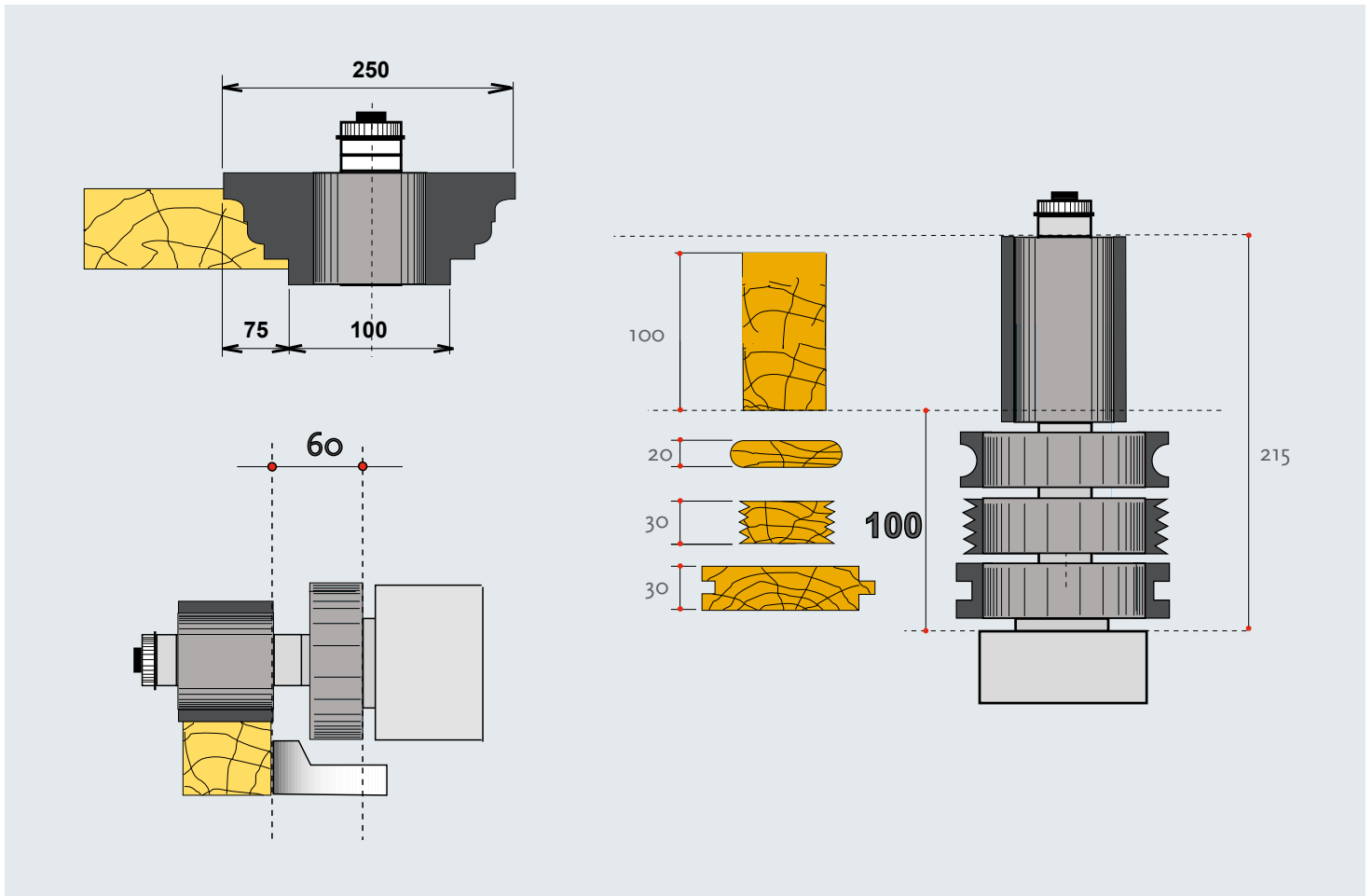


SINGLE WORK-PIECE MACHINING

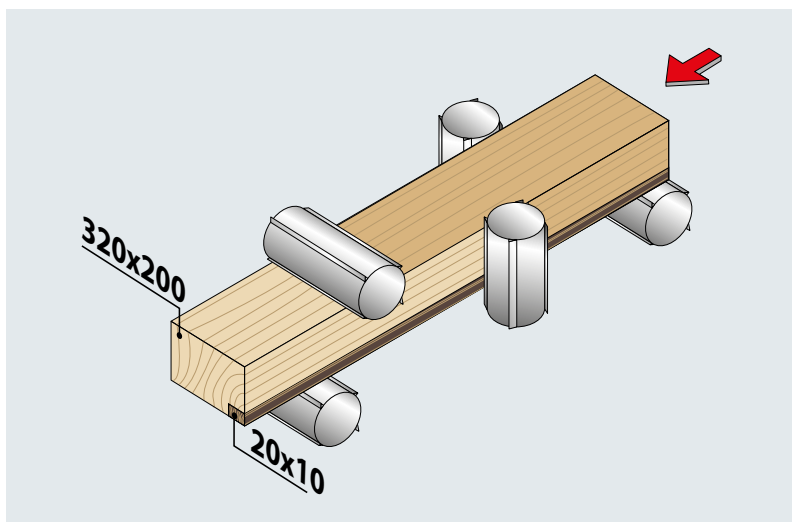
In standard configuration, the machine can process a component of 520 mm length.



MACHINING UNIT



Possibility to perform profiling up to 75 mm and to equip the machine with a high number of tools thanks to the horizontal and vertical axial strokes up to 60 and 100 mm.



INCREASED WORKING SECTIONS

The machine structure enables managing a wide range of widths and thicknesses for the work-pieces, to carry out a great variability of products.



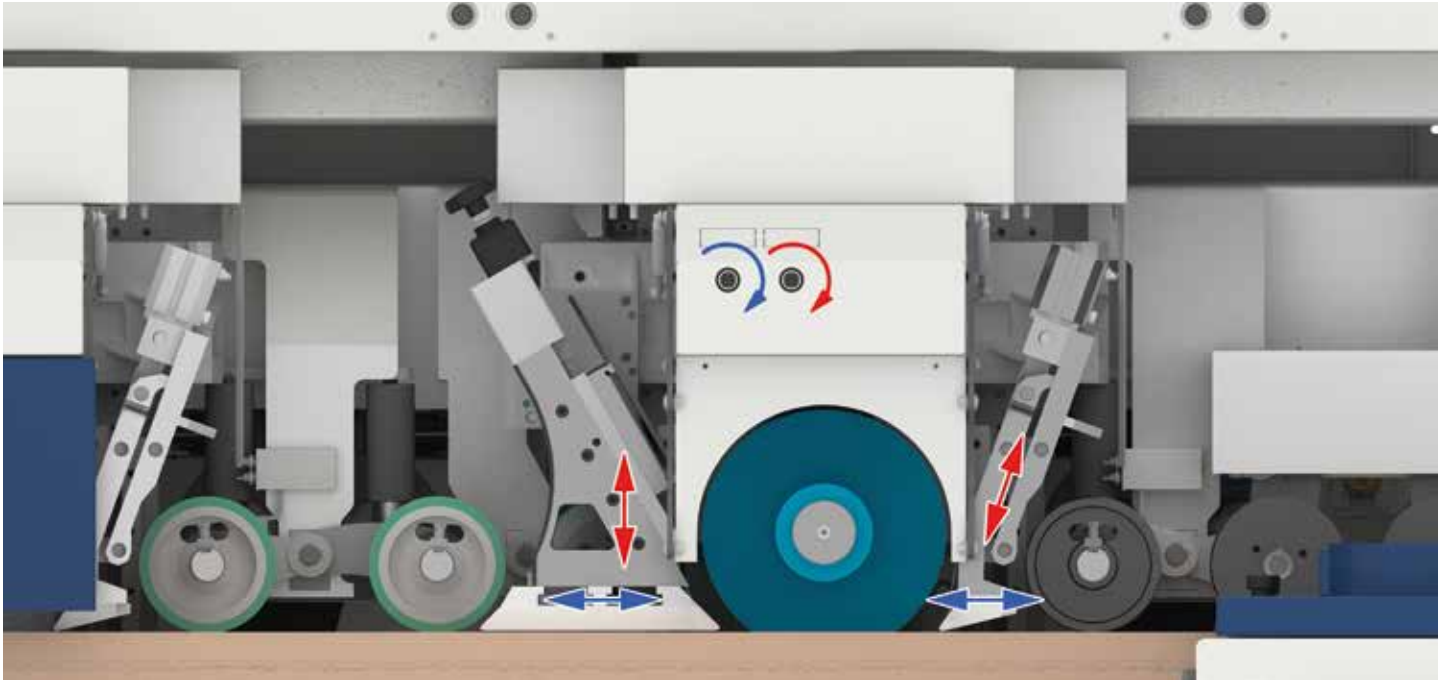
SPINDLES WITH “HSK” TOOL CHUCK

When the machining unit is fitted with inverters and spindles with “HSK” tool chuck, rotating speeds up to 12.000 rpm can be reached, guaranteeing excellent finish quality even at high working feed speeds.



In the case of a machine featuring electronic control and spindles with “HSK” tool chuck, the tool changing is guided: a QRcode identifies the machining unit and another one identifies the tool, so the machine checks the exact match between them, eliminating any possibility of error.

MACHINING UNIT



Increased productivity thanks to the possibility of changing tools and performing adjustments in just a few seconds, with the “SET-UP” system (in red), supplied on all SCM throughfeed moulders.

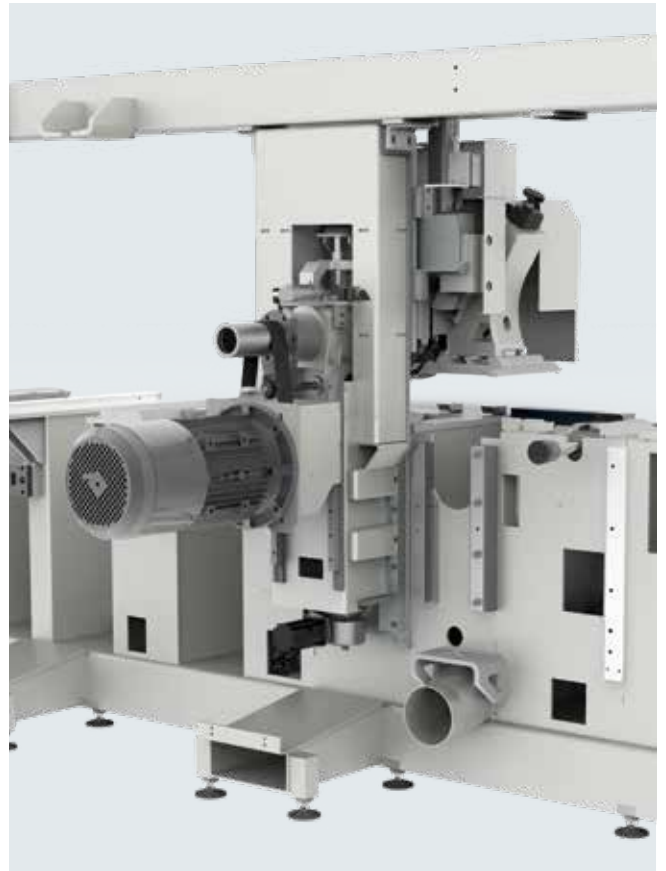
Moreover, on *topset xxl*, the top horizontal units are equipped with an additional micrometric setting of the presser shoes position (in blue), at the infeed and outfeed, for optimising their position based on the installed tool.



MULTI-SECTOR PRESSER SHOE

Foreseen for the top horizontal spindle, it ensures high finish quality. It is also available the device for the adjustment of the multi-sector presser shoe, that simulates the working conditions on the machine.

Unrivalled finishing with the top horizontal units that are rigidly connected to the machine structure, even in the top side.



M Maestro Digital Systems

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

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.

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.

Transforming the way it delivers services to its customers through digital technologies and particularly, the IoT platform that collects and analyses data coming from the machine, SCM created a world of services enabled by Maestro connect.

Meaning that connecting an SCM machine through Maestro connect will let customer subscribe a program of fast-evolving services and access a wide range of benefits that even go beyond the machine experience and will support and assist you through the whole life-cycle of your machine.

Tips on how to
correctly use
the machine

Machine
maintenance

Machine
monitoring, KPI,
instant
notifications

Maestro connect A REAL MASTER OF EFFICIENCY

Report and
historical
data export
to ERP

Warranty
extension

Predictive
maintenance,
Machine
learning





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 evo” console with Full HD LCD (24”) display 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.

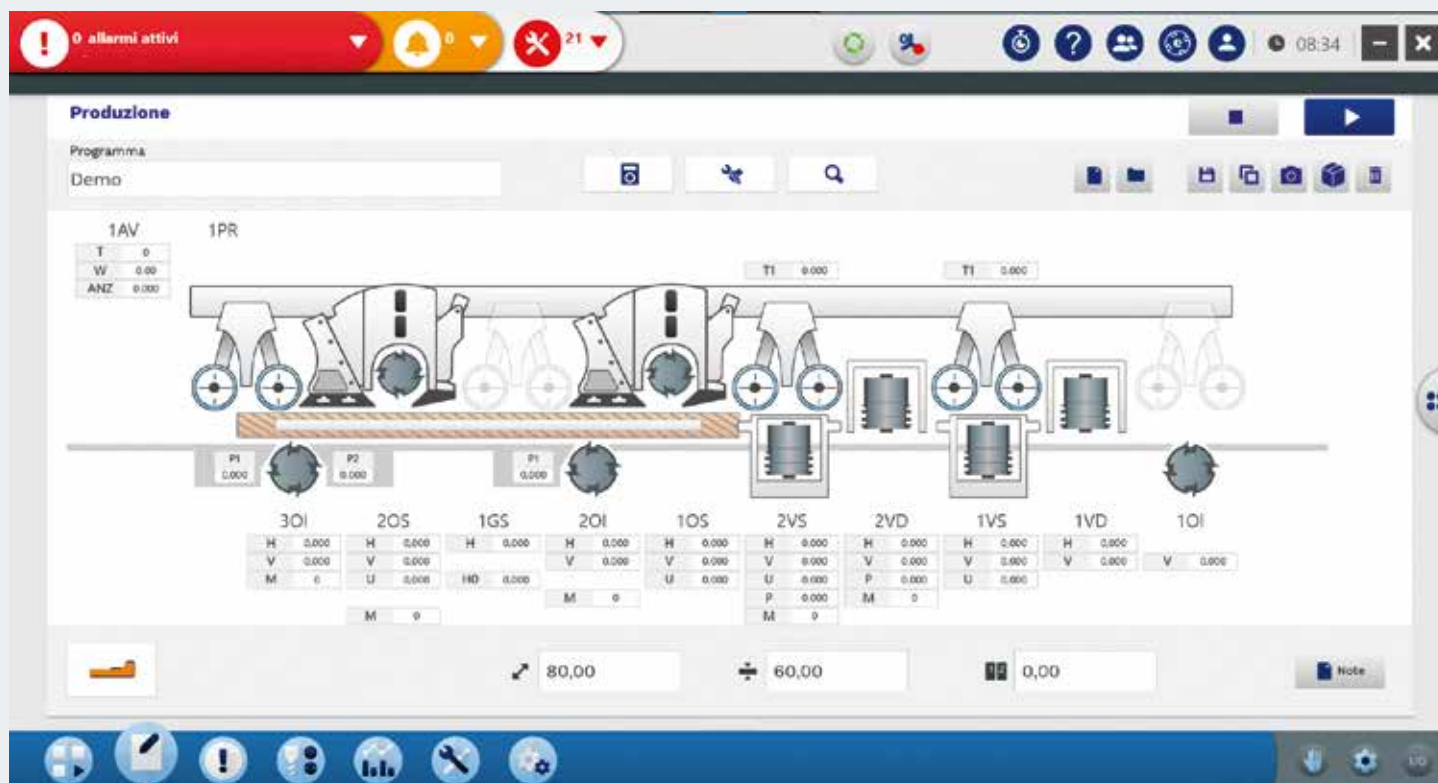
TOOLS? NO PROBLEM!

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:

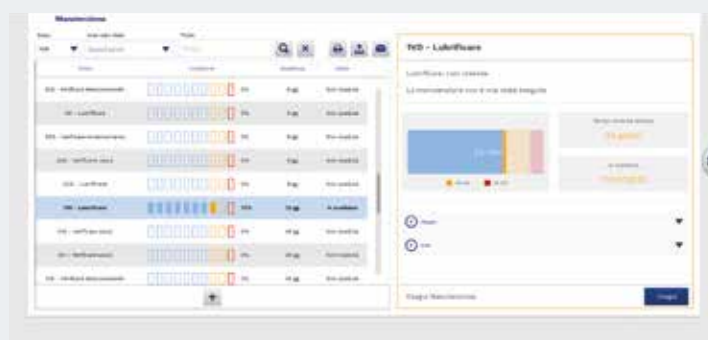
- customization of layout and options, specific for each machine composition
- tools library without number limits, with import of the tool image
- work programs without number limits, with import of the profile image
- MDI (Memory Data Input) function for guided manual adjustment of axes
- axes management with electronic adjustment, feed speeds adjustment, on/ff power for motors, spindle rotating speed setting (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.



Guided operations by software during manual machine set-up.



Management of maintenance to be performed on the machine.



Paddle: quick commands accessible on the machine interface.



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



Settings available on the machine: users, **Maestro** connect, shifts, software, constants, manual settings, data import/export.



Tool wear management.

ELECTRONIC CONTROLS



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.



BARCODE READER

Quick and easy scanning of labels applied to the components or checking the exact tool matching between “HSK” tool chuck and machining unit, by using the barcode/QRcode reader.

Maestro connect

CONNECT YOUR MACHINE AND GAIN ACCESS TO A WORLD OF SERVICES

Connecting your machine through IoT technology Maestro connect will let you subscribe a program of fast-evolving services. You will access a wide range of benefits that even go beyond the machine experience and will support and assist you through the whole life-cycle of your machine.

FASTER SERVICE INTERVENTION AND PROBLEM RESOLUTION

Maestro connect provides real time data and Health Records of the machine also to SCM Service, drastically reducing its troubleshooting time.

WORKING ALWAYS IN PERFECT CONDITIONS

Maestro connect can provide a full kit of sophisticated sensor devices to detect and warn the operator in case of alarming conditions of the machine.

SMART MACHINE

THE ENTIRE MACHINERY FLEET AT YOUR FINGERTIPS



- **REAL-TIME MONITORING** of the machine status, components, and performance in term of availability and efficiency.
- **INSTANT NOTIFICATIONS** on pc, tablet, and smartphone when machine alarms occur, allowing you to act timely and avoid additional equipment damages.

SMART MAINTENANCE

PLANNING AND MAINTENANCE: PREVENTION IS BETTER THAN... REPAIRING!



- **PLANNING:** In the Smart Maintenance section, you can find all the tools you need to plan the maintenance of the entire machinery fleet to prevent downtimes.
- **TROUBLESHOOTING:** Thanks to intuitive smart documents, Maestro connect guides the operator in the maintenance activities procedures step by step.
- **SERVICE REQUEST:** Do you need further support? Open a ticket in one click, and our experts will assist you.

WARRANTY EXTENSION

Is your machine still under warranty?

You will be able to activate the second year of warranty with facilitated conditions directly via Maestro connect.



SMART ANALYTICS

REPORT AND KPI: GET TO KNOW BETTER YOUR MACHINE



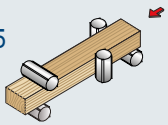
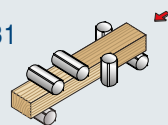
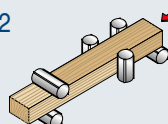
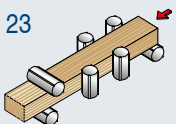
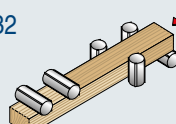
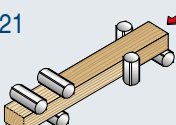
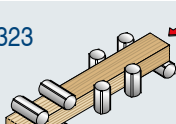
Maestro connect reports and KPIs provide an in-depth analysis of production results, enabling you to know your machine's performance in detail.

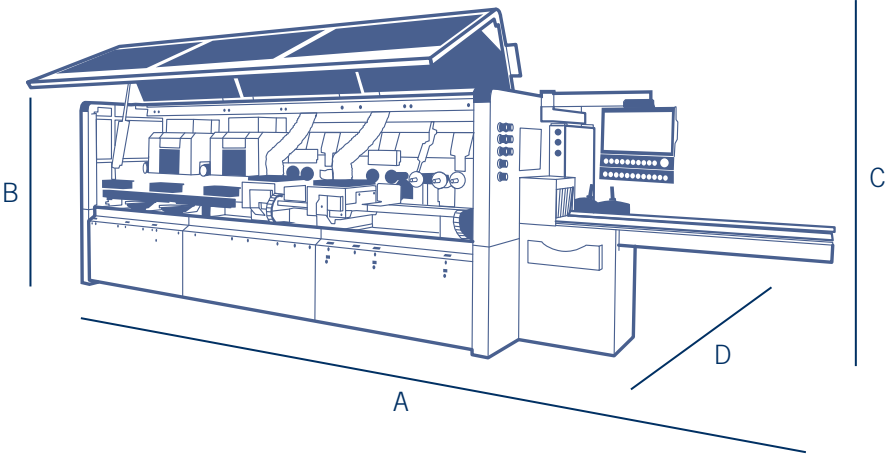
OEE: WHY IT'S IMPORTANT TO KNOW IT



The Overall Equipment Efficiency Indicator (OEE) allows you to monitor the three variables: **Availability, Performance and Quality**. By doing so, you'll be able to detect the lower one and act on it: the performance of your machine will be the highest ever.

LAYOUT

Machine composition	A (mm)	B (mm)	C (mm)	D (mm)
<div>5</div> 	5870	1870	2466	2505
<div>31</div> 	5870	1870	2466	2505
<div>22</div> 	5870	1870	2466	2505
<div>23</div> 	5870	1870	2466	2505
<div>32</div> 	6776	1870	2466	2505
<div>321</div> 	6776	1870	2466	2505
<div>323</div> 	6776	1870	2466	2505



topset xxi		
Minimum working width (finished section)	mm	20
Maximum working width (finished section)	mm	320
Minimum working thickness (finished section)	mm	10
Maximum working thickness (finished section)	mm	200
Feed speed	m/min	4 ÷ 40
Motors power	kW (HP)	7,5 ÷ 40
Spindles rotating speed	rpm	6000 [8500 opt.] (6.000 - 12.000 with HSK)
Diameter of tool-holder spindles	mm	50 [40 opt.]
Axial adjustment of vertical spindles from worktable	mm	100 [95 with HSK]
Axial adjustment of horizontal spindles from right fence	mm	60
Min./max. diameter of planing spindle and reference engraver tools	mm	120/145 - 140/165
Min./max. diameter of planing tools (planing spindle excluded)	mm	100/200
Min./max. diameter of profiling tools (planing spindle excluded)	mm	100/250
Worktable height	mm	950 ± 15
Diameter of feeding rollers	mm	140
Axial adjustment of feeding wheels (if the option is foreseen)	mm	100



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

THE USE OF POWER ONLY WHEN IT IS REQUIRED

SavEnergy allows making things operate only when they are really necessary. It means the machine automatically enters “stand-by” mode when there are no panels to be machined.

The technical data can vary according to the requested machine composition. In this catalogue, machines are shown with options. The company reserves the right to modify technical specifications without prior notice; the modifications do not influence the safety foreseen by the CE Norms.

*Maximum noise levels measured according to the operating conditions established by
Acoustic pressure in process 84.8 dB(A) (measured according to EN ISO 11202:2021).
Acoustic power in process 104.3 dB(A) (measured according to EN ISO 3746:2010).*

Even if there is a correlation between above mentioned “conventional” noise emission values and average levels of personal exposure over eight hours of operators, these last also depend on the real operating conditions, duration of exposure, acoustic conditions of the working environment and presence of further noise sources, this means the number of machines and other adjacent processes.



SERVICE AND MAINTENANCE



TRAINING SERVICE



SPARE PARTS



DIGITAL SERVICES

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!**

CONTACT

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My Scm

WE'LL GO THE EXTRA MILE FOR 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

SOLUTIONS AND SERVICES ALWAYS CONNECTED FOR YOU

SCM, A STRATEGIC PARTNER, BY YOUR SIDE AT EACH STAGE OF YOUR BUSINESS PROCESS

SCM has always stood alongside companies in the woodworking sector, with **technological solutions and services which are constantly connected to maximise the machine's efficiency, improve product quality and reduce operating costs.**

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

SCM GROUP, THE MOST ADVANCED SKILLS AND KNOW-HOW IN THE FIELDS

INDUSTRIAL MACHINERY

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



Woodworking
technology



Composite, aluminium,
plastic, glass, stone, metal
technology



Technologies for the profiles
processing of aluminium,
PVC and light alloy



Automated systems for
industry



OF MACHINERY AND INDUSTRIAL COMPONENTS OVER THE LAST 70 YEARS

INDUSTRIAL COMPONENTS

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

HITECO

Electrospindles
and technological
components

les

Electrical
panels

steelmec

Metalworking and
mechanical machining

scmfonderie

Iron castings



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