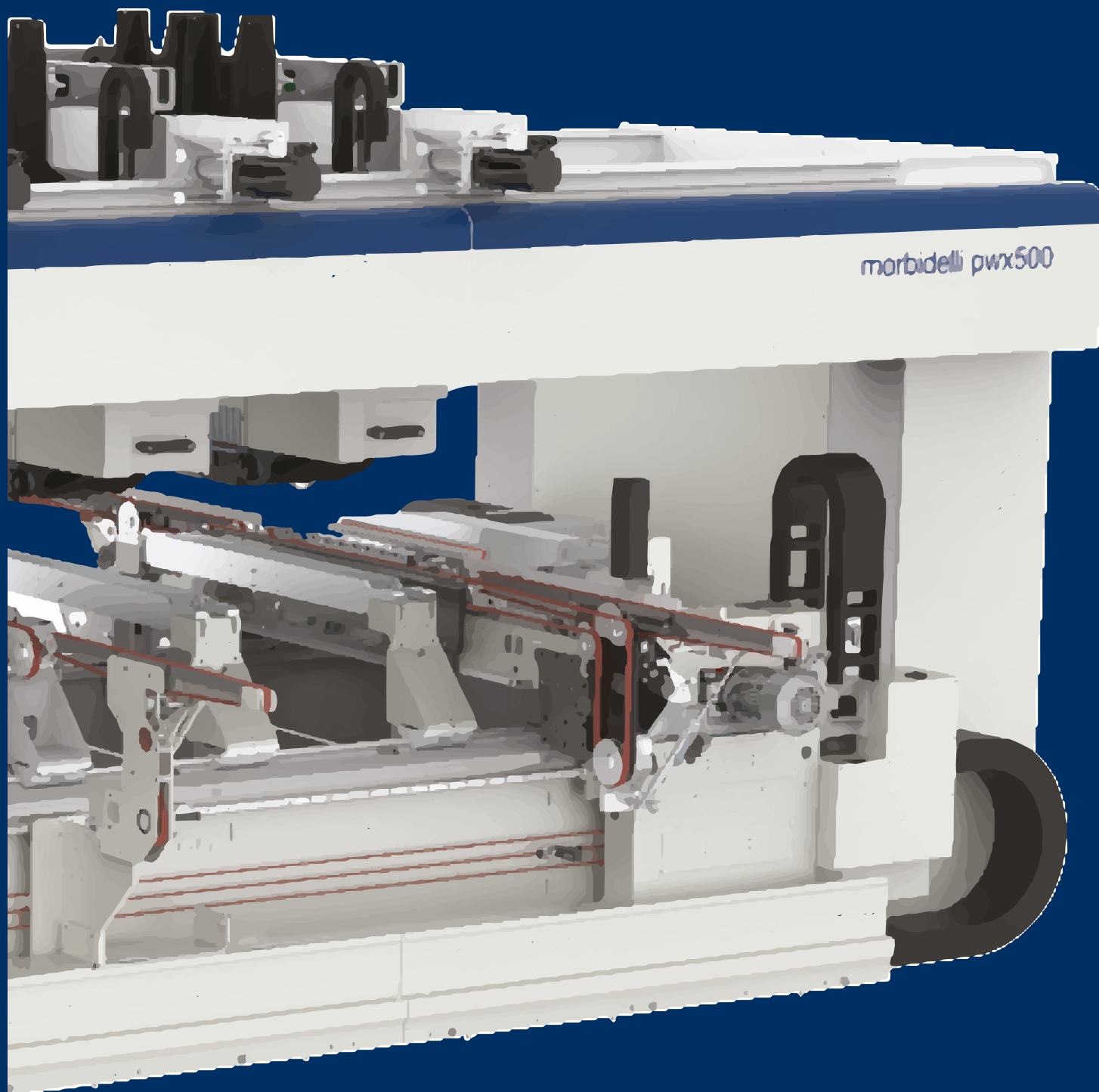


morbidelli pwx500

high-productivity flexible drilling machine



MORBIDELLI PWX500

**FLEXIBLE DRILLING
FOR BOOSTED PRODUCTIVITY**

MORBIDELLI PWX500



OUR SOLUTION FOR FLEXIBLE,
FAST AND HIGH-QUALITY
PRODUCTION

TOP QUALITY



Drilling precision with the innovative RO.AX (Rotoaxial spindle technology), the highest-performance spindle on the market with controlled rotation speed from 3000 to 6000 rpm.

Movement system FLEX that automatically adapts to the characteristics of the workpiece.

FASTER



High productivity even when machining **small batches differing in quantities and characteristics.**

Configurability for any production need: up to 14 operating heads and 454 independent spindles, electrospindle with tool changer, blade units and routing unit.

FLEXIBLE



Programme changes in a few seconds thanks to high axis translation speed and independent positioning of units and worktables.

Optimisation of the upper drilling units to meet modern industry's need for batch variability.

Possibility of carrying out **additional machinings** such as doweling, routing and grooving.

DIGITAL



Simple, fast and reliable management with the **Maestro Suite's** wide range of software.

Optimised drilling heads' set-up with **Maestro Powerset** to execute all programs in the shortest possible time.

Complete and immediate reporting.

16

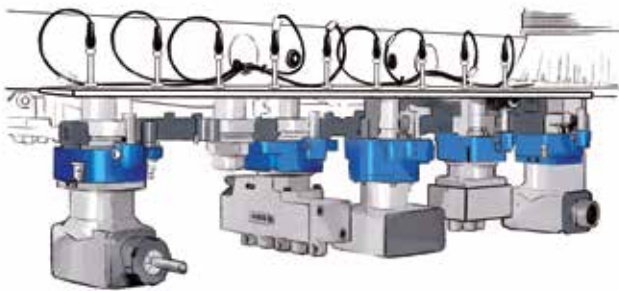
OVERALL DIMENSIONS

17

TECHNICAL DATA

TECHNICAL FEATURES OVERVIEW

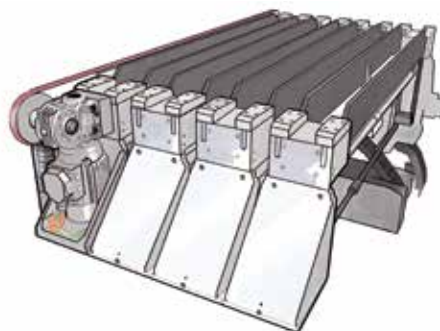
DETAILS THAT MAKE THE DIFFERENCE



9.5 kW electrospindle and 10 positions tool changer with all the tools required always on board for routing, grooving and deep drilling.



Movement and reference system FLEX that automatically adapts to the characteristics of the workpiece, with the possibility of positioning the panel in one or more Y positions.



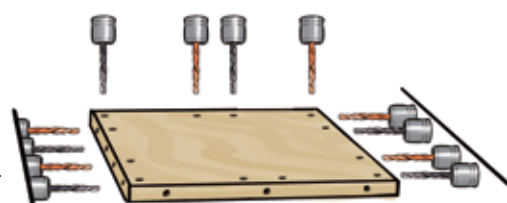
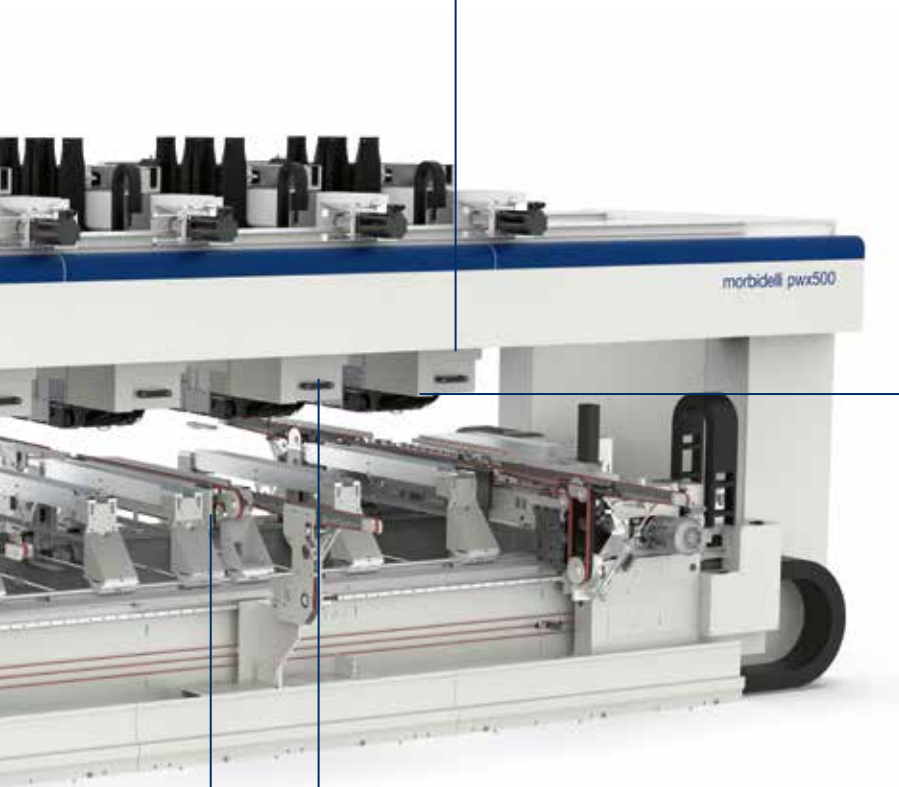
Work tables equipped with independent X positioning, automatically managed according to the workpiece dimensions.

morbidelli pwx500

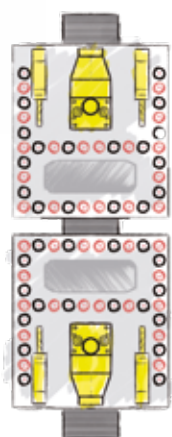
high-productivity flexible drilling machine



Doweling unit with variable centre to-centre distance and up to 6 independent inserting devices per side, automatically positioned in X, Y, Z.



Horizontal and vertical drilling units with independent spindles.



New drilling unit providing the best spindle arrangement and maximum productivity.

PWX500

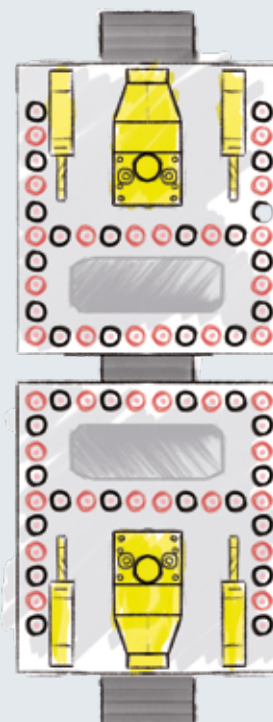
HIGH FLEXIBILITY

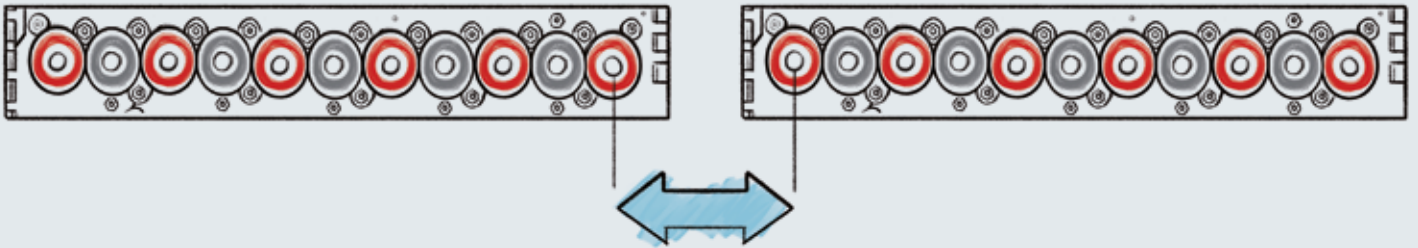


HORIZONTAL AND VERTICAL OPERATING UNITS

ensuring reliability and high productivity.

Each operating unit consists of two heads with 36 vertical spindles and can be equipped with 2+2 horizontal spindles and 1+1 hinge heads, also of different types.





THE MACHINE IS EQUIPPED WITH:

- 1+1 drilling head with 21 independent spindles automatically positioned in X, Y, Z.
Or
- 2+2 drilling heads with 11 spindles with variable centre-to-centre distancing.



HORIZONTAL DOWELING:

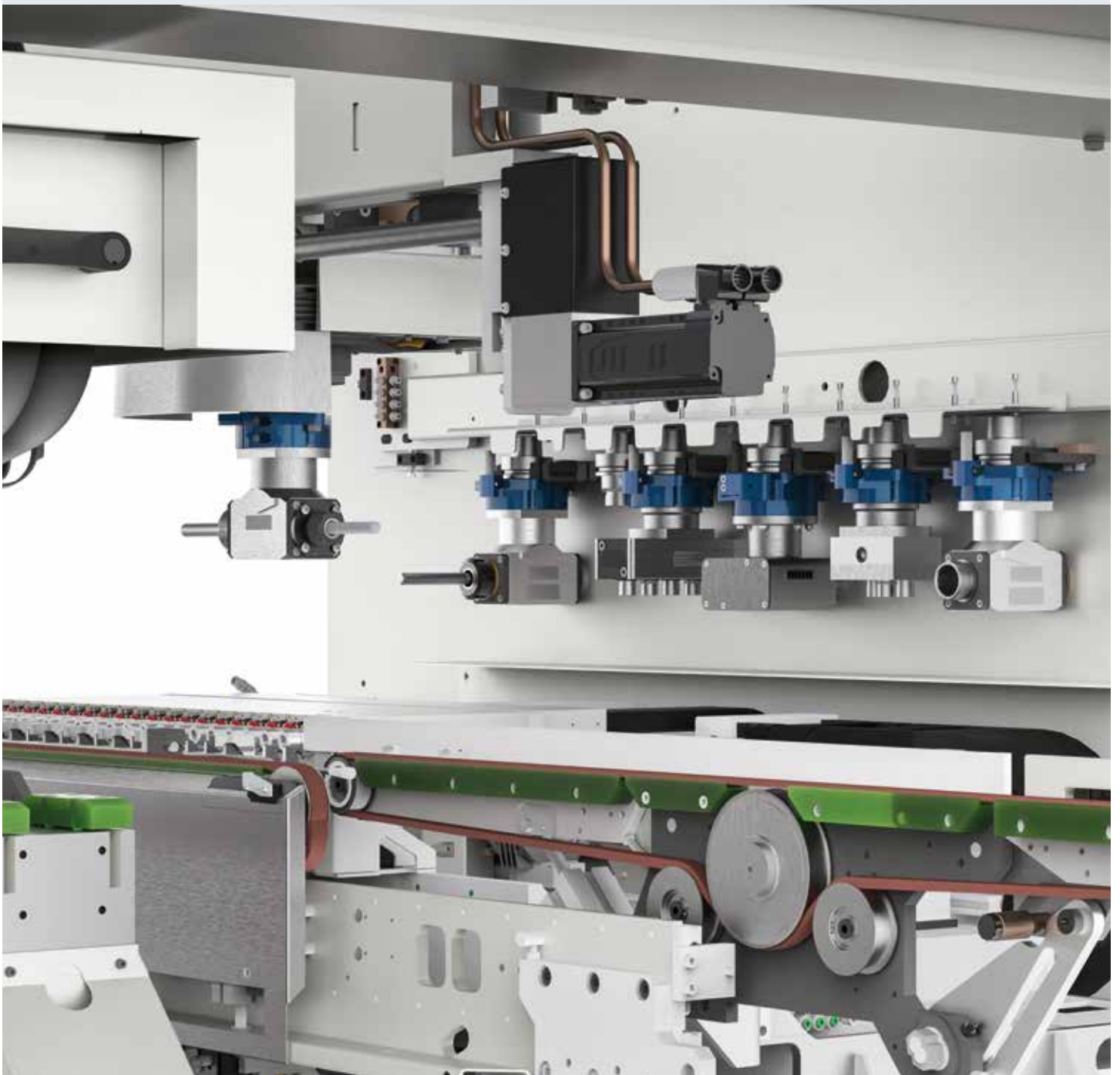
- 6 independent inserting devices per side, automatically positioned in X, Y, Z.
- Automatically adjustable dowel protrusion from 10 to 20 mm.
- Feeder for pre-glued dowels and vinyl glue.
- Integrated sensors and diagnostics (optional).

PWX500

HIGHLY FUNCTIONAL AND RELIABLE:

9.5 kW electrospindle with HSK63-F quick release tool-holder with integrated C-axis and a rotation speed of up to 24,000 rpm. It is the ideal solution to perform multiple machining operations, even according to the selected aggregates:

- vertical routing
- vertical drilling with multiple heads or hinge heads
- deep drilling - horizontal routing with angular drive head on front and rear side
- clamex



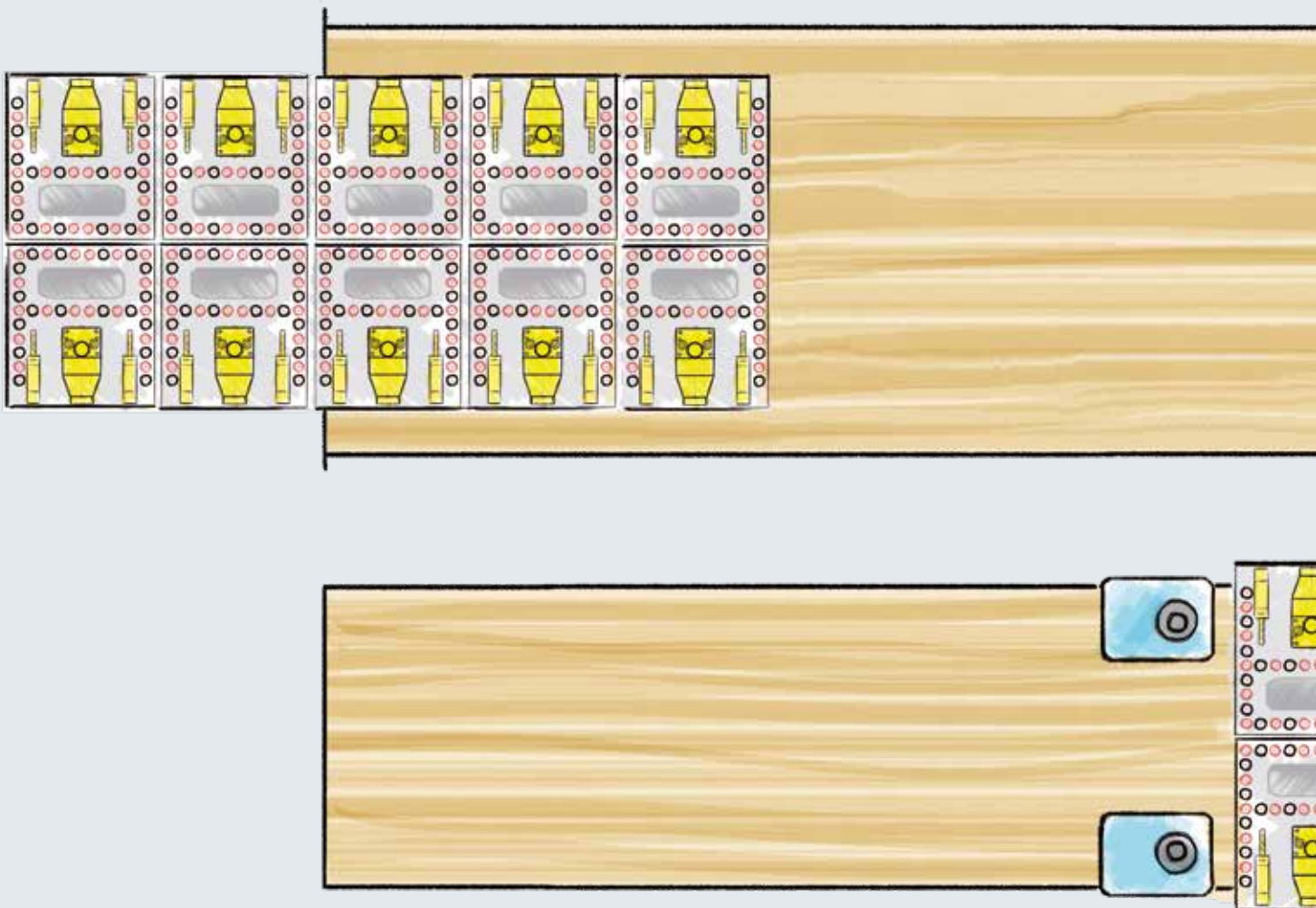
morbidelli pwx500

high-productivity flexible drilling machine



HIGH SPEED

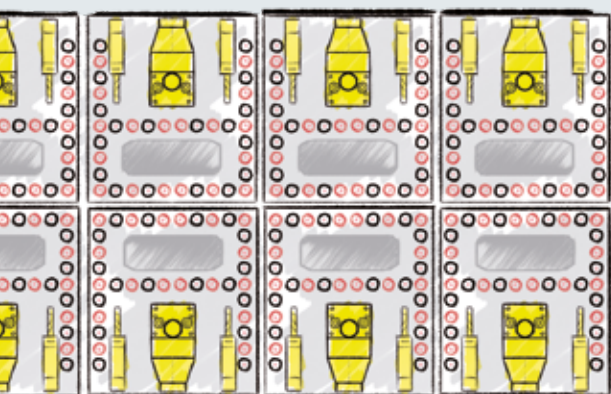
MAXIMUM PRODUCTIVITY even when machining small batches differing in quantities and characteristics.





LARGE NUMBER OF SPINDLES REACHING THE EXTREMITIES OF THE PANEL:

up to 5 rows of spindles and over 450 bits both left and right reaching the extremities of the panel, so as to execute structural holes according to the different needs.



EXTREME SPEED AND MAXIMUM PRODUCTION STANDARDS:

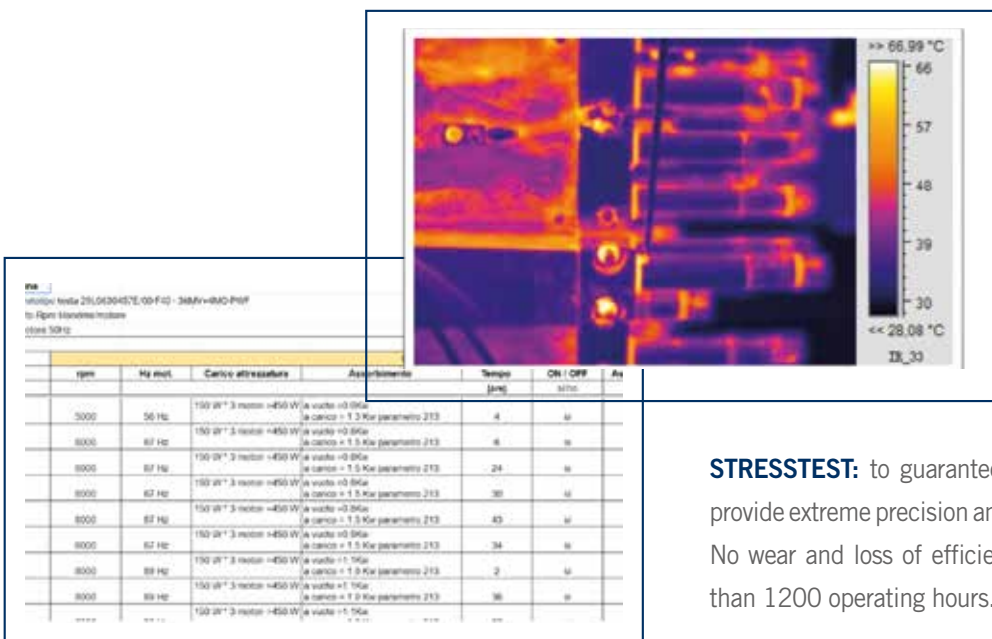
the panel can be machined with several independent units at the same time through a reduced number of steps.

RWX500

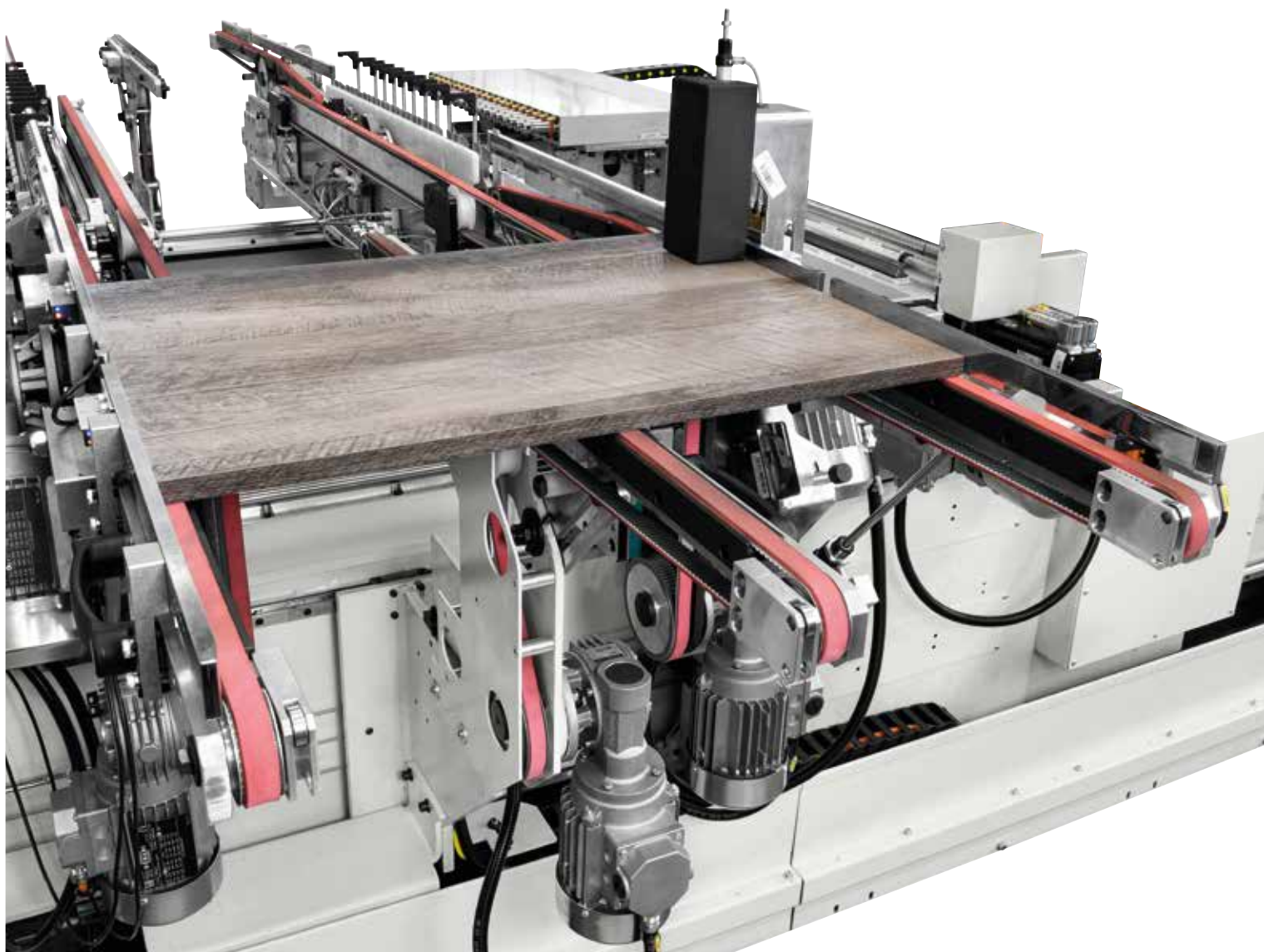
HIGH QUALITY



DRILLING PRECISION with the innovative RO.AX (Rotoaxial spindle technology), the highest-performance spindle on the market.



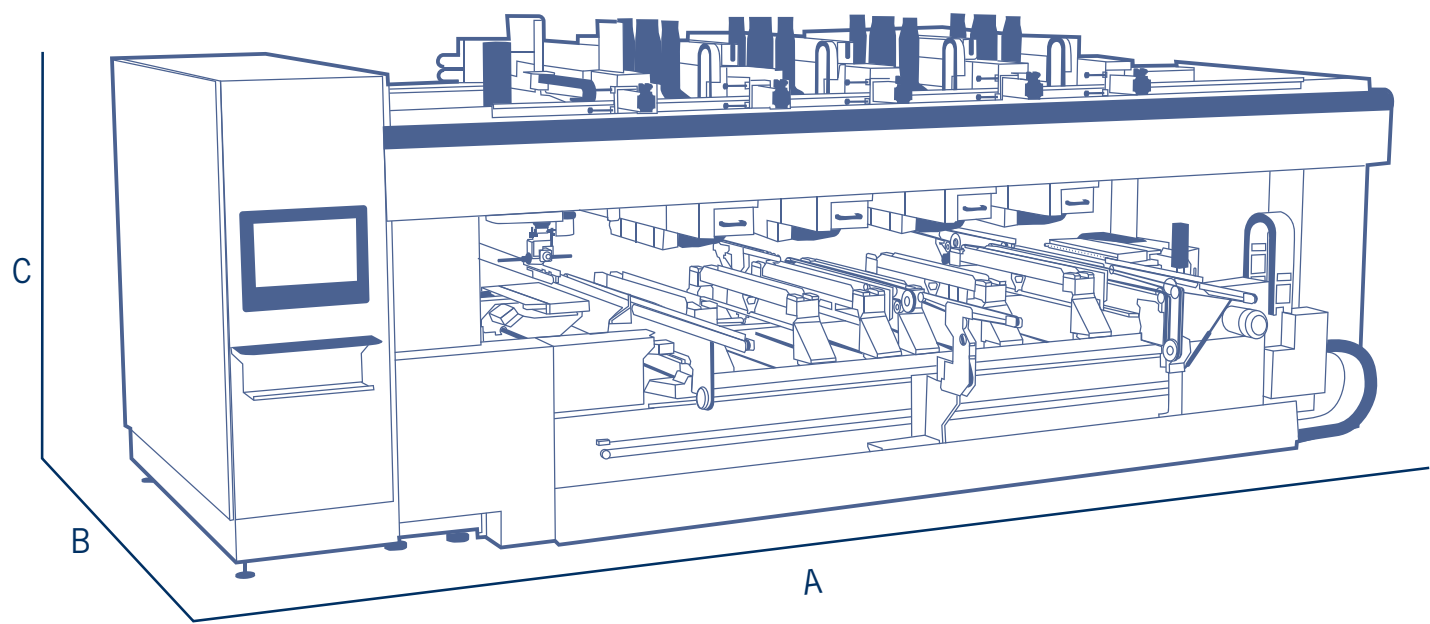
STRESSTEST: to guarantee temperature stability to 65 degrees and provide extreme precision and preservation of lubrication characteristics. No wear and loss of efficiency with maintenance required after more than 1200 operating hours.



ABSOLUTE PRODUCTIVITY with any type of material thanks to the **FLEX movement and reference system** which automatically adapts to the characteristics of the workpiece by changing speeds and accelerations according to the mass of the panel to be transported.

OVERALL DIMENSIONS

morbidelli pwx500		A	B	C
	mm	9100	from 3650 to 6000	2550



morbidelli pwx500		
Min. / max. panel length	mm	250 / 3000
Min. / max. panel width (single positioning)	mm	100 / 900
Min. / max. panel width (double positioning)	mm	100 / 1200
Min. / max. drilled panel thickness	mm	10 / 60
Min. / max. panel with dowels thickness	mm	12 / 60
Max panel weight	Kg	50
Vertical drilling heads (max.)	no.	10
Horizontal drilling heads (max.)	no.	4
Drilling rotation speed	rpm	3.000 - 6.000
Automatic work tables	no.	5 (std) - 1 (opt)
Work table height	mm	1070
HSK 63 electrospindle with tool changer (opt.)		
Side doweling unit (opt.)		

SOFTWARE

Maestro lab

In the office, the Maestro lab design and programming system ensures that all machining can quickly and easily be programmed.

Transforming an idea into a finished product has never been easier.

More than 150 already integrated apps allow to generate cnc programs with just a few mouse clicks.



Office

THE SOFTWARE THAT SIMPLIFIES THE WORK

CAD/CAM programming software to design all the production processes. Developed in Windows environment it ensures easy programming with an advanced, simple and intuitive sketching environment that features all the tools necessary to design the parts, tools management and the relative machining operations.

All the procedures are contained in a perfectly integrated and high performance software.

SUITE



Maestro msl connector

Connector with third-party design software to ensure total integration.



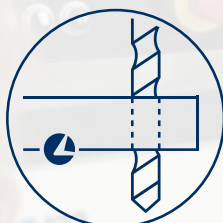
Maestro 3Drill

Module for the automatic detection of holes and the application of machining on surfaces.

Maestro Powerset

Maestro lab module whose function is to provide the most efficient drilling combination for each mix and calculate the instantaneous productivity of the machine.

The only optimiser on the market that allows to equip the machine more often to achieve maximum efficiency on each order/batch.



Tools optimiser

INNOVATIVE AND UNIQUE OPTIMISER ON THE MARKET

Software for creating detailed reports of machining steps and times for single panels and their batches. Algorithm that generates tool list and tooling file ready to be used on the machine.



OPTIMISED TOOL POSITIONING



TOOLING MAP



INSTANTANEOUS LINE PRODUCTIVITY CALCULATION



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!**

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www.scmwood.com

SCM SPAREPARTS

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spareparts@scmgroup.com
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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

THE STRONGEST WOOD 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

SCM GROUP, A HIGHLY SKILLED TEAM EXPERT IN INDUSTRIAL MACHINES

INDUSTRIAL MACHINERY

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



WOODWORKING TECHNOLOGIES



TECHNOLOGIES FOR PROCESSING
COMPOSITE MATERIALS, ALUMINIUM,
PLASTIC, GLASS, STONE, METAL

TECHNOLOGIES



industrial equipment and components for machining the widest range of materials.

AND COMPONENTS

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

Les

ELECTRIC PANELS

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