

morbidelli p200

machining centre for drilling, routing and edgebanding



THE AFFORDABLE ALL-IN-ONE TECHNOLOGY

UNDERSTAND THE NEEDS TO BE...



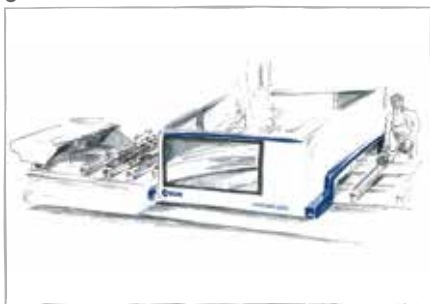
... ALL RESPONSIVE



**EVERYTHING YOU
HAVE ALWAYS
DREAMED OF A
CNC MACHINING
CENTRE BUT
WERE TOO
AFRAID TO ASK**

FREEDOM

6



Optimizing the space in your factory due to the PRO-SPACE solution.

Accessible and ergonomic 360° all around, no floor obstructions: all the components are within the base.

Total safety and freedom to load large panels (as wide as 2200 mm) due to the work table being entirely accessible.

TOP QUALITY

12



The most performing and compact edgebanding unit that allows the edge application on panels up to 80 mm thick.

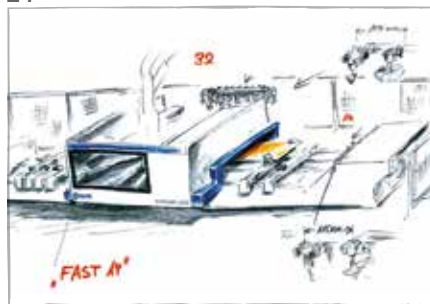
Unrivalled finishing with new direct drive **JQX (Just Quality eXtreme)** 5-axis electrospindle.

Reduced maintenance, owing to the **RO.AX** (Rotoaxial spindle technology) drilling bits. It is recommended only after more than 1000 hours of work.

60% of time saved on drilling cycles with the new drill-bits designed to guarantee the best effectiveness on all types of material and building styles.

FASTER

24



Beyond imagination, up to 60 tools always available on board.

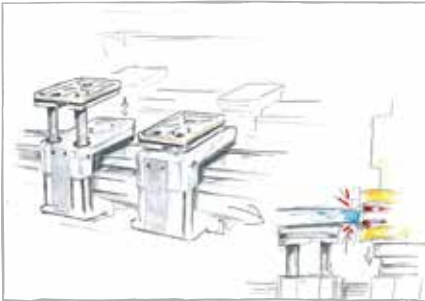
Less than 15" for the tool change with the 14 position **FAST** tool changer.

ALL

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machining centre for drilling, routing and edgebanding

FLEXIBLE

28



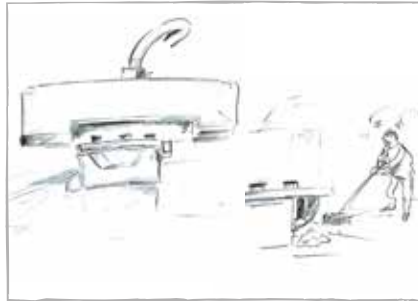
From wood to plastic, from panel to furniture, from kitchen doors to windows. **The right solution configured for all your needs** and your investment plan.

Zero idle times for set-up operations and no compromise for the machine performance with **the versatility and free configurability** of the **TV FLEXMATIC** work table.

With HE-POD the work table becomes 3D: a single positioning and no displacement.

CLEAN

36



No problem with dust or shavings as a result of the intelligent solution of the dust collection box located in an ergonomic position.

Free space on the floor with the vacuum pump integrated in the machine base.

SOFTWARE

40



CAD/CAM programming software to design all the production processes.

42 **TECHNICAL DATA**
43 **SERVICE - SPARE PARTS**

TECHNICAL FEATURES OVERVIEW

11

*All at your fingertips with the **TECPAD** 7" remote control with colour touch-screen.*



13

*Rapid working cycles with the 14 position **FAST** tool changer.*



12

Free access, having the cable-holder chain enclosed within the machine frame.



8

*Zero idle times for set-up operations and no compromise for the machine performance with **the versatility and free configurability** of the **TV FLEXMATIC** work table.*

9

*Integrated **electrical cabinet** with air conditioner.*



10

Intuitiveness and easiness with the APPS included in the Maestro software for doors, stairs, furniture and furnishing elements production.



morbidelli p200

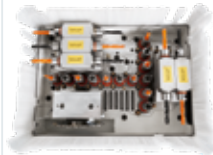
machining centre for drilling, routing and edgebanding

14

Wide availability of tools
due to the **TRC**
rear chain tool changer
with 32 positions.



1



Unrivalled finishing with new direct drive **JQX** (Just Quality eXtreme) 5-axis electrospindle.

Reduced maintenance, thanks to the **RO.AX** (Rotoaxial spindle technology) drilling bits. It is recommended only after more than 1000 hours of work.

2



The most performing and compact **edgebanding unit** that allows the edge application on panels **up to 80 mm thick**.

3



TRB tool changer
with 14 positions.

4



Free space on the floor
with the vacuum pump
integrated in the
machine base.

6

100% of the working area
covered both in routing and
in edgebanding operations.



7



The work table becomes 3D:
HE-POD.

5



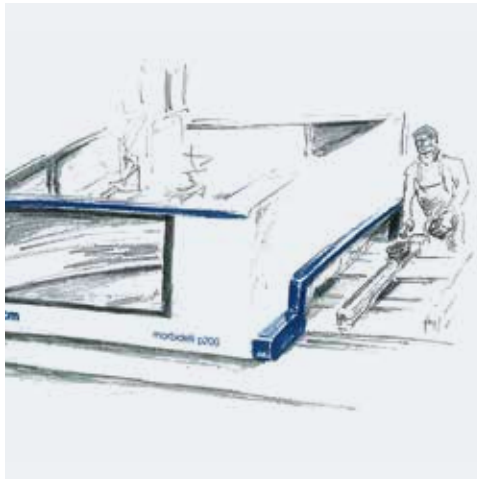
No problem with dust or shavings as a result of
the intelligent solution of the dust collection box
located in an ergonomic position.

EVERYTHING YOU HAVE ALWAYS DREAMED OF A CNC MACHINING CENTRE BUT WERE TOO AFRAID TO ASK

FREEDOM OF MOVEMENT



ALL FREEDOM

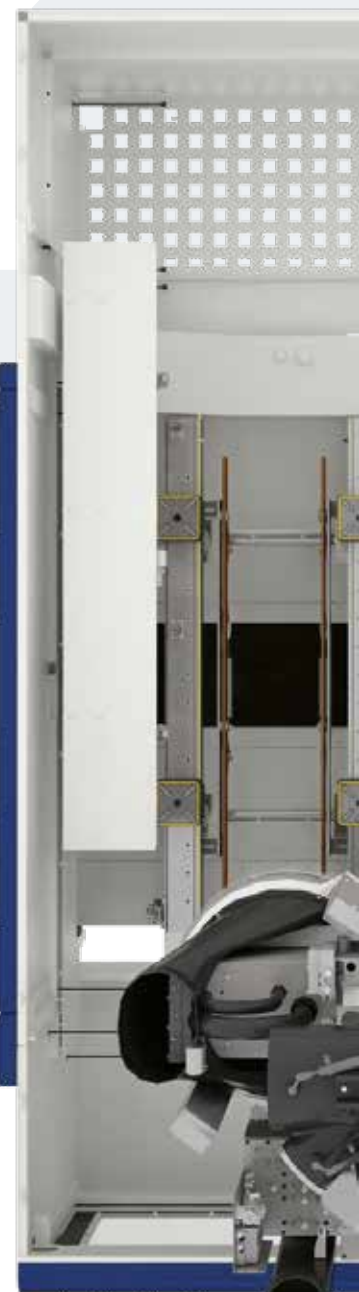


Optimizing the space in your factory due to the PRO-SPACE solution.

Accessible and ergonomic 360° all around, no floor obstructions: all the components are within the base.

Total safety and freedom to load large panels (as wide as 2200 mm) due to the work table being entirely accessible.

MINIMUM OVERALL DIMENSIONS MAXIMUM SAFETY AND FLEXIBILITY

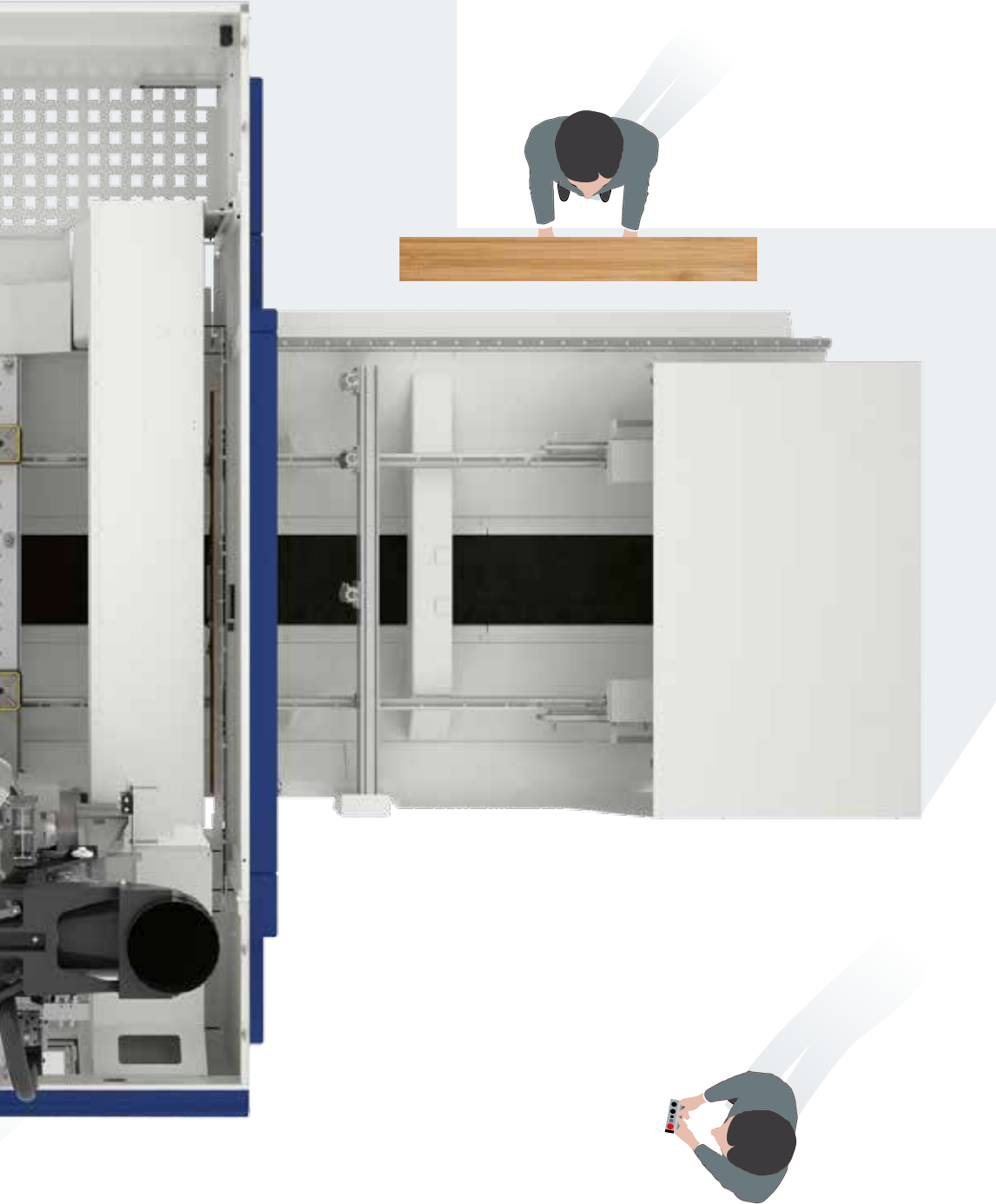


“PRO-SPACE” PROTECTIONS

Loading zone completely free in order to reduce to a minimum the space occupied. The absence of perimeter protections facilitates the work table access on all the sides of the machine.

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SAFETY SYSTEMS

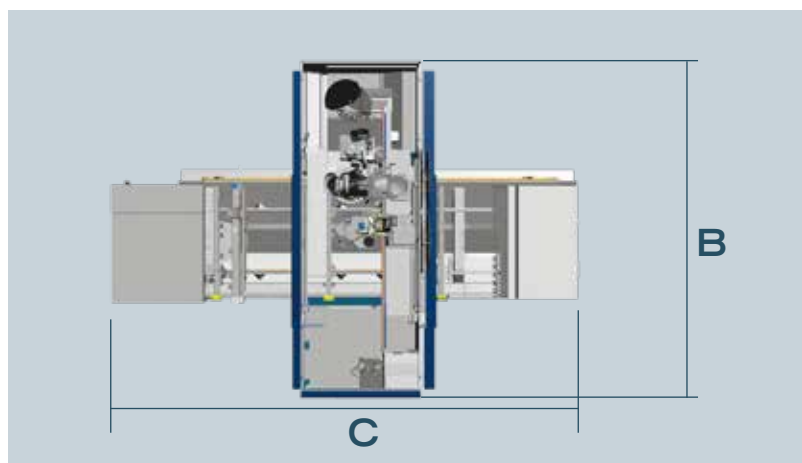
GUARANTEED SAFETY: BUMPERS PROTECTIONS

Fully safe machining with the bumpers safety system which lock the machine in case of accidental contact with the operator.



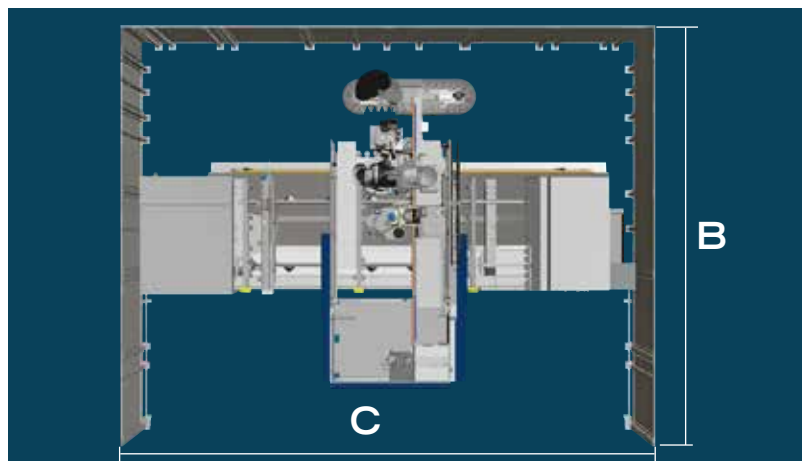
MINIMUM OVERALL DIMENSIONS MAXIMUM SAFETY AND FLEXIBILITY: PRO-SPACE PROTECTIONS

Loading zone completely free in order to reduce to a minimum the space occupied. The protections allow the machine to be used with a feed speed up to 25 m/min in X direction. The absence of perimeter protections facilitates the work table access on all the sides of the machine.



TOTAL FREEDOM AND HIGH PRODUCTIVITY: PRO-SPEED PROTECTIONS

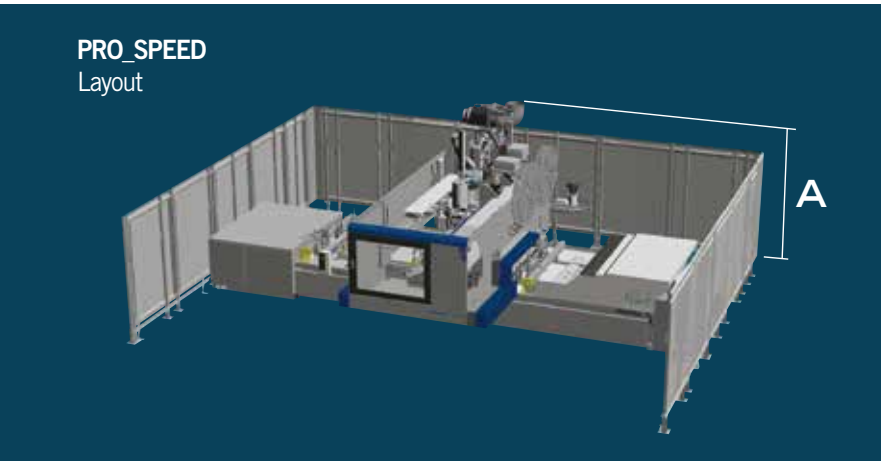
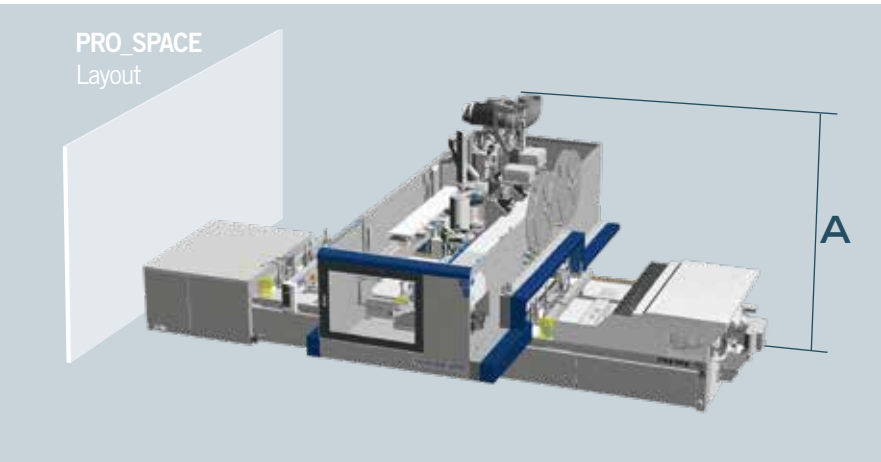
Protection system for the machine use to the maximum speed of 60 m/min. When the operator enters into the loading area, which is delimited by the front photocell barrier, the machine automatically reduces the speed; when the operator leaves the loading area, the system restores the maximum speed.



OVERALL DIMENSIONS

		A	B		C	
			PRO-SPACE	PRO-SPEED	PRO-SPACE	PRO-SPEED
MORBIDELLI P200 WORK TABLE						
Working area 3110 x 1600	mm	2780	4600 (5600*)	5740	6780 (7130*)	7300
Working area 3710 x 1600	mm	2780	4600 (5600*)	5740	7380 (7730*)	7900
Working area 5510 x 1600	mm	2780	4600 (5600*)	5740	9180 (9530*)	9700

* It includes the operating area



EVERYTHING YOU HAVE ALWAYS DREAMED OF A CNC MACHINING CENTRE BUT WERE TOO AFRAID TO ASK

FIRST-RATE EDGEBOARDING

ALL TOP QUALITY



The most performing and compact edgebanding unit that allows the edge application for panels up to 80 mm thick.

Unrivalled finishing with new direct drive **JQX** (Just **Q**uality **eX**treme) 5-axis electrospindle.

Reduced maintenance, owing to the **RO.AX** (Rotoaxial spindle technology) drilling bits. It is recommended only after more than 1000 hours of work.

60% of time saved on drilling cycles with the new drill-bits designed to guarantee the best effectiveness on all types of material and building styles.

TOP QUALITY



COMPACT AND RELIABLE: EDGEBANDING UNIT

The most performing and compact edgebanding unit that allows the edge application up to 84 mm high for panels up to 80 mm thick.



The automatic adjustment of the edging vertical limiters allows maximum machining flexibility, working in rapid succession on panels with different thicknesses, particularly effective for batch 1 production.



The new **SBRINDLE** device can precisely detect the position of the tapes' edge "on-the-fly" and without slowing down, allowing 0/360° junctions on constant geometry stretches with minimum length of 80 mm.



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The edge storage can always make available the best suited to the machining set.
Selection, feeding and supply speed are managed by the numeric control.

GLUING UNIT

The quick change glue tank has a unique design with a spreading roller featuring a built-in heating element to guarantee uniform gluing and lasting adhesive chemical properties for the best possible product performance. Fast change-over allow preventive maintenance or a change of glue (colour or type), slashing down times.



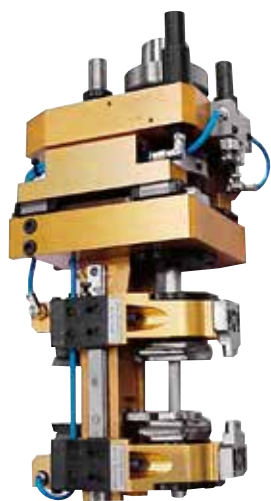
*Glue is loaded in masked times
into the granule feed system.*

TOP QUALITY



EDGEBANDING

FINISHING HEADS AND AGGREGATES



*Multifunction
trimmer + edge scraper unit*



*Blade unit for edging
and trimming*



*Head for
post-formed panels*



*Head for cleaning
90° internal angles*



Edge trimming.



Edge scraping.



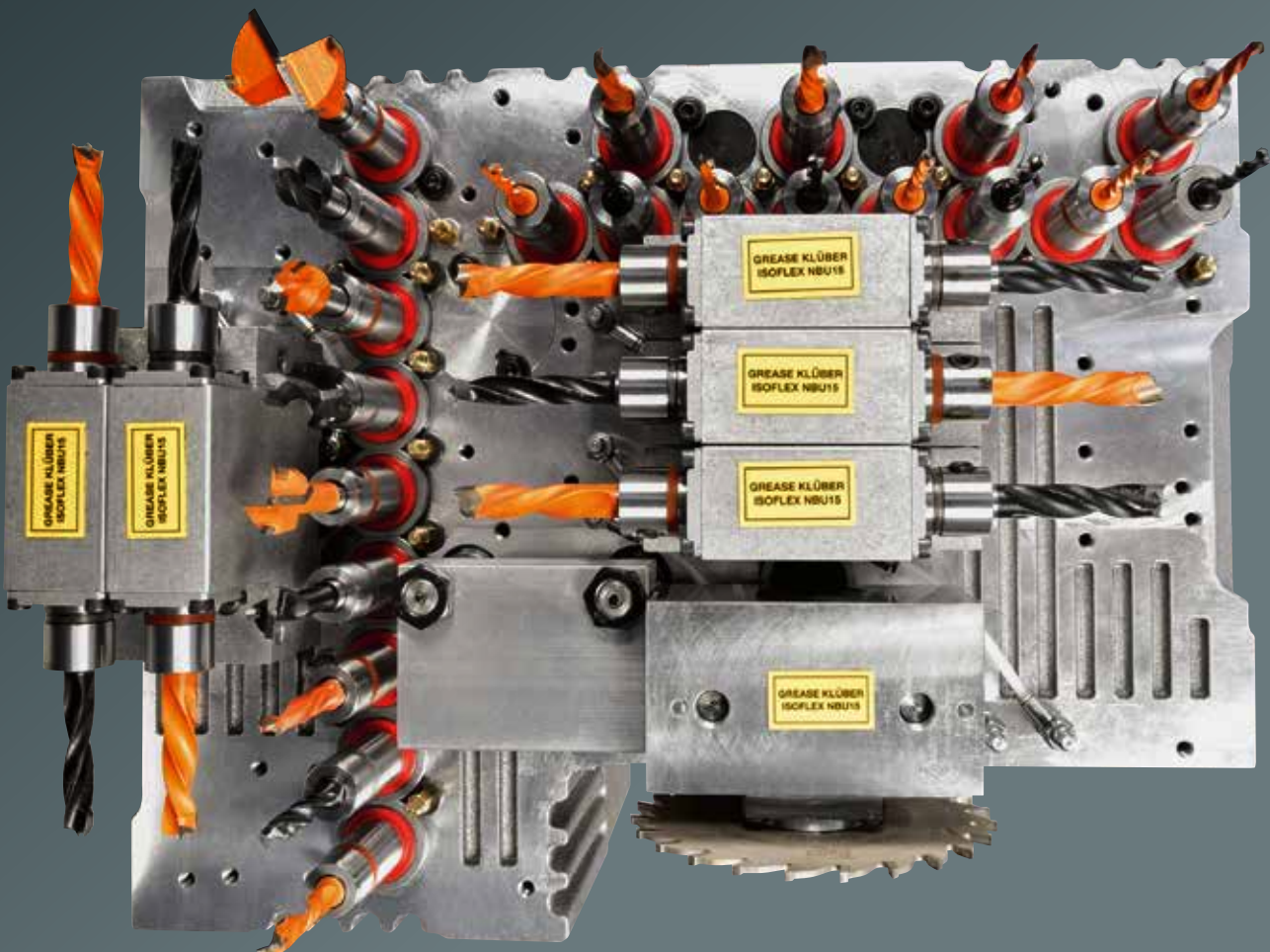
TOP QUALITY

OPERATING UNIT: **DRILLING UNIT**

The higher drilling capacity in its category up to 21 vertical spindles, 12 horizontal spindles and an independent blade unit.

INDESTRUCTIBLE AND WITH LOW MAINTENANCE

The sturdiness of drilling heads is proven by the reduced maintenance costs: it is recommended only after more than 1000 hours of work.



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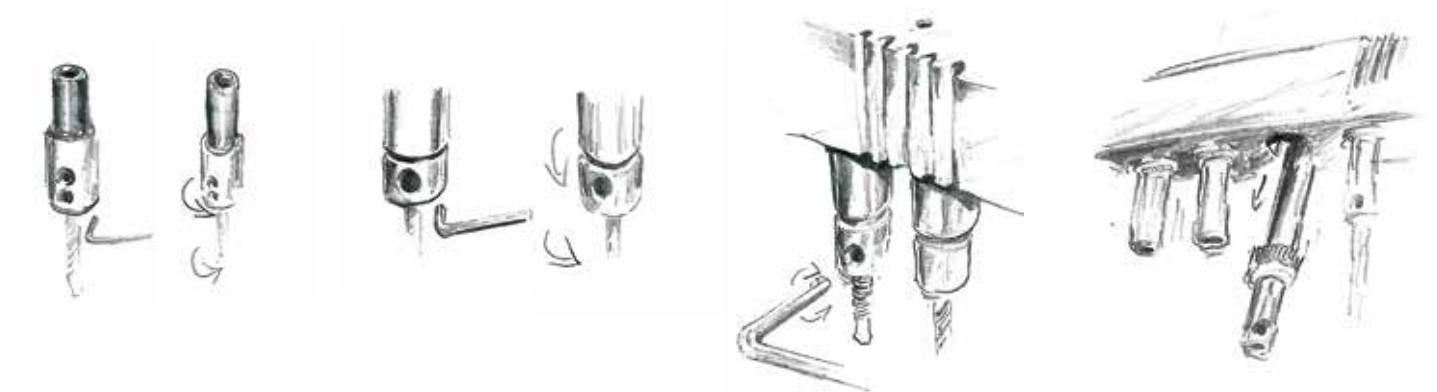
60% of time saved on drilling cycles with the new drill-bits designed to guarantee the best effectiveness on all types of material and building styles.

THE PERFECT DRILLING



RO.AX SPINDLE

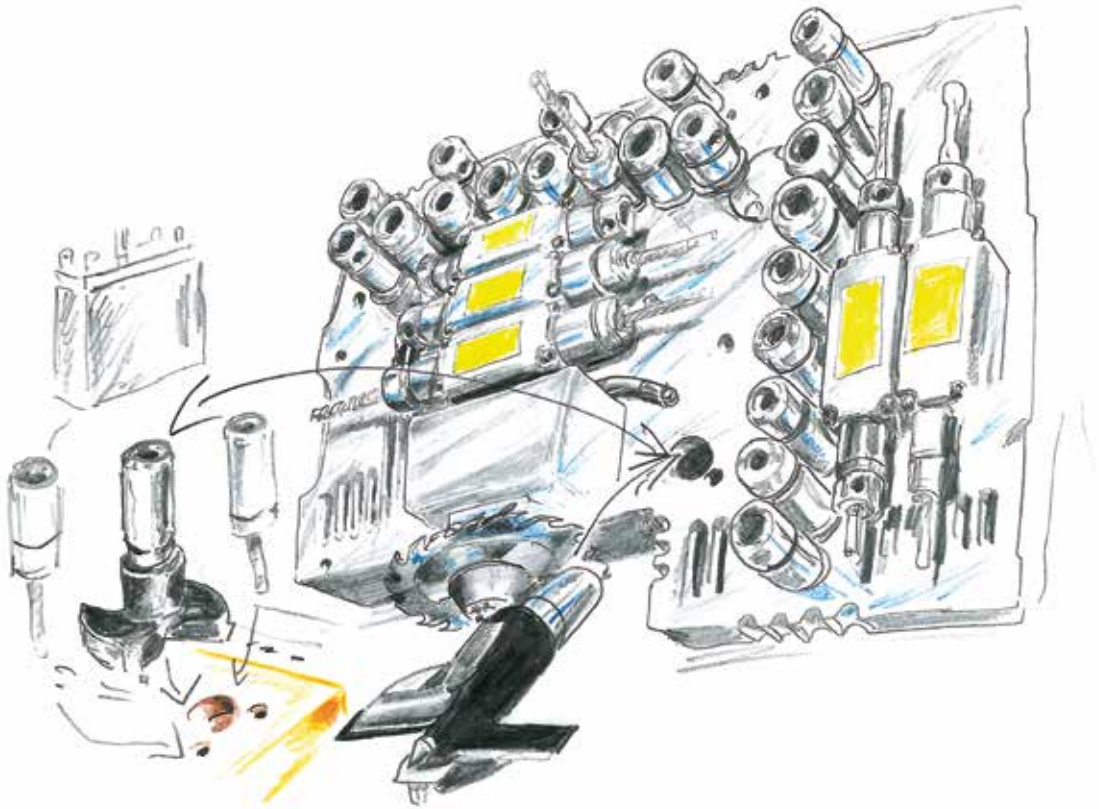
Zero play during machining with the new RO.AX technology (Rotoaxial spindle technology), the most efficient spindle on the market with rotation speeds up to 8000 rpm.



High performance drilling units owing to the spindles with innovative design. The new drilling spindle offers optimal solutions to achieve the highest quality of finishing and the maximum speed of the whole execution:

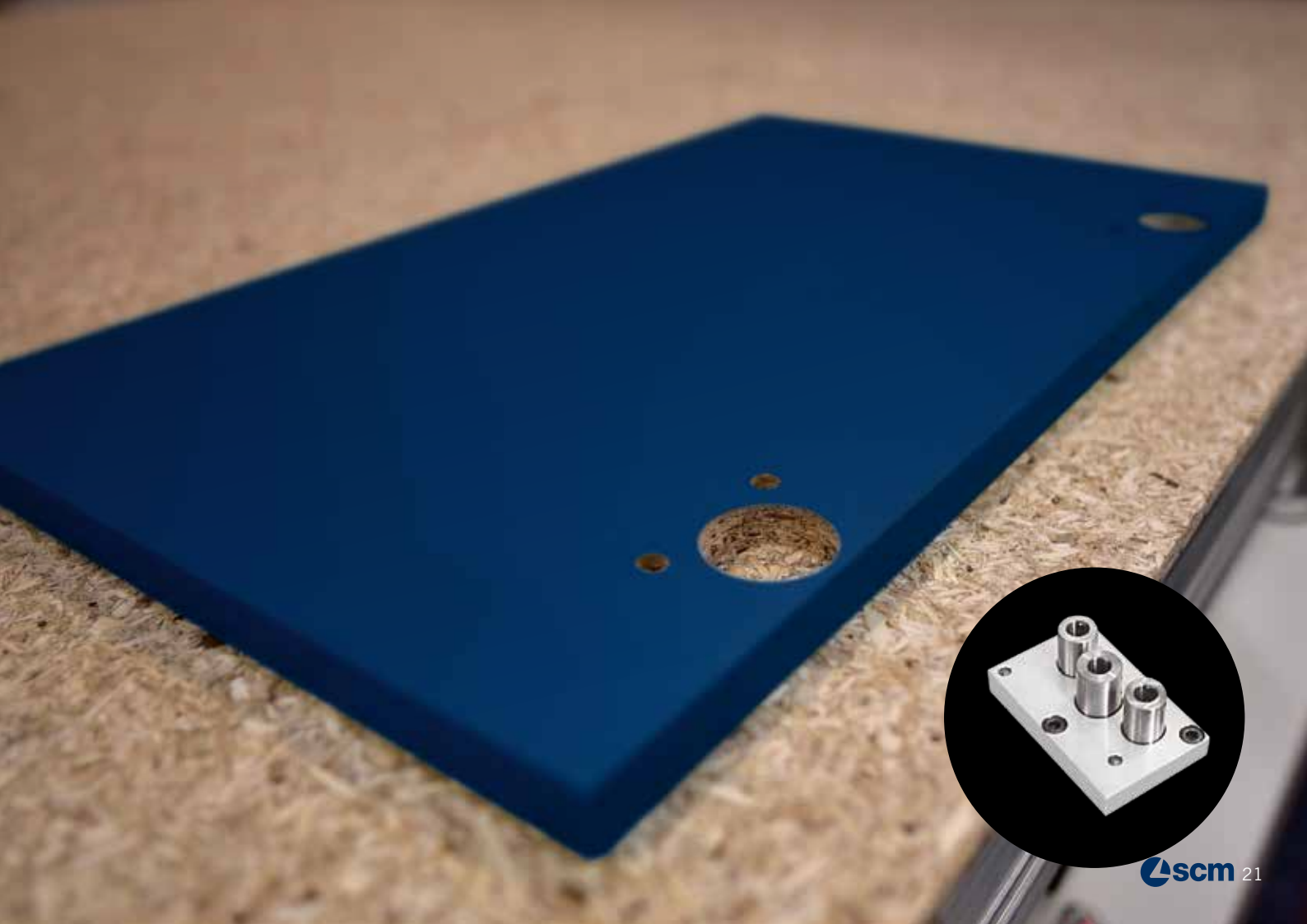
- **more than 50% increase in rigidity:**
rod spindle diameter from 20 mm
- **reduction of vibrations and guaranteed drilling quality on all materials:**
rod spindle guide system with special roll bearings
- **lower operation noise and more rigidity:**
absence of radial friction between spindle and rotating bearings
- **reduced maintenance costs:** new system to disassemble every spindle
- **more reliability:** less components employed





**HINGE DRILLING:
ONE STEP WORTH THREE!**

Possibility to carry out 3 simultaneous drillings with a single head integrated in the main drilling unit.



TOP QUALITY

UNIVERSAL, HIGH SPEED ROTATION

TO PRODUCE OBJECTS
WITH ANY KIND OF SHAPE
ON ANY KIND OF MATERIAL

JQX ELECTROSPINDLE

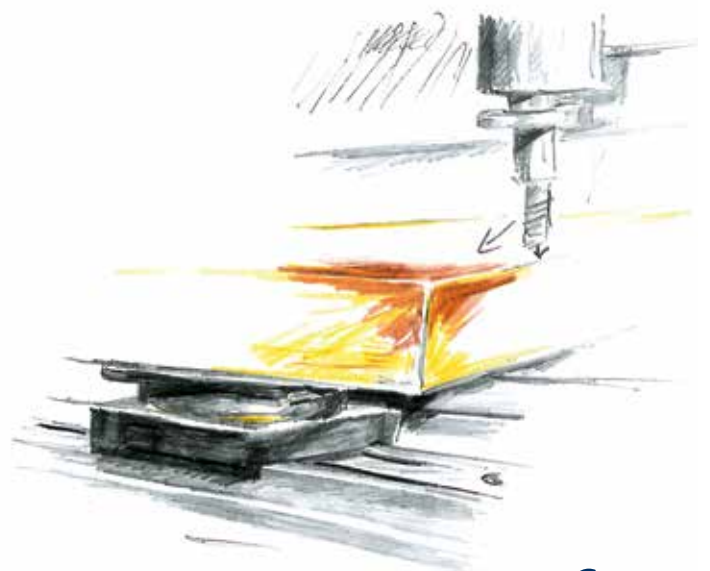
Very high finishing quality with the **JQX** (Just Quality **eXtreme**) 5-axis electrospindle, with direct drive and up to 12 kW power, which ensures total absence of vibrations even with large material removals at high speeds.

The lightweight structure and the excellent price/quality ratio make this electrospindle ideal for those who are looking for a flexible and practical product but with high level performance.



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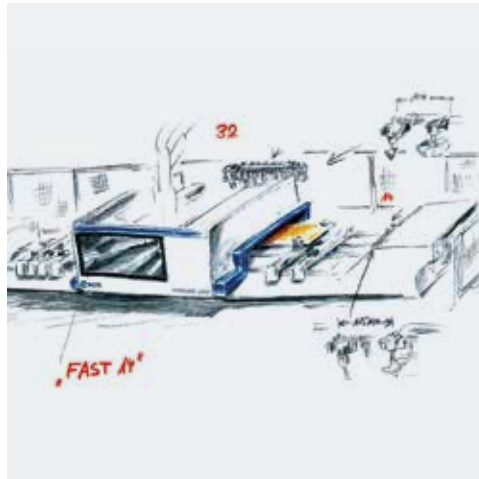


EVERYTHING YOU HAVE ALWAYS DREAMED OF A CNC MACHINING CENTRE BUT WERE TOO AFRAID TO ASK

MACHINING TIME REDUCTION



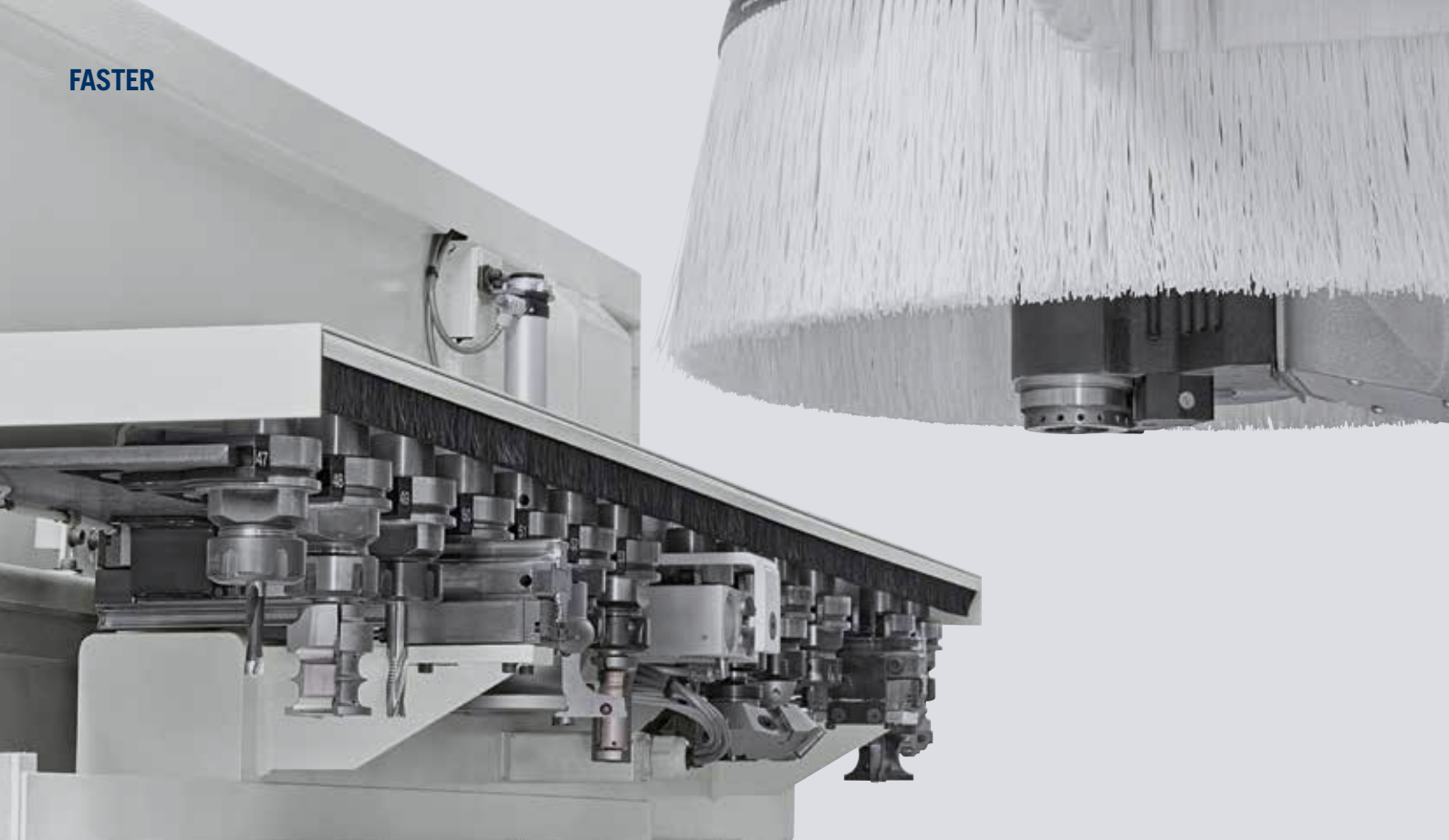
ALL FASTER



Beyond imagination, up to 60 tools always available on board.

Less than 15" for the tool change with the 14 position **FAST** tool changer

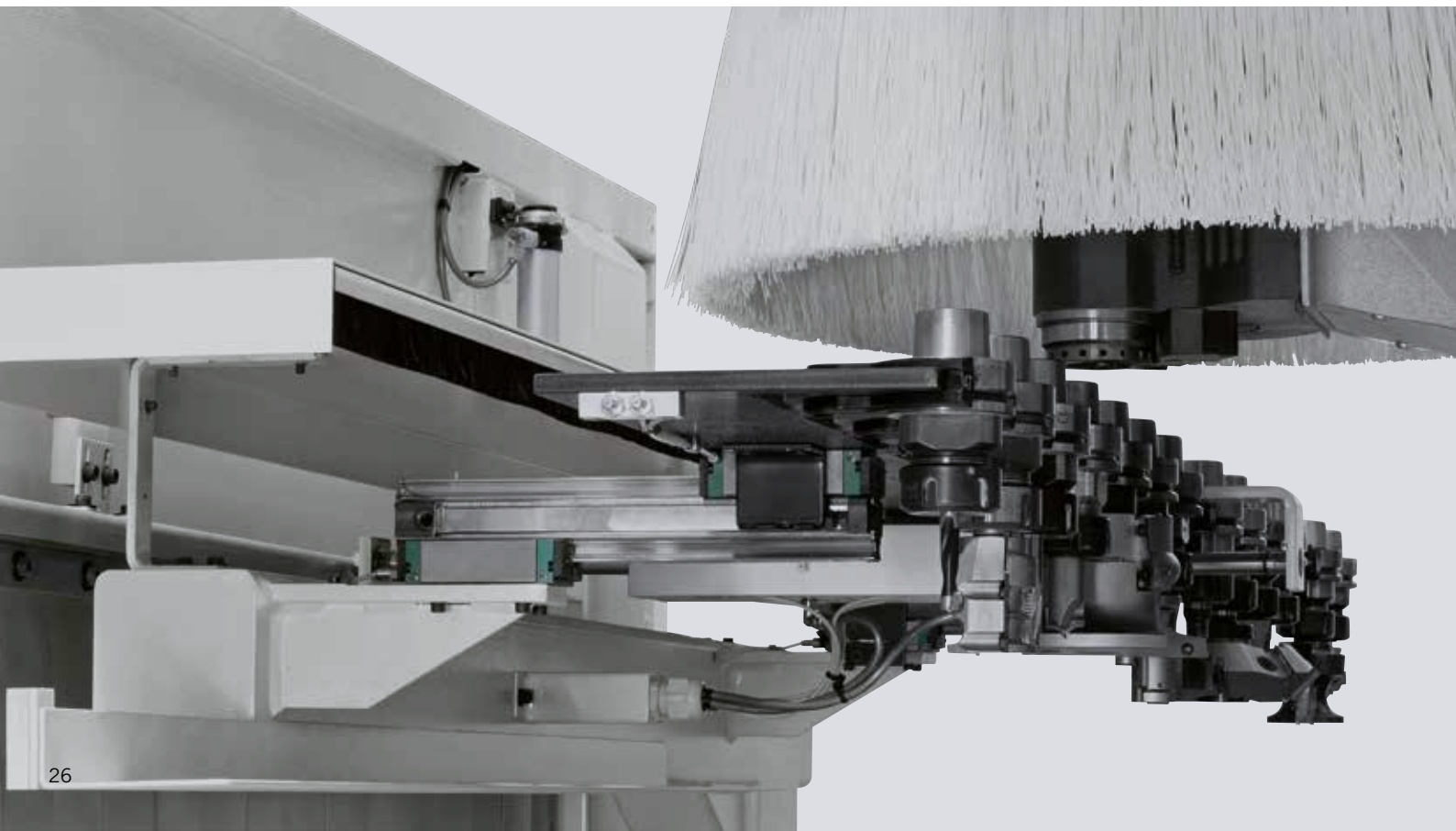
FASTER



ALL AT YOUR SPINDLE FINGERTIPS!

UP TO 60 TOOLS ALWAYS AVAILABLE ON BOARD

NO IDLE TIMES for the tool change from a machining process to another one with the 14 position **FAST** tool changer.



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Wide range of tools available to the operator
with the rear tool changers up to 32 positions.



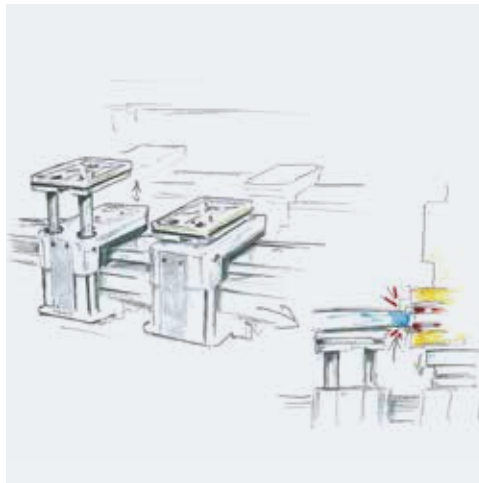
TRB side tool changer with 14 positions.



EVERYTHING YOU HAVE ALWAYS DREAMED OF A CNC MACHINING CENTRE BUT WERE TOO AFRAID TO ASK

INFINITE WAYS OF BEING

ALL FLEXIBLE



From panel to furniture, from kitchen doors to windows. **The right solution configured for all your needs** and your investment plan.

Zero idle times for set-up operations and no compromise for the machine performance with **versatility and free configurability** of the **TV FLEXMATIC** work table.

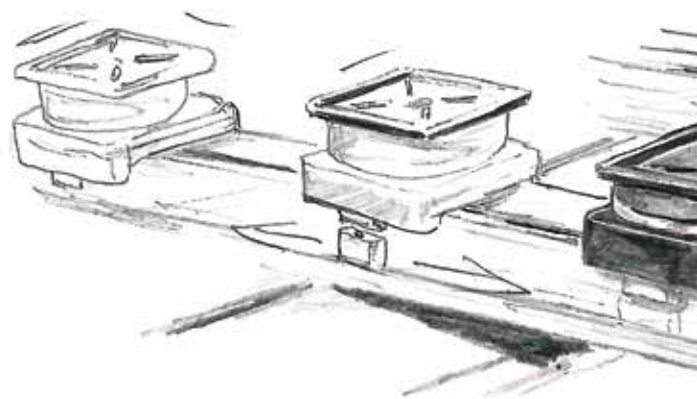
With HE-POD the work table becomes 3D: a single positioning and no displacement.

FLEXIBLE



TOTAL CUSTOMISATION: **TV FLEXMATIC** **RAILS WORK TABLE**

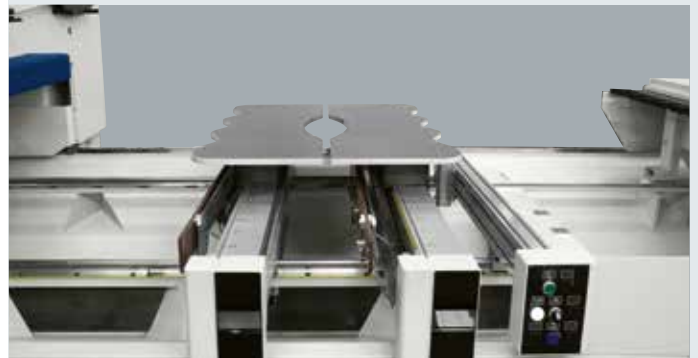
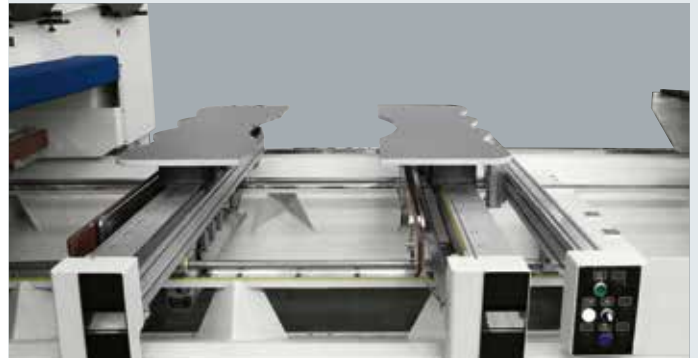
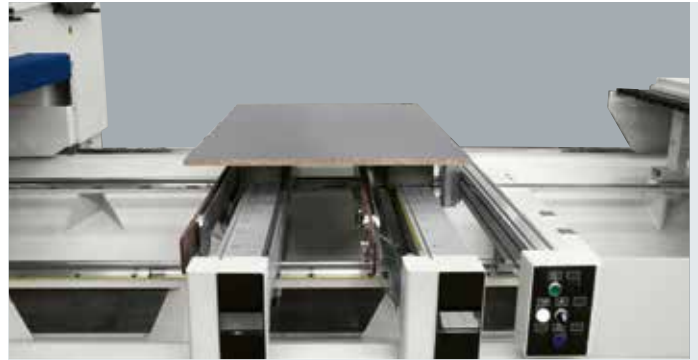
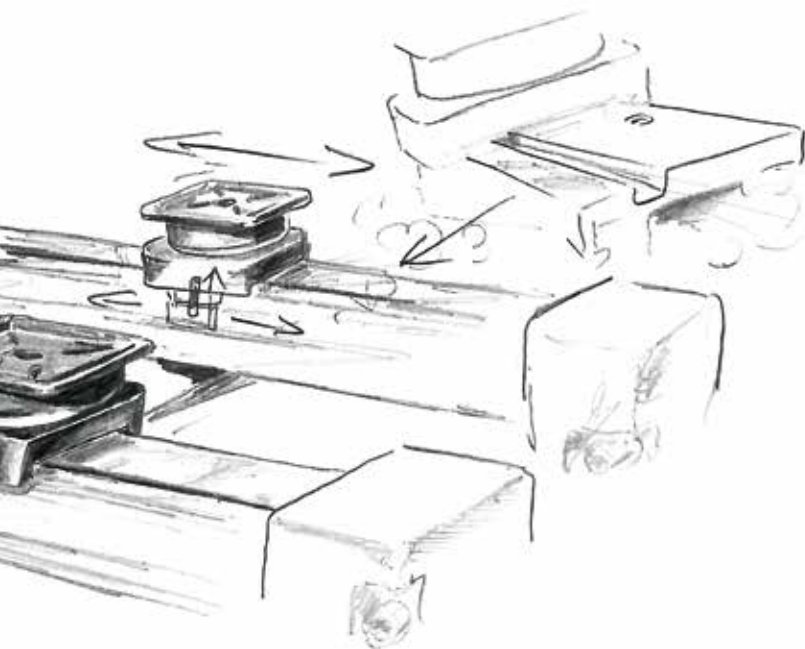
Automatic work table that allows the management up to 6 vacuum pods on a single rail, according to the dimensions and shape of the work piece to be machined, in order to always have the best holding without risks of collision. Available also with manual version **TV FLEX**.





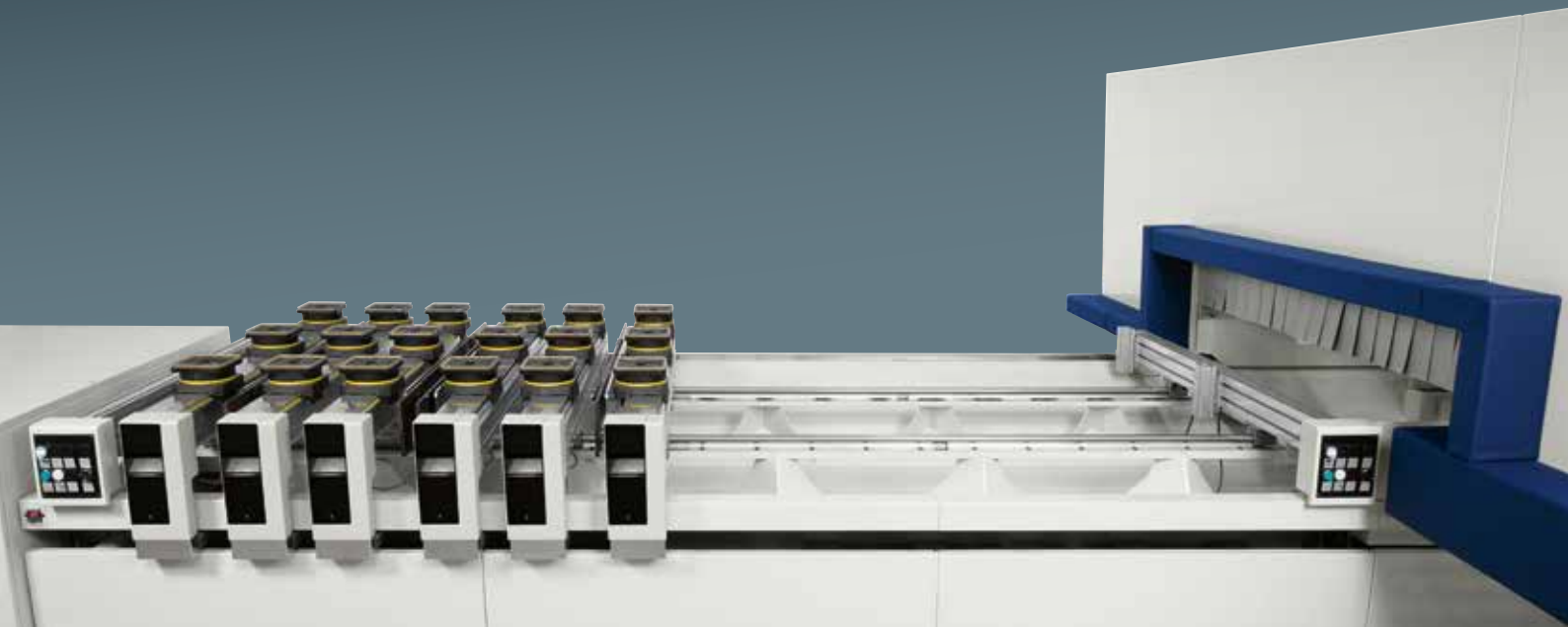
It is possible to add or remove vacuum pods or clamps with a simple movement of the hand; the number and the position are automatically detected.

No problem for the sliding of vacuum pods or clamps due to the blowers positioned along the whole rail that guarantee a constant cleaning.



From a single panel can be obtained more elements and automatically re-position them to carry out all machining without interrupting the production cycle; at the end the work pieces are returned to the initial position to facilitate the unloading from the work table.

FLEXIBLE

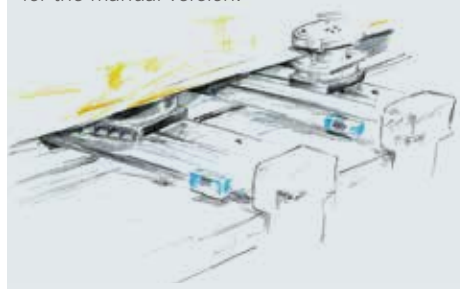


NO LIMITS ON RAILS POSITIONING: NO OBSTACLE ON THE WORK TABLE

IDEAL FOR LARGE SIZE PANELS

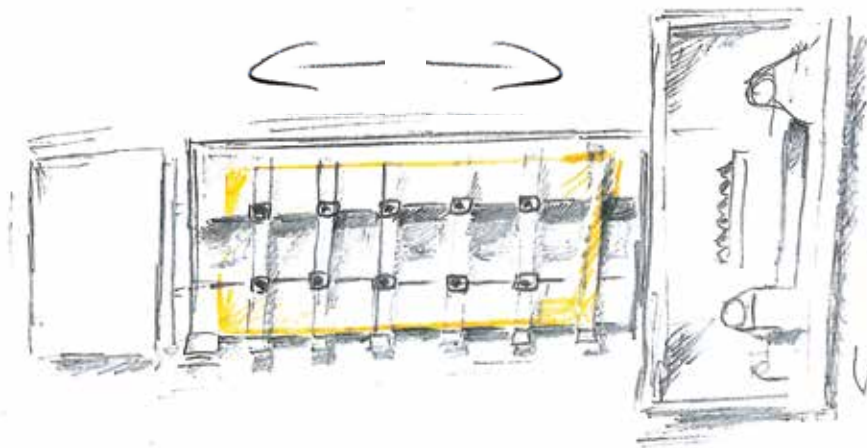
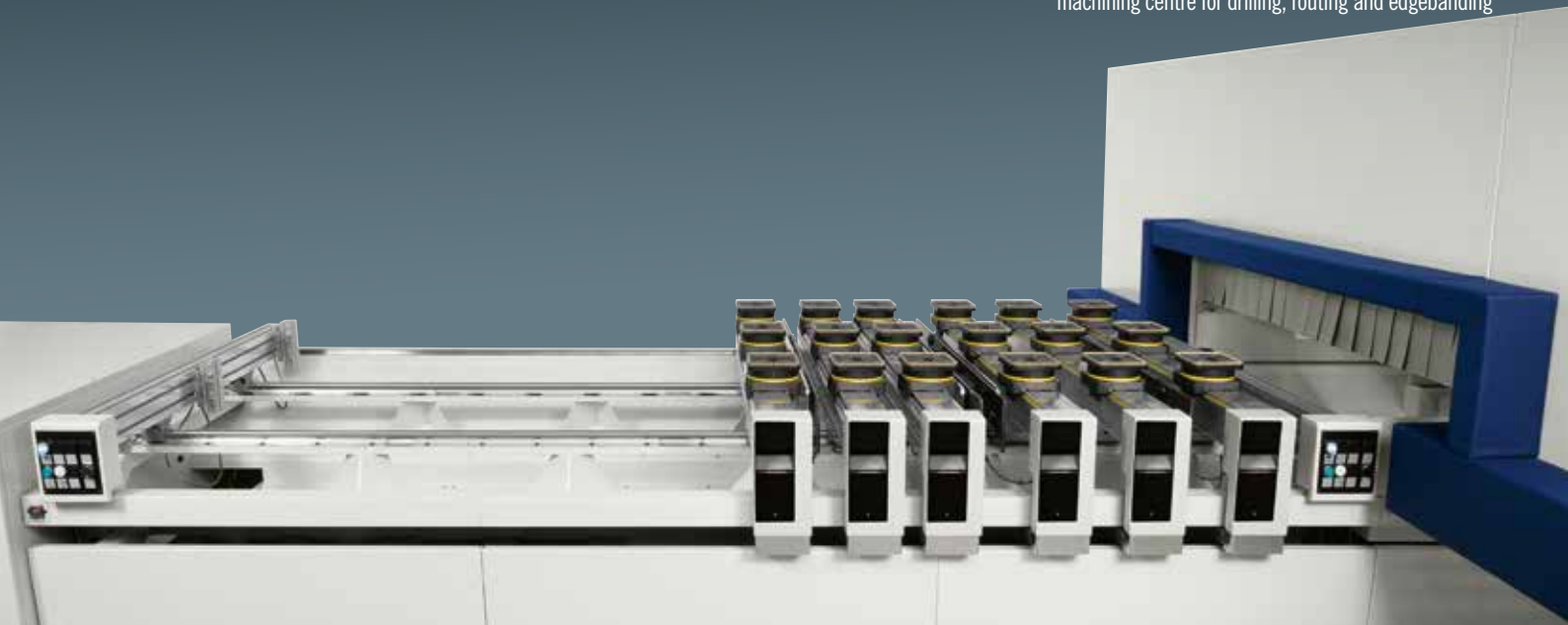


Simple and quick work table set-up also for the manual version.



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Comfortable pushbutton to have at your fingertips all the necessary commands for the programs execution.



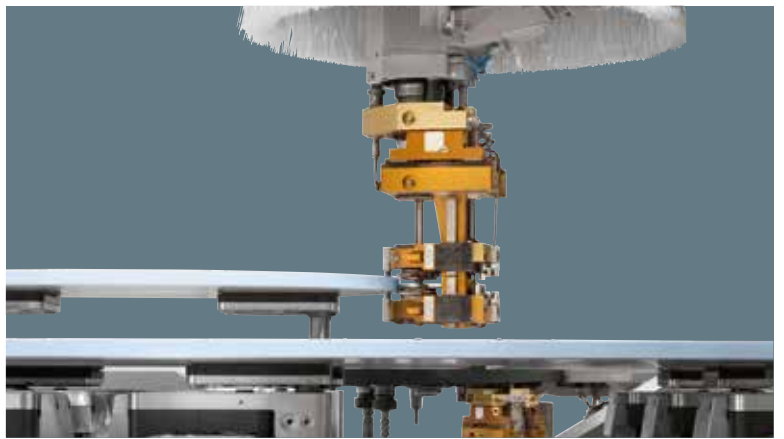
Easy positioning of heavy work pieces and large panels with the lifting support.

FLEXIBLE

THE WORK TABLE BECOMES 3D: HE-POD

Cycle time reduced by 30%, owing to HE-PODs which allow to use the whole working area for the work pieces positioning and the tool paths optimisation.

Maximum exploitation of the work table performance:
a single positioning and no displacement.

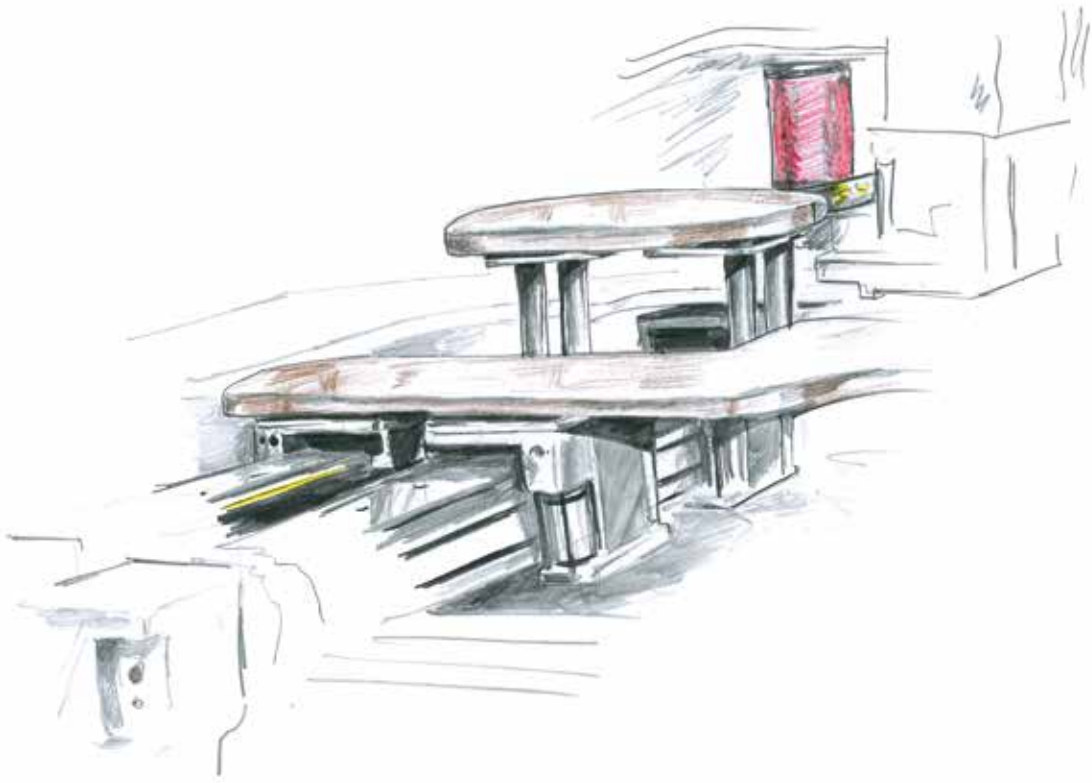


No constraint on locking:
any pod can be associated to a work piece in order to lock both panels and any shaving.

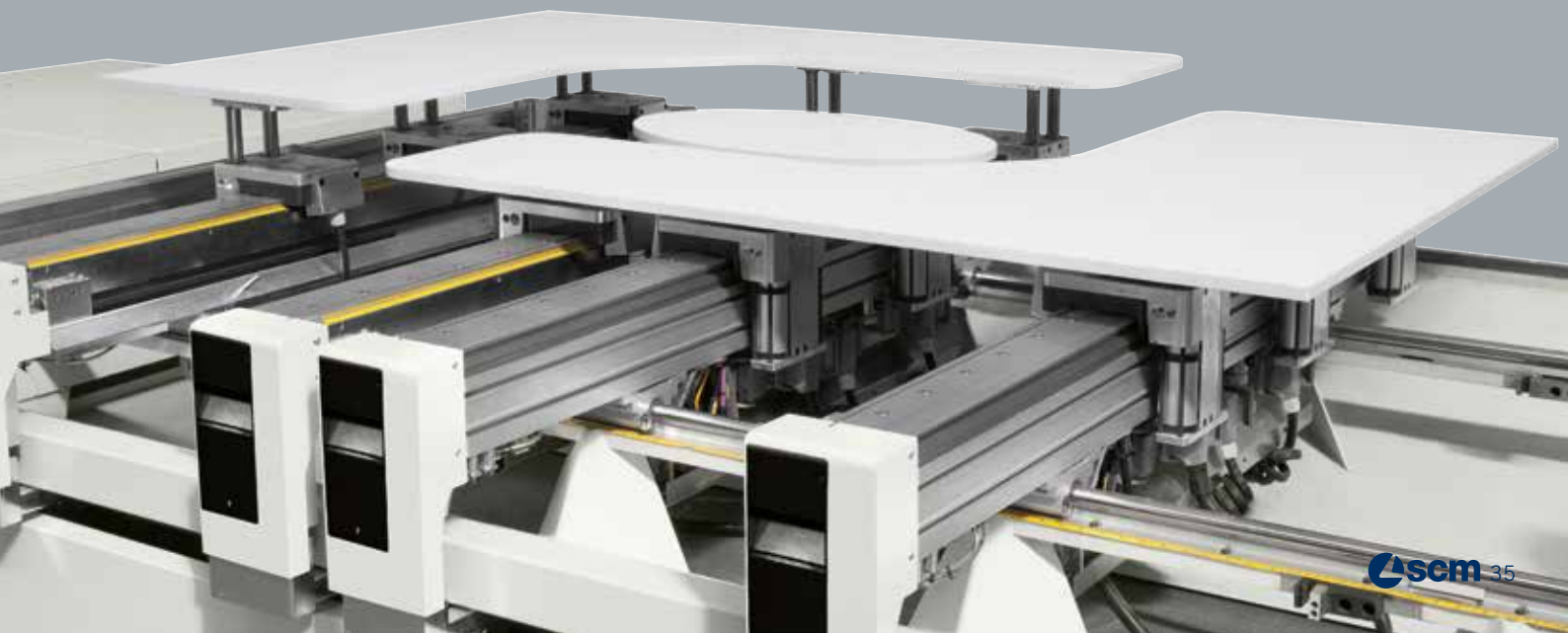


Maximum flexibility:
use of HE-POD and standard pods in the same program.





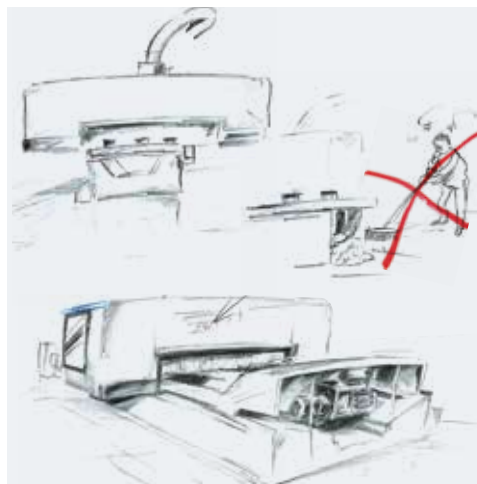
A SINGLE POSITIONING
AND NO DISPLACEMENT!



EVERYTHING YOU HAVE ALWAYS DREAMED OF A CNC MACHINING CENTRE BUT WERE TOO AFRAID TO ASK

SWEEP AWAY WORRIES

ALL CLEAN

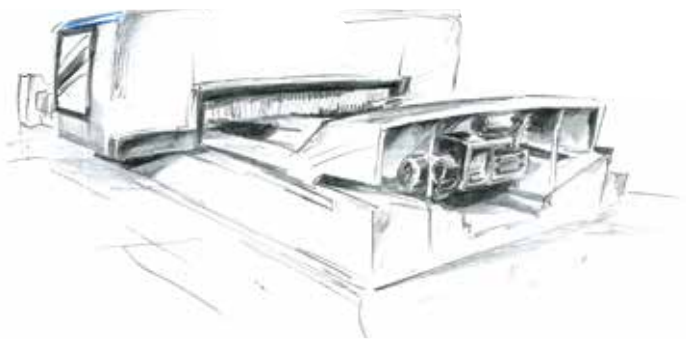


No problem with dust or shavings as a result of the intelligent solution of the dust collection box located in an ergonomic position.

Free space on the floor with the vacuum pump integrated in the machine base.

CLEAN

SPACE? NO PROBLEM!

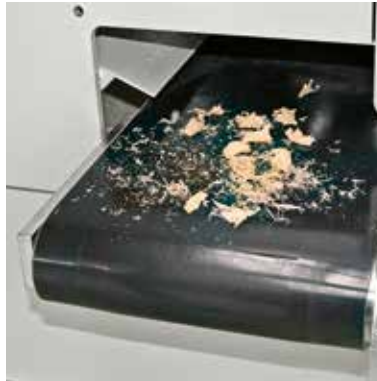


Free access without obstacles on the floor, cable-holder chain and vacuum pump integrated in the machine base.



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Rapidity and ergonomics to equip and do maintenance to the operating group, also in PRO-SPACE version due to the practical front and rear openings.

No problem with dust or shavings as a result of the dust shavings conveyor belt equipped with exhaust outlet and the dust collection box located in an ergonomic position.



MAESTRO SUITE

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, their layout on the work table, tools management and the relative machining operations. All the procedures are contained in a perfectly integrated and high performance software.

TO EACH TECHNOLOGY ITS SCM SOFTWARE



MAESTRO APPS – Unique know-how

Maestro apps is 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.



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.



MAESTRO 3D – Unique in the creation of 3D objects

The module integrated in the Maestro suite is designed to program three dimensional objects on 5-axis machining centres.



MAESTRO EDGE – Unique in edgbanding shaped pieces

It allows users to manage the routing, drilling and treatment of the edges of shaped panels and components.



TECHNICAL DATA

MORDIBELLI P200

AXIS

Z axis panel passage	mm	180
Vectorial speed - axis	m/min	56 (PRO-SPACE) 78 (PRO-SPEED)

ROUTING UNIT

Motor power (max.)	kW (hp)	15 (20,5)
Rotation speed (max.)	rpm	24000
Available tools on tool changer (max.)	places	60

DRILLING UNIT

Independent vertical spindles (max.)	No.	21
Independent horizontal spindles (max.)	No.	12
Rotation speed (max.)	rpm	8000
Integrated blade in X, diameter	mm	125

INSTALLATION

Exhaust air consumption	m³/h	4430
Exhaust air speed	m/sec	25
Exhaust outlet diameter	mm	250



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 EN 848-3:2012
Acoustic pressure in process (routing) 81 dbA (measured according to EN ISO 11202:2010, uncertainty K = 4 dB)
Acoustic power in process (routing) 98 dbA measured according to EN ISO 3746:2010, uncertainty K = 4 dB)*

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.

PROMPT AND EXPERT TECHNICAL SUPPORT THROUGH A NETWORK OF 1000 TECHNICIANS AND AN INVENTORY OF 36,000 SPARE PARTS.

HIGHLY SPECIALISED TECHNICIANS, EFFICIENT MANAGEMENT AND 6 SPARE PARTS BRANCHES AROUND THE WORLD GUARANTEE A CLOSE, SAFE AND EFFECTIVE TECHNICAL SUPPORT.

SERVICE

SCM provides a service that goes beyond the purchase, to guarantee the long term performance of your technological production system and peace of mind for your business.

A COMPLETE RANGE OF AFTER-SALES SERVICES

- installation and start-up of machines, cells, lines and systems
- tailored training programs
- telephone support to reduce times and costs when machines are not working
- preventive maintenance programs to guarantee long term performance
- complete renovation of machines and plants to renew the added value of the investments
- custom upgrading to update machines and plants and meet new production requirements

SPARE PARTS

SCM Group can count on 140 spare parts professionals worldwide to meet any request with real time shipments.



36,000 SPARE PARTS

Our spare parts inventory, with a value of 12 million euros, covers every single machine.



SPARE PARTS GUARANTEED

We guarantee also hard to find parts, with 3,5 million euros invested in "critical" spare parts.



IMMEDIATE AVAILABILITY

Over 90% of orders received are carried out the same day thanks to the huge inventory available.



6 BRANCHES AROUND THE WORLD

The spare parts service can count on worldwide support (Rimini, Singapore, Shenzhen, Moscow, Atlanta, São Bento do Sul).



500 SHIPMENTS A DAY



THE STRONGEST WOOD ARE IN OUR DNA

SCM. A HERITAGE OF SKILLS IN A UNIQUE BRAND

Over 65 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.

65 years history

3 main production sites in Italy

300.000 square metres of production space

17.000 machines manufactured per year

90% export

20 foreign branches

350 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

SCM GROUP, A HIGHLY SKILLED TEAM EXPERT IN INDUSTRIAL

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



equipment and components for machining the widest range of materials.

MACHINES 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

steelmec

METALWORK

scmfonderie

CAST IRON



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