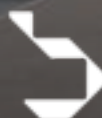


PRO VER BFT

CNC MACHINING CENTRE



 Biesse

THE ULTIMATE IN NESTING PROCESS PRODUCTIVITY

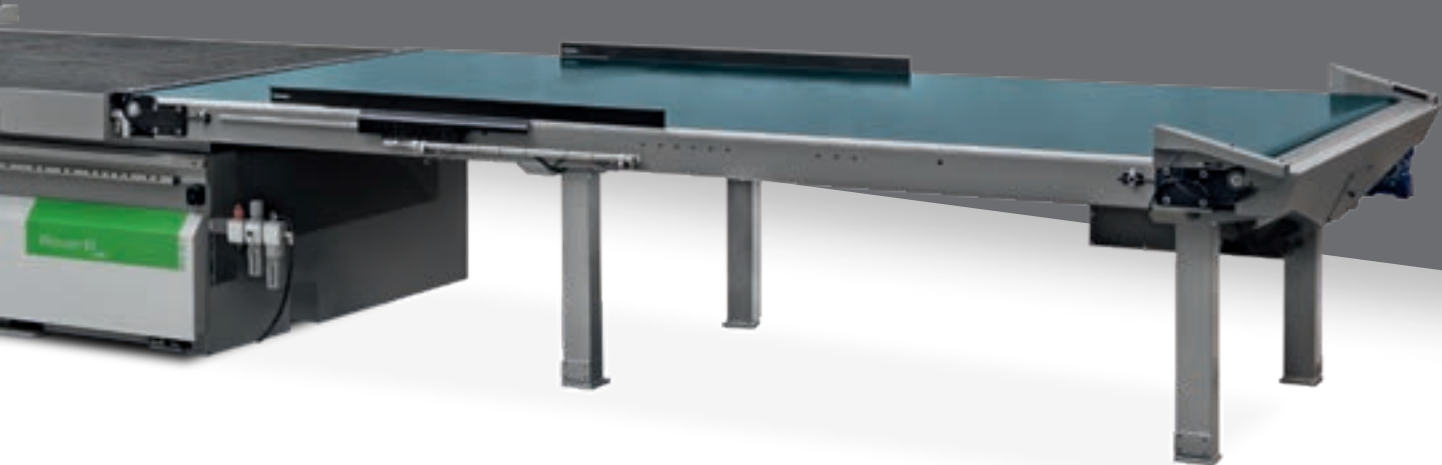


THE MARKET EXPECTS

In a dynamic market of increasing complexity, there's a need for greater flexibility, more and more contract production and uncompromising end product quality.

BIESSE MEETS

with technological and innovative solutions aimed at ensuring high standards of precision and reliability. Modular solutions to best meet the new market requirements. The **Rover B FT** nesting machining centre raises the quality and productivity standards in this sector. Thanks to its structure and the variety of possible configurations, it can keep abreast of the work rhythm of medium and large companies for the production of pieces for every type of application.

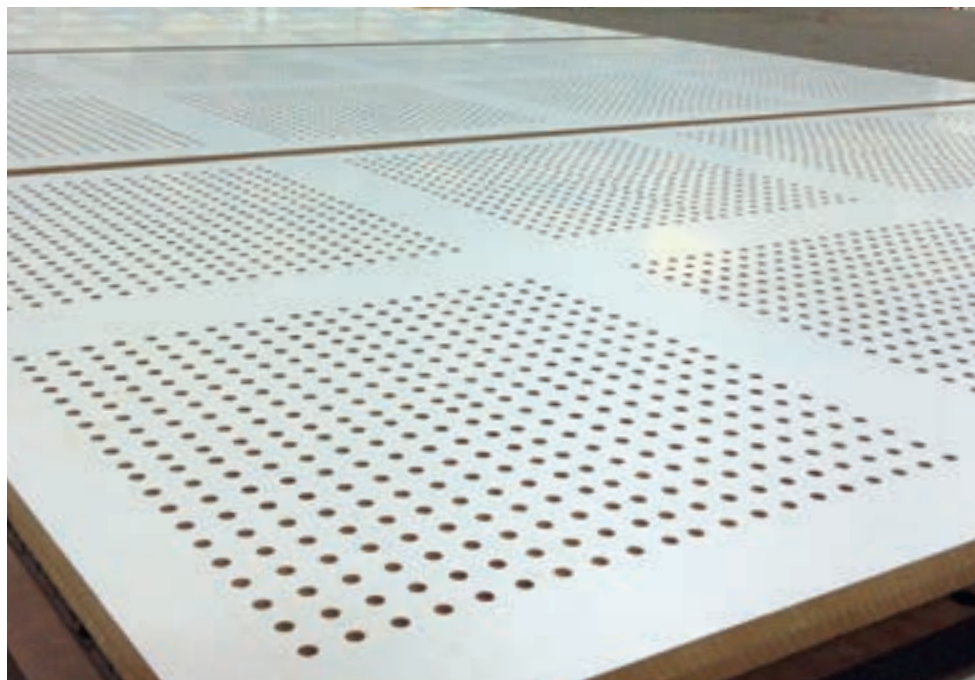
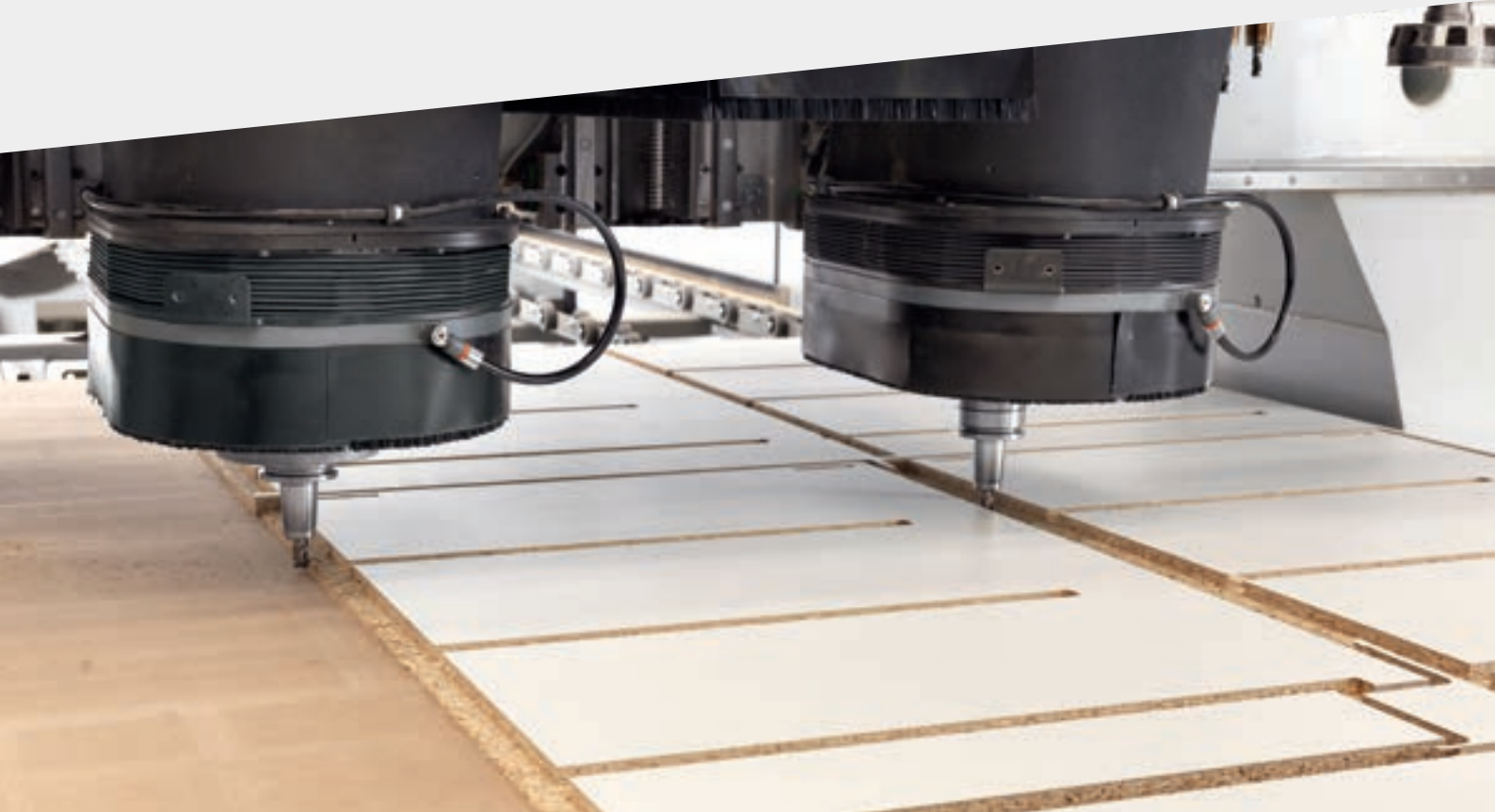


ROVER_{BFT}

- ✓ PRODUCTION FLEXIBILITY THAT IS UNIQUE ON THE MARKET
- ✓ PRECISION AND RELIABILITY OVER TIME
- ✓ FULLY INTEGRATED INTO A WORKING CELL
- ✓ THE MOST ADVANCED TECHNOLOGY CLOSE AT HAND
- ✓ EFFECTIVE SOLUTIONS FOR REMOVING CHIPS AND WASTE

ENDLESS MACHINING POSSIBILITIES

Biesse's sector-leading technology and many years of experience in nesting provide the perfect response to an extensive range of applications



The 5-axis unit further boosts the machine's capabilities.

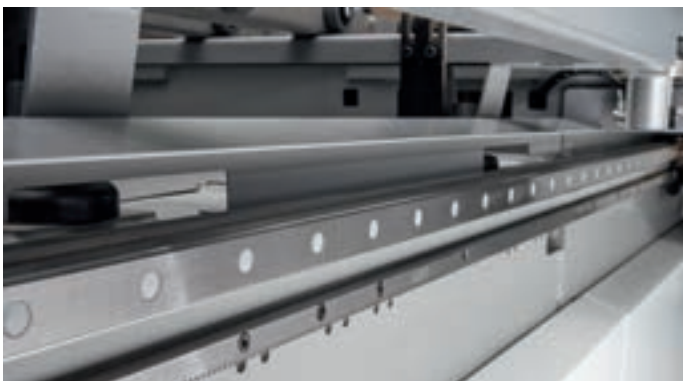


PRECISION AND RELIABILITY OVER TIME

A machine designed to enable you to achieve your goals.



Gantry structure with twin drive to increase productivity and the quality of the end product.

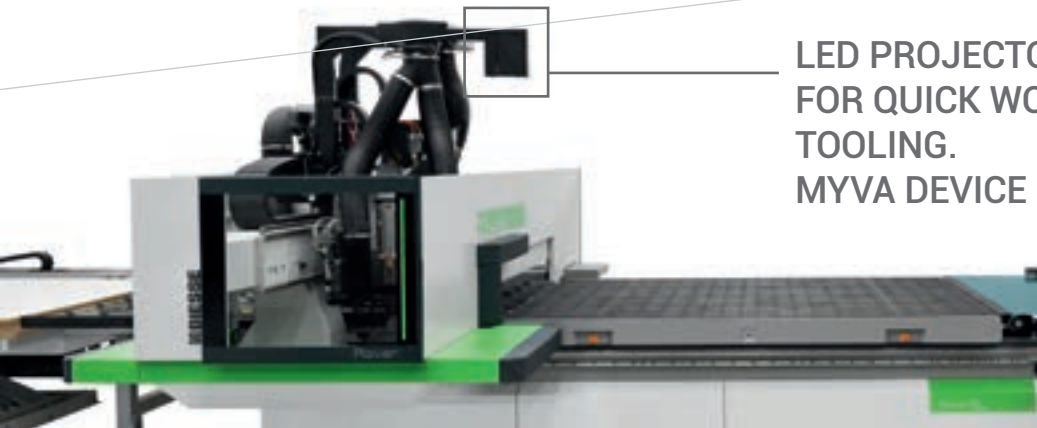


Linear guides sized for greater rigidity and precision.

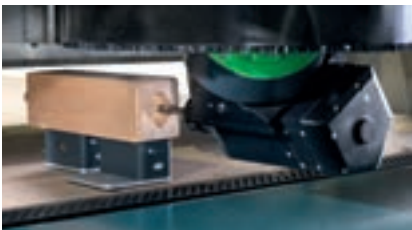


The twin drive guarantees speeds of up to 120 m/min, thus increasing productivity.

All Biesse's FT tables can adopt multi-zone technology, allowing the clamping area to be adapted to the panel format used.



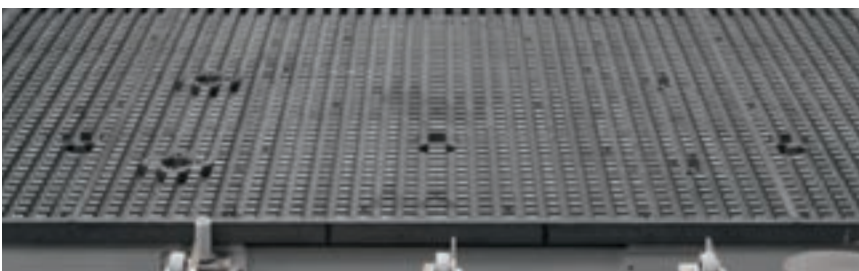
LED PROJECTOR
FOR QUICK WORK TABLE
TOOLING.
MYVA DEVICE



The vacuum modules can be directly positioned on the support panel

The modules can be quickly and easily used, even without the auxiliary vacuum system, without compromising the hold on the panel.

HFT and FT PLUS nesting tables to meet all machining requirements.



HFT

is based on our customers' experience, for machine solutions with loading and unloading, with breathable materials combined with the roller presser.

DYNAMIC VACUUM

An innovative system that concentrates the vacuum in the machining area, enabling the clamping of critical pieces (up to 100x100 mm) made of breathable material, chipboard or MDF. The advantages are countless:

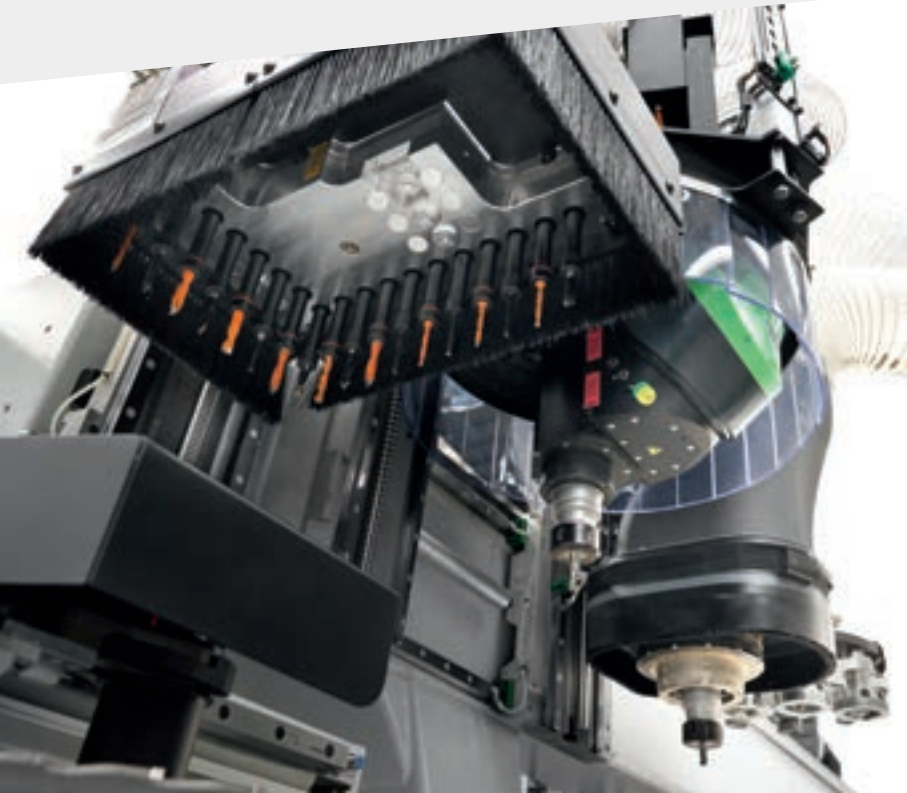
- ✔ Reduction in energy consumption of 25%
- ✔ Lower noise levels
- ✔ No need for a vacuum pump in larger sizes
- ✔ Quality guaranteed
- ✔ Fast return on investment



FT PLUS

the excellent modularity of this type of table allows different clamping systems to be used for solid wood elements or critical parts. The extension and increase in capacity guarantee optimum machining flexibility.

PRODUCTION FLEXIBILITY THAT IS UNIQUE ON THE MARKET

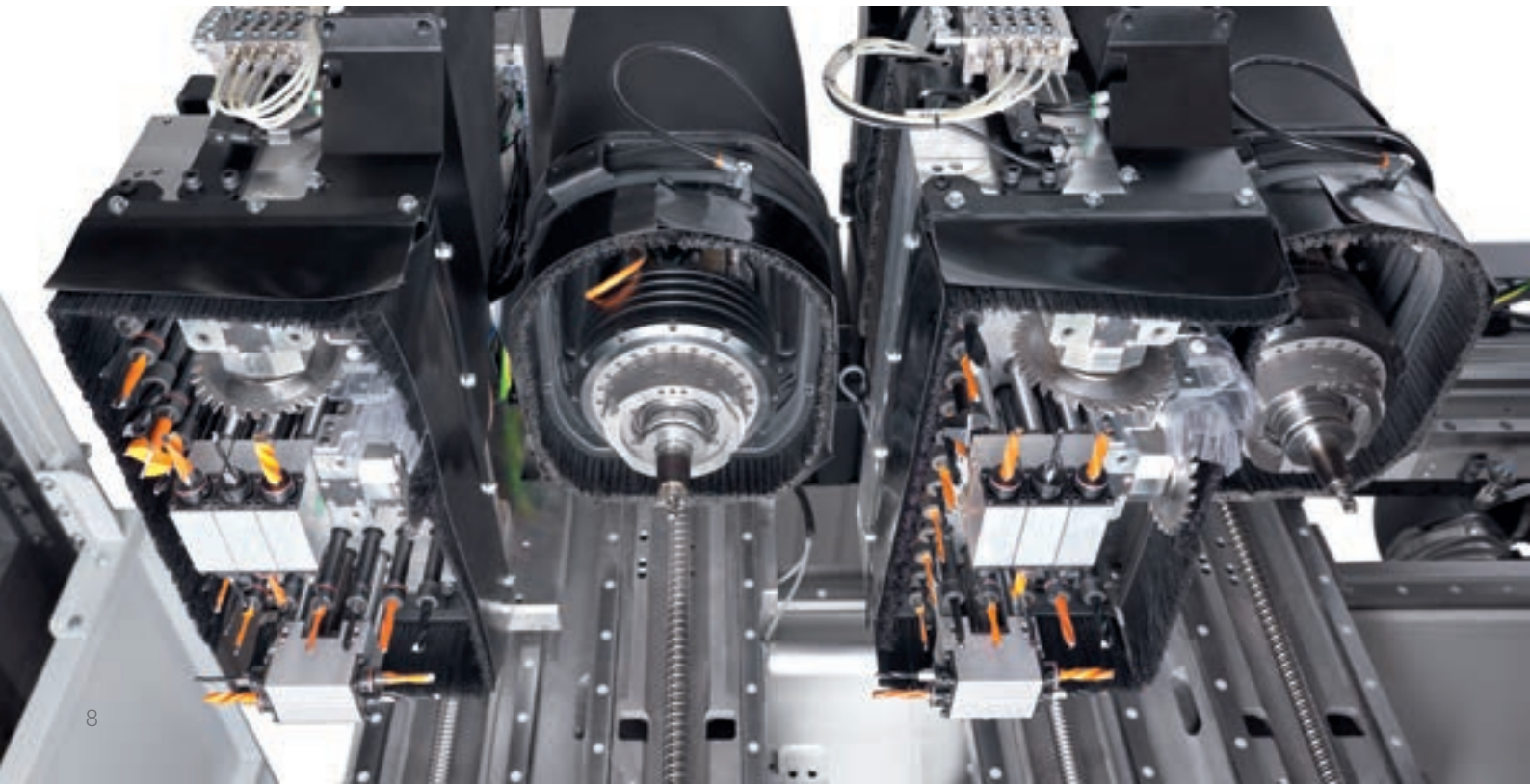


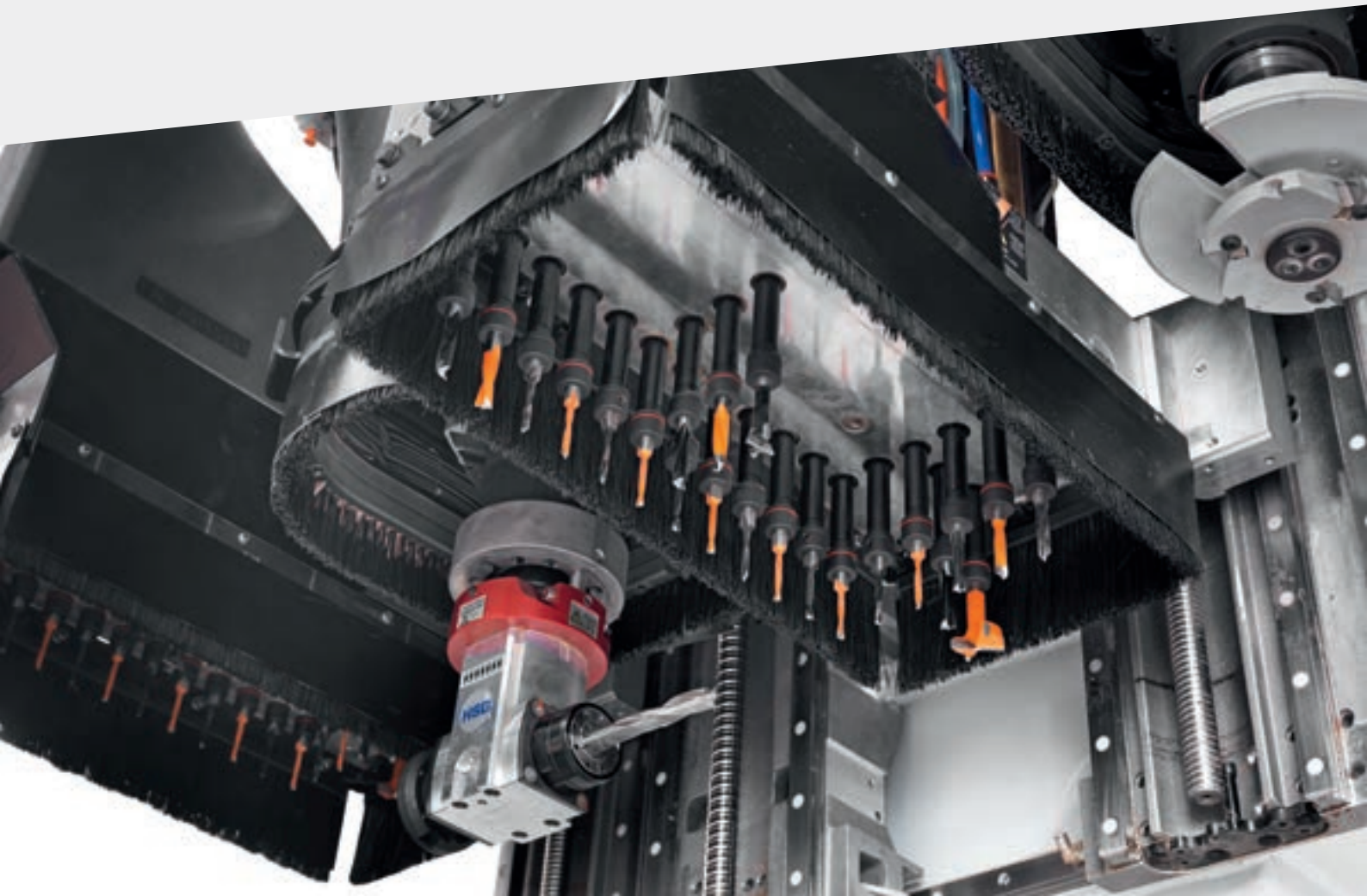
The modularity of the design allows Biesse to deliver machines with configurations which are customised to meet the requirements of individual customers.



Configuration with a 4-axis working unit combined with a 5-axis working unit, for maximum flexibility at all times. Also available on size 1536.

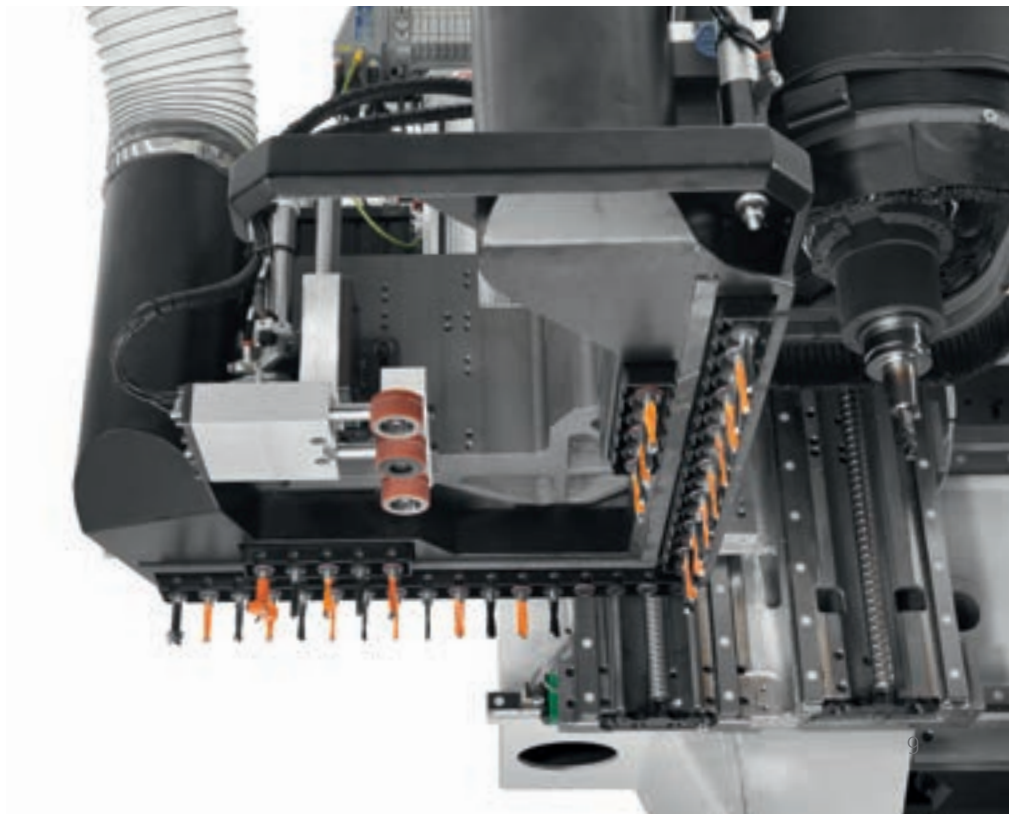
Configuration with 2 identical working units for machining 2 pieces simultaneously on a single panel or separate panels, and tool changes while the machine is running.



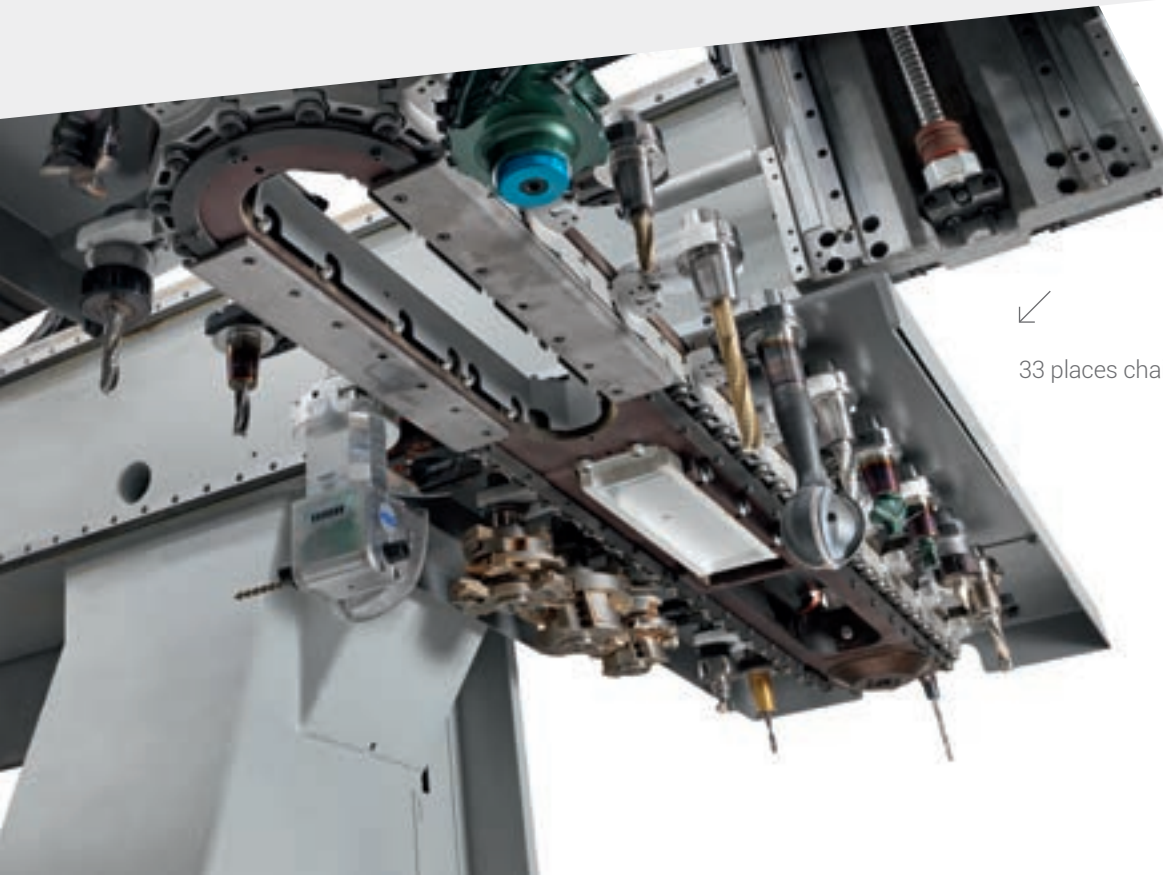


BHZ 22 boring head for maximum boring capacity with twin configuration. The best productivity levels in its category.

BHC 42 boring head with automatic lubrication, liquid cooling and dedicated suction on the spindles. The top in boring technology on a Biesse CNC.



WIDE RANGE OF TOOLS READY ON THE MACHINE, WITH FAST TOOLING TIMES



33 places chain magazine



New tool magazine with 18 places: spacious and fast, for those wanting to try out different products with the 5-axis unit.

8 to 51 tools and aggregates available in the tool changer, which are loaded automatically when switching from one machining operation to the next.



The contact **pre-setter** automatically measures the length of tools up to 130 mm in diameter. This greatly reduces the machine tooling time and eliminates any risk of mistakes by the operator.



16 places revolver magazine



Revolver magazine with 12 places on the head and 12 on the X carriage, reducing cycle times to the minimum.

NETS TING



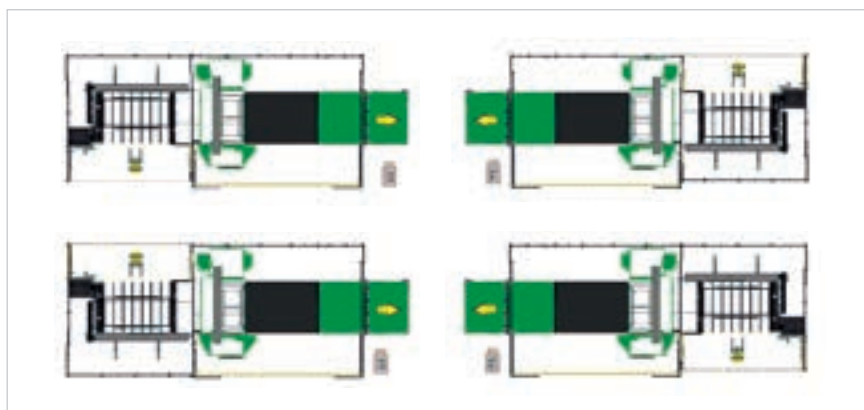
EXCLUSIVE TECHNOLOGY

Highly flexible configurations, work table with notable vacuum capacity, pioneering cleaning systems, unique technological solutions to meet the productivity and flexibility requests of the most demanding manufacturers.

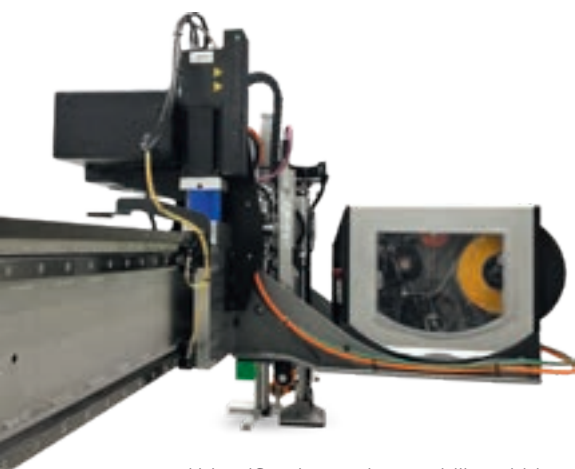


FULLY INTEGRATED INTO A WORKING CELL

Rover B FT can be customised into a working cell to meet customer requirements.



Loading/unloading operations are carried out simultaneously, allowing the operator to remove completed components from the unloading station in the utmost safety whilst the machine is already processing the next panel.



Panel identification and traceability within the production flow thanks to on-demand labelling system with touch screen.

The mobile command station allows the operator to stand near the piece unloading mat, and keep everything under control.



LOADING AND UNLOADING SOLUTIONS

PANEL LOADING SYSTEM WITH SCISSOR LIFT AND AUTOMATIC PANEL ALIGNMENT.



The system's ease of use ensures long term reliability. The loading pallet positioned close to the machine ensures the overall dimensions on the ground remain compact.

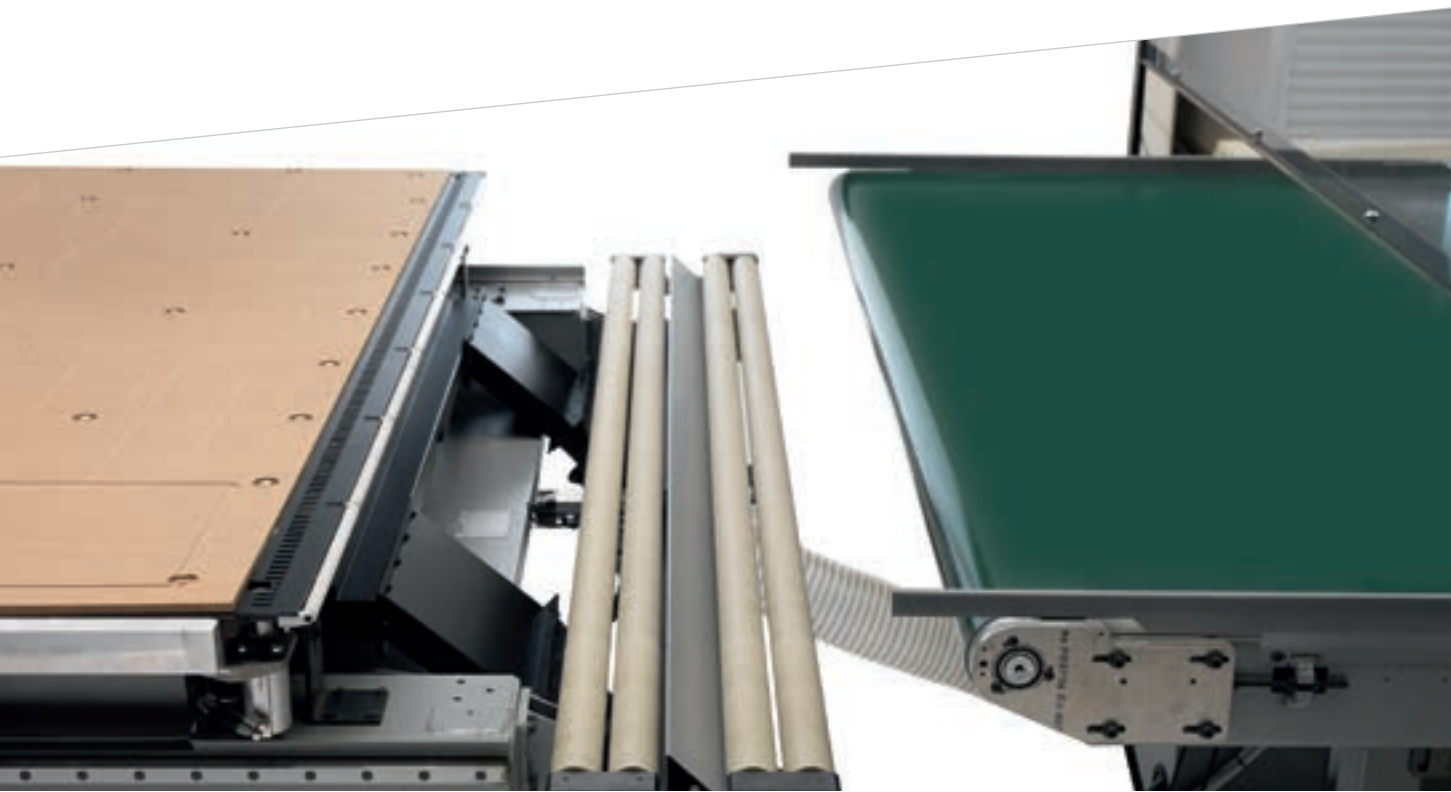


Sweeping arm with adjustable blade.
Used to unload panels up to 3 mm thick.



The separation systems can manage loads of breathable materials.

INCREASED PRODUCTION



The roller press enables the processing of several overlapping panels of breathable material, up to 3 panels (18 mm thick) for the frames of chairs or sofas. Thanks to its compatibility with all the twin unit configurations too, production capacity can be extended enormously.



The loop presser supports the machining of warped and overlapping panels of **breathable material**, or those with a **high level of friction**, by applying pressure to the upper surface of the panel.



Biesse boasts extensive experience in the machining of breathable materials arranged in overlapping panels.

AUTOMATED, INTERCONNECTED PRODUCTION



Rover B FT can be perfectly integrated with ROS (robotised solutions) and loading/unloading systems. The ROS ensure a marked increase in production and total reliability of both the production process and the loading/unloading operations, even in a wider context of industrial automation.

INCREASED PRODUCTIVITY AND REDUCED PRODUCTION COSTS, THANKS TO:

- The possibility to work on several loading/unloading stations simultaneously according to the needs of the customer
- Reduced working time for the operator
- Simplification of work for the operator
- Machining operations that require no supervision and have no time limits (24/7)

The PLS (Picking List Smart) application allows the user to:

- View the composition of the piles being loaded into the Rover, with generation of reports to support the operator
- Integrate with the ROS nesting unloader for stand-alone machines
- Manage master data and stocks of panels and offcuts, shared across multiple machines



LEAN, EFFICIENT PRODUCTION FLOWS



Winstore is the automated storage for the optimised management of panels for companies who wish to increase their productivity, guaranteeing production with reduced times and costs.

- ✓ **RAPID RETURN ON INVESTMENT
THANKS TO INCREASED PERFORMANCE
AND REDUCED COSTS**
- ✓ **PRODUCTION FLOW OPTIMISATION**
- ✓ **INTEGRATION IN THE PRODUCTION LINE**



Winstore ensures that the panels to be machined are easily accessible at all times, so it is possible to substantially increase cell productivity compared to manual loading methods using a forklift truck, without frequent stack changes.



- **REDUCED DELIVERY TIMES**
- **REDUCED WAREHOUSE SPACE REQUIRED**
- **REDUCED LABOUR**
- **WASTE REDUCTION**
- **LESS RISK OF DAMAGING PANELS**

PROTECTION AND SAFETY FOR ALL MACHINING OPERATIONS

Biesse machines are designed to enable operators to work in complete safety.



Maximum safety and reliability thanks to bumpers combined with photocells, with no working dimensions on the ground and no damage. The wide hatch provides maximum visibility of the machining operations, as well as ensuring easy access to the working units.



22 overlaid layers of side curtain guards to protect the working unit, which are movable to enable the machine to work at maximum speed in total safety.

LED bar with 5 colours,

indicating the machine status in real time, allowing the operator to check the machine status at any point, guaranteeing safe working conditions.



THE MOST ADVANCED TECHNOLOGY CLOSE AT HAND

bTouch is an optional feature that can be purchased after purchase of the machine to enhance the functionality and the usage of the technology available.



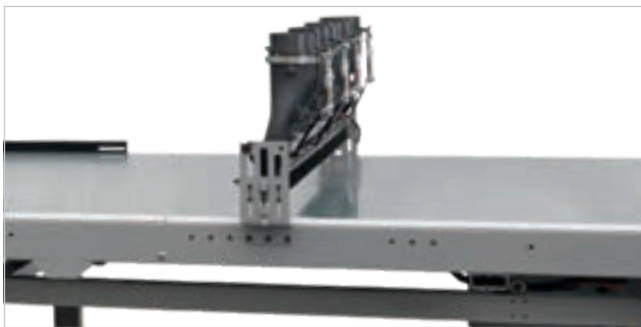
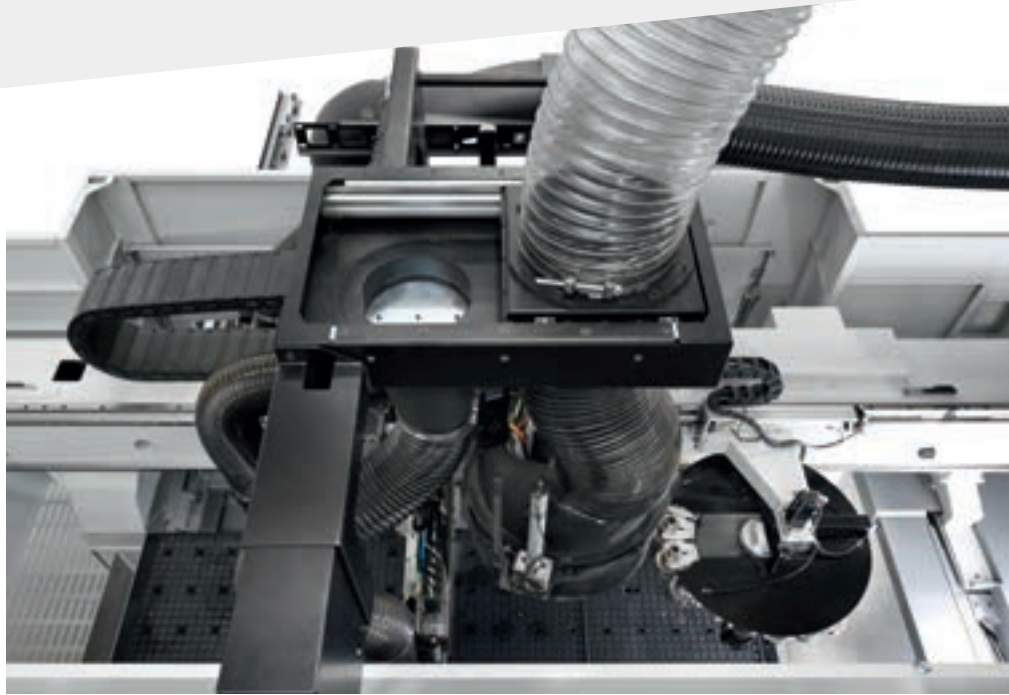
bTouch is the new 21.5" touch screen which enables you to carry out all of the functions previously performed using the mouse and the keyboard, enhancing the direct interaction between the user and the device.

Perfectly integrated with the B_SUITE 3.0 interface (and with later versions) and optimised for touch, this solution is incredibly simple, and makes the best possible use of the Biesse software functions installed on the machine. The screen has a maximum resolution of 1920 x 1080 (Full HD) at 60 Hz. Specifically, you can:

- Create any CAD programme (including parametric programmes), with layouts and machining operations
- Move, rotate and increase the size of objects (panel, NC machine, tool etc.) present within the CAD/CAM area
- Quickly and simply complete warehouse tooling, by dragging the tools into their designated places
- Prepare the machine for the correct positioning of the panel (machine set-up), moving tables and carriages into the desired position
- Send a programme machining list, change the parameters and send it to the NC machine for processing
- Manage all the controls present in soft-console

EFFICIENT SOLUTIONS FOR A FLAWLESS FACTORY

Rover B FT has a new suction system on the working units; it's extremely effective and reliable over time, to ensure optimum cleaning of both the product and the surrounding area.



System with 2 to 4 suction hoods positioned above the unloading belt.



Chip removal system positioned between the machine and the unloading belt, guaranteeing optimal panel cleanliness.



Intake manifold positioned at the end of the belt.



Suction manifold for lounge furniture structure applications. An extremely sturdy solution positioned at the end of the conveyor, purposely designed for those working with packed elements.



Various automatic machine and component cleaning options are available which saves operator time.

New suction hoods which can be adjusted to 12 positions (3 axis) or 19 positions (5 axis) and continuous coating of bristles. This solution enables fine, precise adjustments to be made to the position of the hood, significantly increasing suction capacity.

T-JET PATENTED TECHNOLOGY

T-JET is the solution patented by Biesse for removing woodchips and dust during milling operations. Together with the C torque axis, the device follows the trajectories perfectly, ensuring the total cleaning of the channels and side surfaces in one single step. Advantages guaranteed even in the narrowest corners or with changes of direction. Combined with the new suction hoods, it enables the perfect execution of machining operations in a smooth, precise manner, offering numerous advantages:

- LESS DUST AND FEWER WOODCHIPS ON THE TABLE, AVOIDING THE RISK OF DAMAGE TO THE SURFACE OF THE PANEL
- TOTAL CLEANING OF THE SIDE SURFACES OF THE PIECES
- EFFECTIVE SUCTION GUARANTEED EVEN AT HIGH FEED SPEEDS
- UNPRECEDENTED FINISHING QUALITY



myVA

SOLUTIONS THAT MAKE THE USE OF OUR MACHINES SIMPLER, MORE ERGONOMIC AND MORE EFFICIENT.



SINGLE CONTROL STATION WITH TWIN MONITORS AND LABELLING MACHINE

The machine can be controlled and labels printed (for piece identification) from a single command point. Solution that greatly enhances the machine ergonomics.

PRINTER ON THE MOBILE CONSOLE

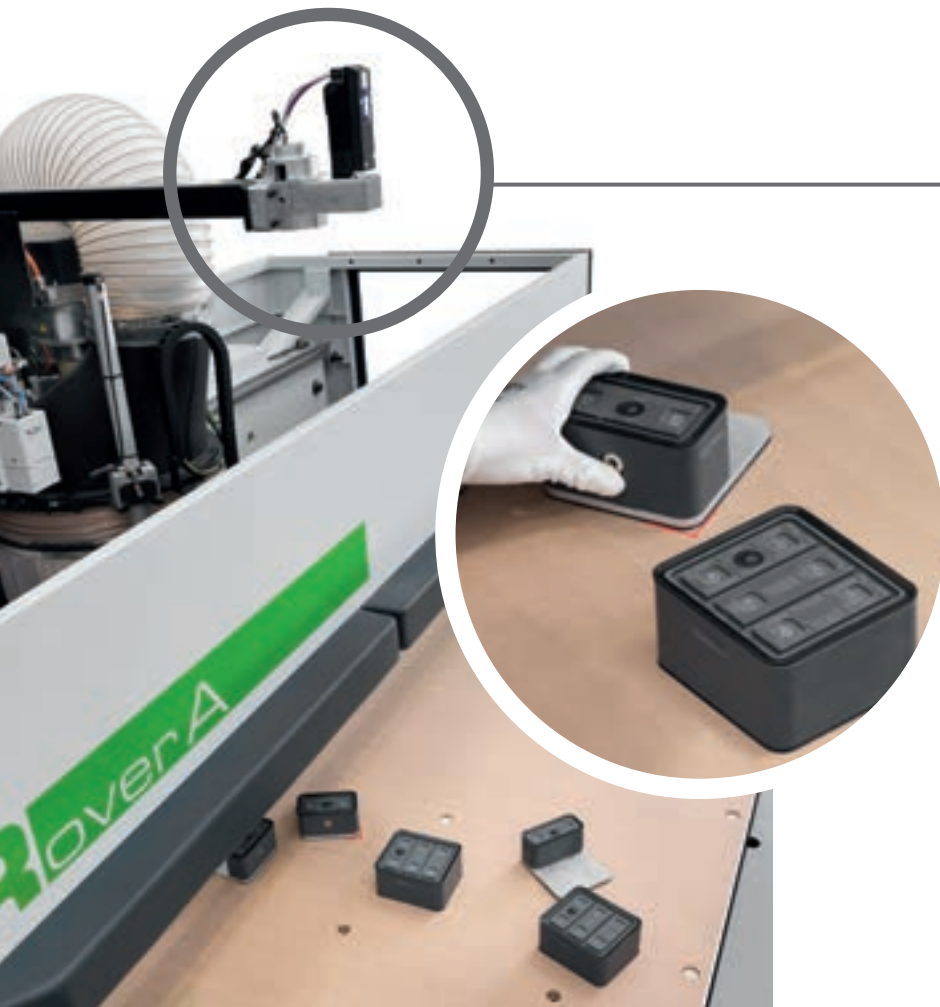
The printer is connected directly to the machine PC, and positioned so that everything needed for labelling.

Biesse has developed a series of solutions that help the operator in the various work phases, making daily tasks easier. myVA is a virtual assistant for every operator.



WEARABLE BAR CODE AND QR SCANNER

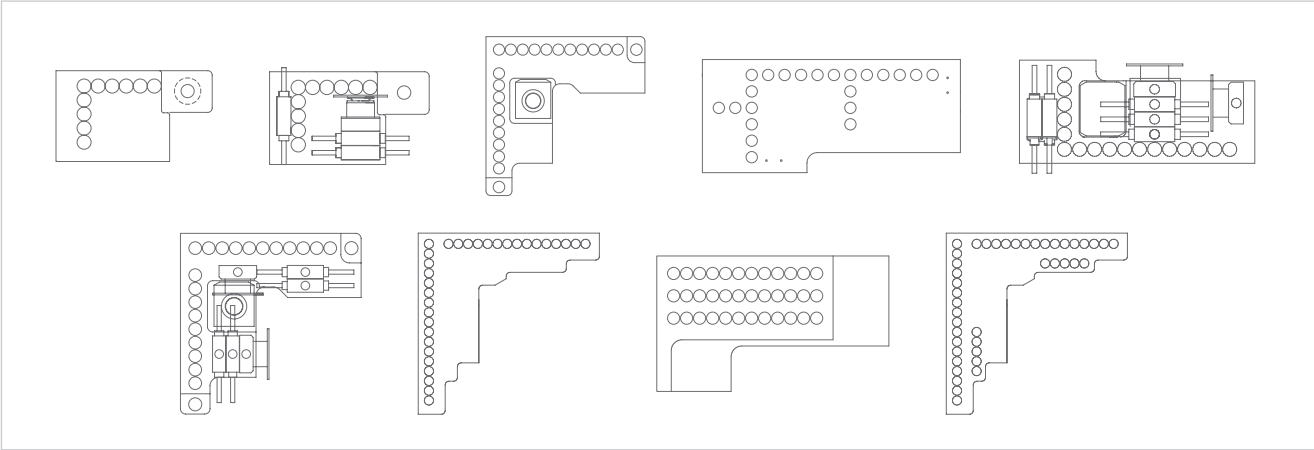
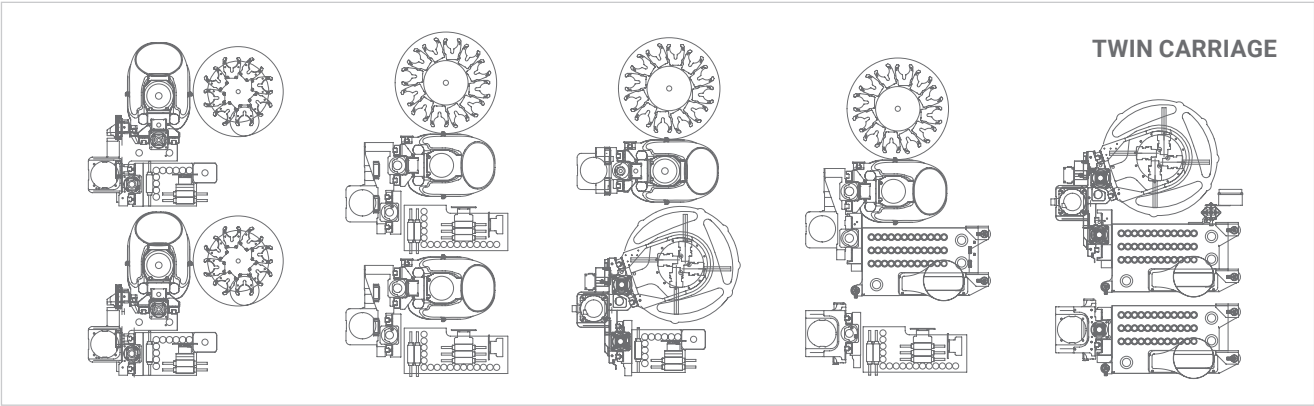
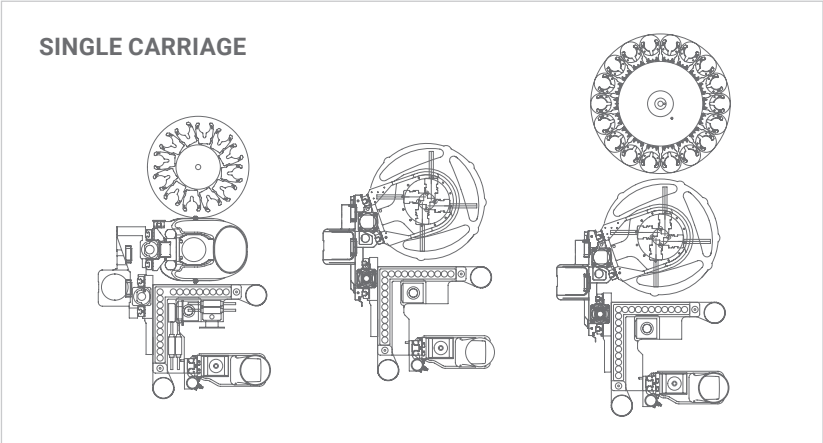
Used to upload programs in the work list, reading the information given on the label and activating the subsequent machining phases. QR codes or bar codes are read quickly and accurately, leaving the operator's hands free (unlike the classic scanner).



LED PROJECTOR FOR TOOLING THE WORK TABLE

The LED projector is used to identify the correct position of the vacuum modules on the work table, showing how they rotate as well. This solution saves on work area tooling time, and reduces the risk of mistakes by the operator.

CONFIGURATION



Available boring heads from 10 to 42 positions:
 BHZ 10 - BHZ 17 L - BHZ 20 - BHZ 22 - BHZ 29 2L - BHZ 30 2L - BHC 32 - BHC 36 - BHC 42.

EXCEPTIONAL FINISH, INCREASED PRODUCTIVITY

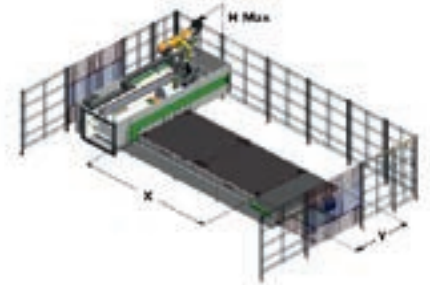


Horizontal motor with one outlet for lock routing and horizontal machining operations.

A COMPLETE RANGE OF AGGREGATES



TECHNICAL SPECIFICATIONS



WORKING FIELDS AND HEIGHT Z

	X		Y		Z		H		H max	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
Rover B FT 1531	3100	122	1560	61	250	10	1980	78	2770	109
Rover B FT 1536	3765	148	1560	61	250	10	1980	78	2770	109
Rover B FT 1564	6450	254	1560	61	250	10	1980	78	2770	109
Rover B FT 1836	3765	148	1875	74	250	10	1980	78	2770	109
Rover B FT 2231	3100	122	2205	87	250	10	1980	78	2770	109
Rover B FT 2243	4300	169	2205	87	250	10	1980	78	2770	109
Rover B FT 2264	6450	254	2205	87	250	10	1980	78	2770	109

SPEED

m/min - ft/min	X		Y		Z		Vector	
	85	279	85	279	35	115	120	394



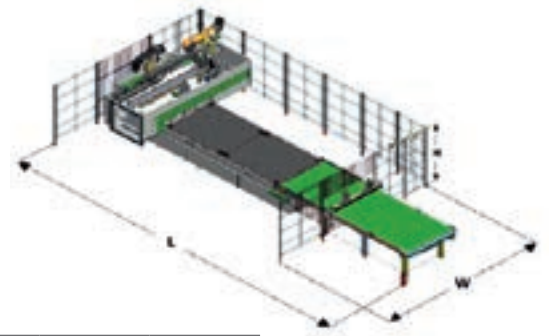
OVERALL DIMENSIONS

CONFIGURATION	L				W			
	Single carriage		Twin carriage		Single carriage		Twin carriage	
	mm	inch	mm	inch	mm	inch	mm	inch
Rover B FT 1531	7468	294	-	-	5463	215	-	-
Rover B FT 1536	8128	320	8100	319	5470	215	5785	228
Rover B FT 1564	10820	426	-	-	5470	215	-	-
Rover B FT 1836	8130	320	-	-	5780	228	-	-
Rover B FT 2231	7470	294	7420	292	6180	243	6530	257
Rover B FT 2243	8680	342	8610	339	6180	243	6530	257
Rover B FT 2264	10820	426	10760	424	6207	244	6550	258

The technical specifications and drawings are non-binding and may be subject to changes and updates. Some of the images may show machines equipped with optional features. Biesse Spa reserves the right to carry out modifications without prior notice.

Weighted sound pressure level A in: Operator workstation Lp_{fA} 78,5 dB (A). Loading/unloading position Lp_{fA} 78 dB (A). Uncertainty factor K = 4 dB (A). Operating conditions: boring or milling.

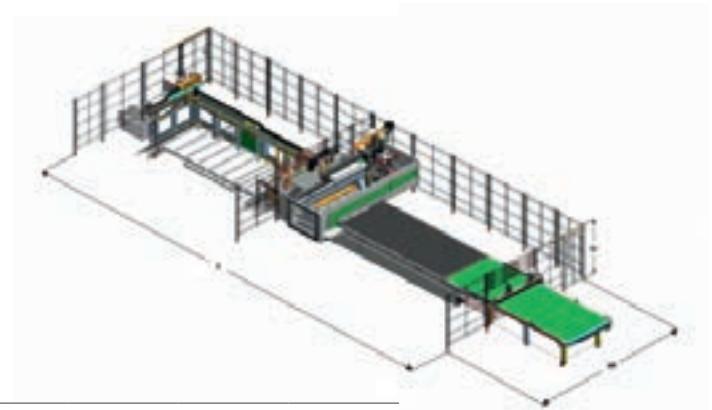
The measurement was carried out in compliance with UNI EN ISO 3746, UNI EN ISO 11202, UNI EN ISO 19085-3 and subsequent modifications. The noise levels shown are emission levels and do not necessarily correspond to safe operation levels. Despite the fact that there is a relationship between emission and exposure levels, this may not be used in a reliable manner to establish whether further measures need to be taken. The factors determining the exposure level for the workforce include length of exposure, work environment characteristics, other sources of dust and noise, etc. i.e. the number of other adjoining machines and processes. At any rate, the above information will enable the operator to better evaluate dangers and risks.



OVERALL DIMENSIONS - UNLOADING BELT ONLY

CONFIGURATION	L*				W			
	Single carriage		Twin carriage		Single carriage		Twin carriage	
	mm	inch	mm	inch	mm	inch	mm	inch
Rover B FT 1531	9380	369	-	-	5051	199	-	-
Rover B FT 1536	10710	422	10700	421	5051	199	5785	228
Rover B FT 1836	10710	422	-	-	5337	210	-	-
Rover B FT 2231	9370	369	9360	369	5746	226	6530	257
Rover B FT 2243	11770	463	11750	463	5757	227	6530	257
Rover B FT 2264	15220	599	15210	599	5760	227	6530	257

* The overall dimensions increase by 460 mm when the suction system is installed at the base of the unloading mat with removable grille for overlapping panels.



OVERALL DIMENSIONS - NESTING CELL TYPE A

CONFIGURATION	L*				W			
	Single carriage		Twin carriage		Single carriage		Twin carriage	
	mm	inch	mm	inch	mm	inch	mm	inch
Rover B FT 1531	12150	478	-	-	5020	198	-	-
Rover B FT 1536	14106	555	14120	556	5037	198	5780	228
Rover B FT 1836	14103	555	-	-	5337	210	-	-
Rover B FT 2231	12140	478	12120	477	5740	226	6530	257
Rover B FT 2243	15650	616	15630	615	5760	227	6530	257
Rover B FT 2264	20460	806	20450	805	5760	227	6530	257

* The overall dimensions increase by 460 mm when the suction system is installed at the base of the unloading mat with removable grille for overlapping panels.

OVERALL DIMENSIONS - NESTING CELL TYPE B

CONFIGURATION	L*				W			
	Single carriage		Twin carriage		Single carriage		Twin carriage	
	mm	inch	mm	inch	mm	inch	mm	inch
Rover B FT 1531	14740	580	-	-	5050	199	-	-
Rover B FT 1536	16660	656	16610	654	5080	200	5785	228
Rover B FT 1836	16680	657	-	-	5313	209	-	-
Rover B FT 2231	14710	579	14690	578	5460	215	6496	256
Rover B FT 2243	18320	721	18270	719	5460	215	6500	256
Rover B FT 2264	23100	909	23060	908	5460	215	6496	256

* The overall dimensions increase by 460 mm when the suction system is installed at the base of the unloading mat with removable grille for overlapping panels.

HIGH-TECH BECOMES ACCESSIBLE AND INTUITIVE



B_SOLID IS A 3D CAD CAM SOFTWARE PROGRAM THAT SUPPORTS THE PERFORMANCE OF ANY MACHINING OPERATION THANKS TO VERTICAL MODULES DESIGNED FOR SPECIFIC MANUFACTURING PROCESSES.

- Planning in just a few clicks.
- Simulating machining operations to visualise the piece ahead of manufacturing and have some guidance for the planning phase.
- Virtual prototyping of the piece to avoid collisions and ensure optimal machine equipment.
- Machining operation simulation with a calculation of the execution time.



REDUCED TIME AND WASTE



B_NEST IS THE B_SUITE PLUGIN SPECIFICALLY FOR NESTING OPERATIONS. IT ALLOWS YOU TO ORGANISE YOUR NESTING PROJECTS IN A SIMPLE WAY, REDUCING THE MATERIAL WASTE AND MACHINING TIMES.

- Flexibility with reduced production times and costs.
- Optimisation for every type of product.
- Management of articles, panels and labels.
- Integration with company software.



MANAGING PRODUCTION IN A SIMPLE, USER- FRIENDLY MANNER

SMART
CONNECTION
Powered by Retuner



SMARTCONNECTION IS A SOFTWARE PACKAGE FOR MANAGING JOB ORDERS WITHIN THE COMPANY - FROM THE GENERATION PHASE TO SCHEDULING AND ACTUAL PRODUCTION START-UP - IN JUST A FEW SIMPLE, INTUITIVE STEPS.

THANKS TO SMARTCONNECTION, THE PRODUCTION SITE MACHINES CAN BE LINKED UP TO TRANSFORM THE COMPANY INTO A 4.0 ENTITY..



SmartConnection is a web-based solution that can be used by any device.

MANAGE THE JOB ORDER

PLAN

SCHEDULE

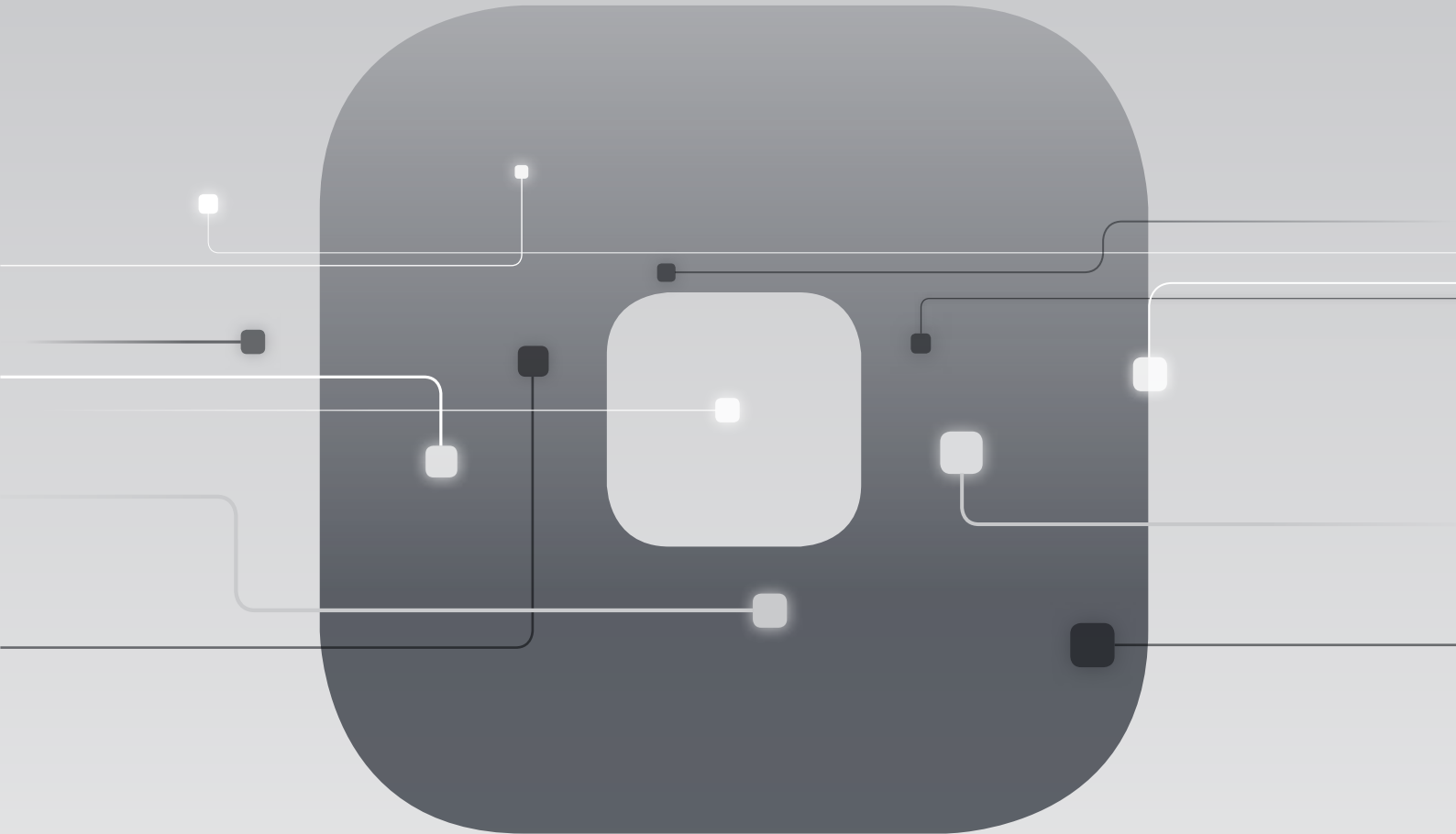
WORK



Biesse is extending SmartConnection across all geographical areas.
To check availability in your country, get in touch with your commercial contact.

SOPHIA

GREATER VALUE FROM MACHINES



The Biesse IoT platform which enables customers to access an extensive range of services to streamline and rationalise their work management processes.

□ SERVICES

□ PROACTIVITY

□ ANALYSIS



CUSTOMER CARE IS WHO WE ARE

SERVICES is a new experience for our customers, to offer not just excellent technology but the added value of an increasingly direct connection with the company, the professionals who work there and the experience they embody.



ADVANCED DIAGNOSTICS

Digital channels for remote interaction online 24/7. Always ready to intervene on-site seven days a week.



A WORLDWIDE NETWORK

39 branch offices, over 300 certified agents, retailers in 120 countries, and spare parts warehouses in America, Europe and the Far East.



SPARE PARTS AVAILABLE IMMEDIATELY

Identification, shipping and delivery of spare parts for every need.



EVOLVED TRAINING OPPORTUNITIES

Lots of on-site, online and classroom training modules for personalised growth.



VALUABLE SERVICES

A wide range of services and software packages to help our customers achieve continuous improvements in performance.

AN EXCELLENT LEVEL OF SERVICE

+550

HIGHLY SPECIALISED
TECHNICIANS AROUND
THE WORLD, READY TO HELP
CUSTOMERS WITH EVERY
NEED

90%

OF MACHINE DOWN CASES
WITH RESPONSE TIME
UNDER 1 HOUR

+100

EXPERTS IN DIRECT
CONTACT THROUGH
REMOTE CONNECTIONS
AND TELESERVICE

92%

OF SPARE PARTS ORDERS
FOR MACHINE DOWNTIME
PROCESSED WITHIN 24
HOURS

+50.000

ITEMS IN STOCK IN THE
SPARE PARTS WAREHOUSES

+5.000

PREVENTIVE MAINTENANCE
VISITS

80%

OF SUPPORT REQUESTS
SOLVED ONLINE

96%

OF SPARE PARTS ORDERS
DELIVERED IN FULL ON TIME

88%

OF CASES SOLVED WITH
THE FIRST ON-SITE VISIT

MADE WITH BIESSE

WOOD-SKIN + BIESSE, DYNAMIC DESIGN BECOMES INTELLIGENT

Digital material. This is how Giulio Masotti, the founder of Wood-Skin, defines his creation: two layers of wood joined together ("Or indeed, two layers of another material", he specifies) and a central layer of fabric. Via a process of removal, this solution allows for the creation of hinges which offer exceptionally high resistance. And so, masterpieces of creativity and dynamism are born - infinite combinations of architectural shapes and forms with an artisan touch and a metropolitan flavour. With his three partners, Stefano Baruffaldi, Susanna Todeschini and Gianluca Lo Presti, Giulio founded Wood-Skin in 2013, putting their names to what would go on to become a patented industrial process to serve a specific purpose, "to realize complex forms in a simple and economical manner, both in terms of the surroundings being created and the design itself," explains Giulio. "This is our response to the many issues that we have experienced first hand during the planning process".

Necessity was clearly a major driver, but

also a powerful desire to experiment, leading the young team to develop a unique creation with infinite applications, "bridging the gap that exists between the possibilities of digital representation through CAD software and the constructed environment, which is very marked as things stand at present. Wood-Skin is a digital material that aims to fully exploit the potential of CNC machines - and thus of digital manufacturing - through the use of an intelligent composite material that makes it possible to create an unlimited number of high-strength hinges wherever you wish».

Innovation, technology, creativity: Biesse and Wood-Skin share a strong identity and a common vocation, and came together to share their experience at Ventura-Lambrate, during the Salone del Mobile. "We wanted to explore the potential for working together in the future, with smart materials such as Wood-Skin and our shared passion for innovation. With the assistance of MIT Boston, we launched a collaborative project, which is both experimental and

yet extremely practical: the Programmable Table. This new concept embodies the vision of a future where items of furniture will be able to self-assemble once completed by the machine that produces them. This is not merely a prototype, but rather a concrete result which will give rise to a line of products in the not-too-distant future.". This scenario may seem futuristic, but in reality, it is extremely practical, if supported by a suitable level of expertise which is able to give shape to ideas, in a simple and straightforward manner. Like the Excel machining centre by Biesse. "The centre is extremely precise, versatile and efficient, allowing us to implement our patented process. We try to take full advantage of the considerable potential of the machine, and the fact that it is a tool capable of performing an unlimited number of precise and complex machining operations. This, when combined with an innovative material like Wood-Skin, can produce a range of unusual, unconventional results.

BIESSE MACHINES ALLOW US TO TRANSFER WOOD AND OTHER MATERIALS FROM A SOLID STATE TO A DIGITAL STATE, IN WHICH THE MATERIAL BECOMES INTELLIGENT AND IS READY TO TAKE ON OTHER FORMS, ONCE IT HAS BEEN REMOVED FROM THE MACHINE.



Giulio Masotti
Founder

WOOD-SKIN.COM



Founded in Italy,
international native.

We are an international company that manufactures integrated lines and machines to process wood, glass, stone, plastic and composite materials and what will come next.

Thanks to our rooted competence nurtured by an ever-growing worldwide network, we support your business evolution – empowering your imagination.

Master of materials, since 1969.

We simplify your
manufacturing
process to make
the potential of
any material
shine.



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