BREMA VEKTOR

VERTICAL BORING AND INSERTION MACHINE WITH NUMERICAL CONTROL

BIESSE

50 YEARS

BIESSEGROUP

HIGH LEVEL PERFORMANCE WITH A SMALL FOOTPRINT

THE MARKET REQUIRES

for a change in production processes to meet the ever growing request for **personalised products** to satisfy customers' specific needs, coupled with quick and certain delivery times. Production volumes are no longer a certainty, and manufacturing on the basis of statistical analysis is not a valid option. Production diversification is the key to success.

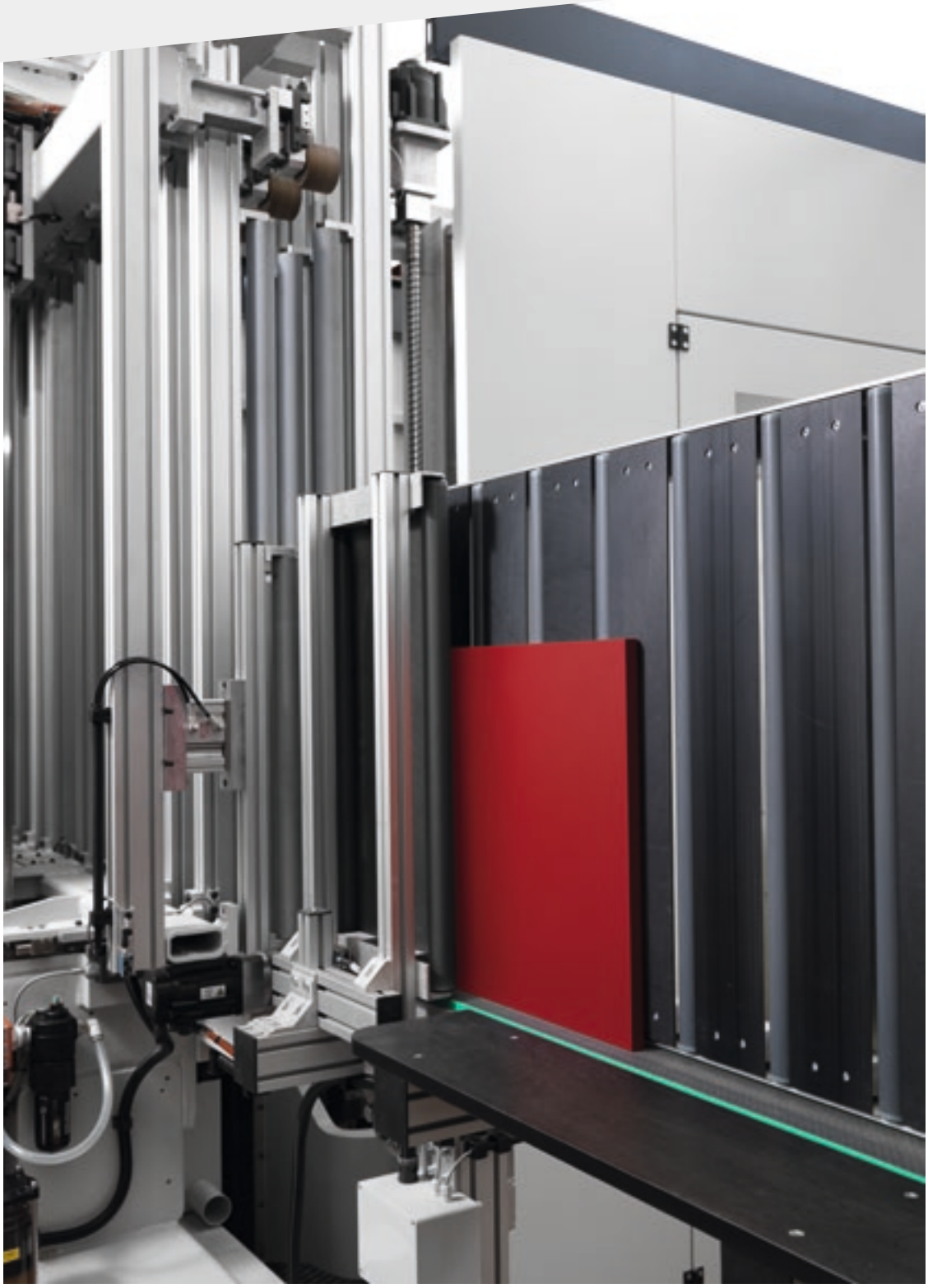
BIESSE RESPONDS

with **technological solutions** able to meet the requirements of companies who manufacture to order, with significantly reduced costs and cycle times. The **BREMA VEKTOR** range offers a wide choice of vertical boring and insertion machines to handle all production needs. Groundbreaking technologies for boring, milling, cutting and inserting hardware on panels of various sizes, **without any special set-up**.

BREMA VEKTOR

- MAXIMUM QUALITY OF MACHINING OPERATIONS
- REDUCED CYCLE TIMES
- SMOOTH, EFFICIENT PRODUCTION FLOW.

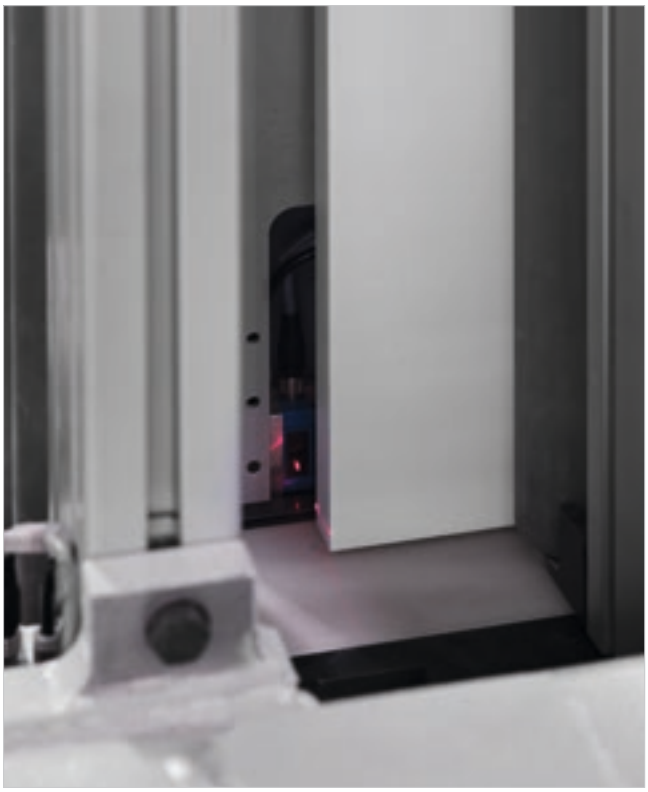
OPTIMUM MACHINING QUALITY



The vertical positioning of the panel and the structure of the machine make the loading/unloading operations highly ergonomic, and guarantee that even the most delicate surfaces can be machined successfully.

The technology used in all Brema Vektor machines guarantees high precision in all machining operations.

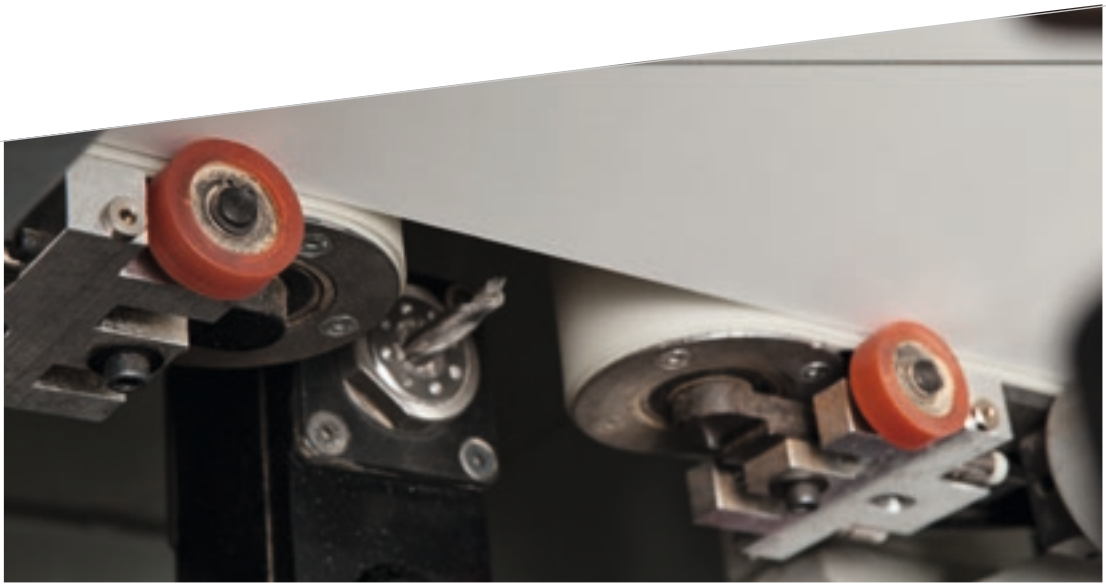
The longer-stemmed spindles allow users to successfully perform all drilling operations, guaranteeing optimum quality standards.

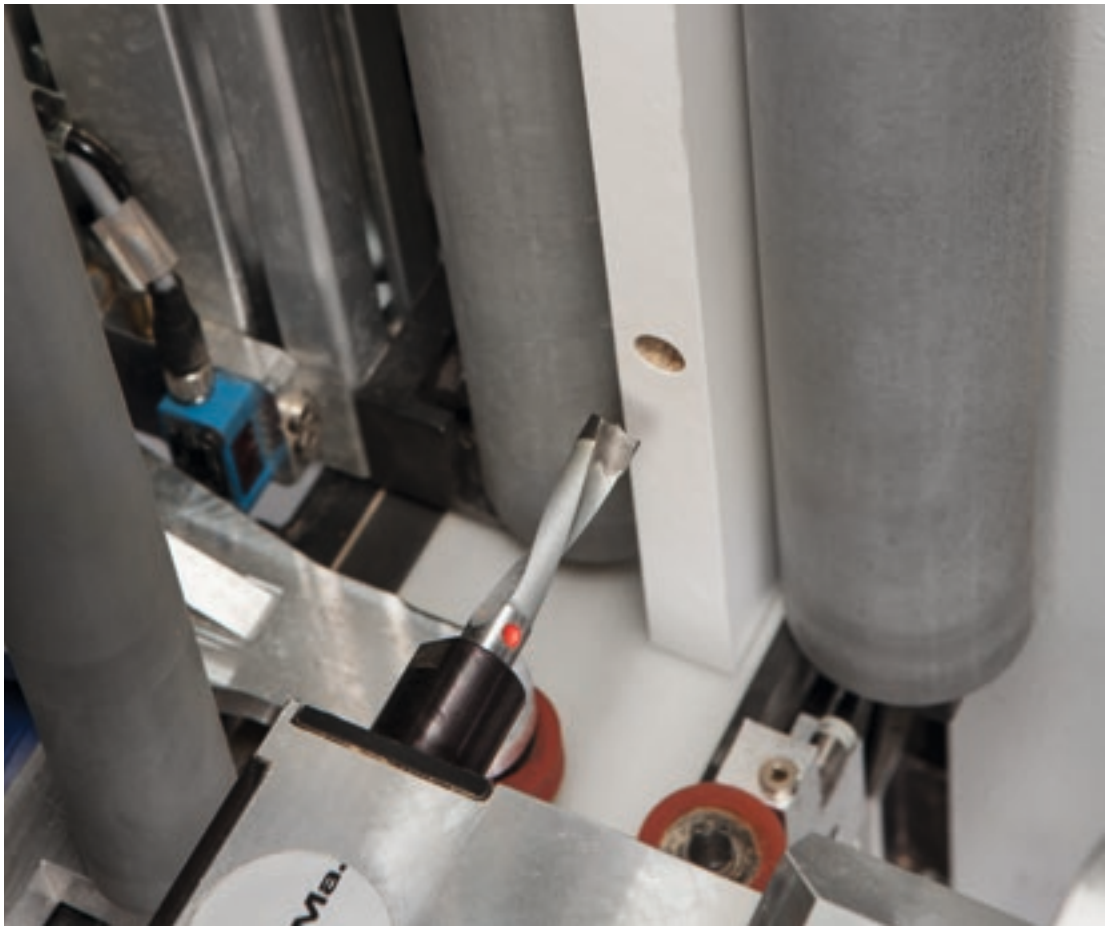


A laser system for detecting the origin of the front and rear panel edges, ensures the machining positions in X can be corrected to compensate for the dimensional tolerances.

CYCLE TIME REDUCTION

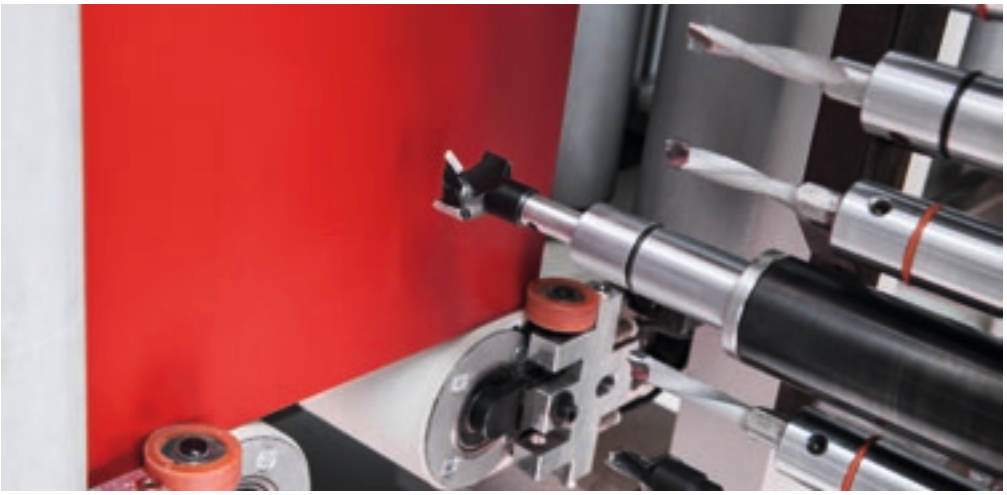
Unique technological solutions to meet productivity and flexibility requirements of the most demanding manufacturers.



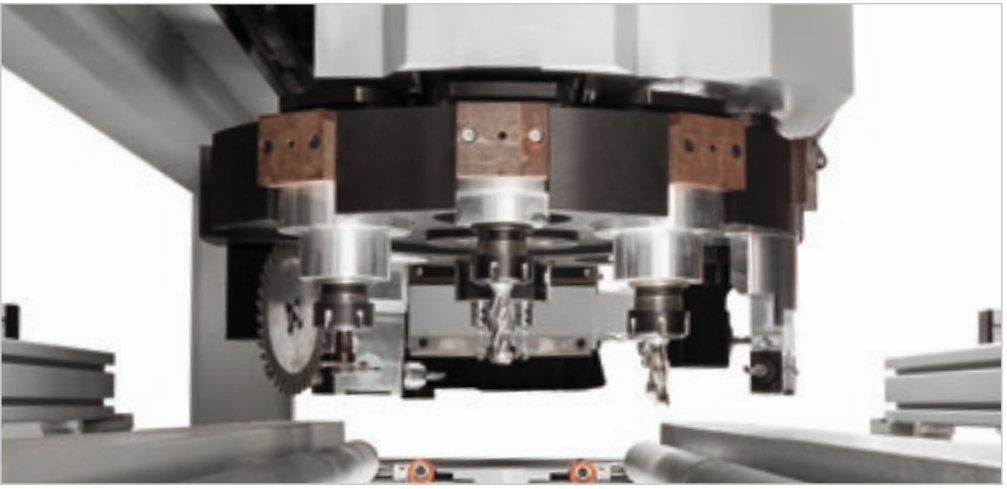


Patented dual-section haul-off for machining the 4 panel edges without limits (not available on Vektor 25 and 30).

The transit from one machining operation to another requires no operator intervention. The machine is suitable for different panel sizes, thanks to the roller vice which ensures a good hold on the piece and allows delicate or painted materials to be machined without damaging the surface.



Revolver “R10” unit with tool change in less than 2 seconds, during the machining operation.

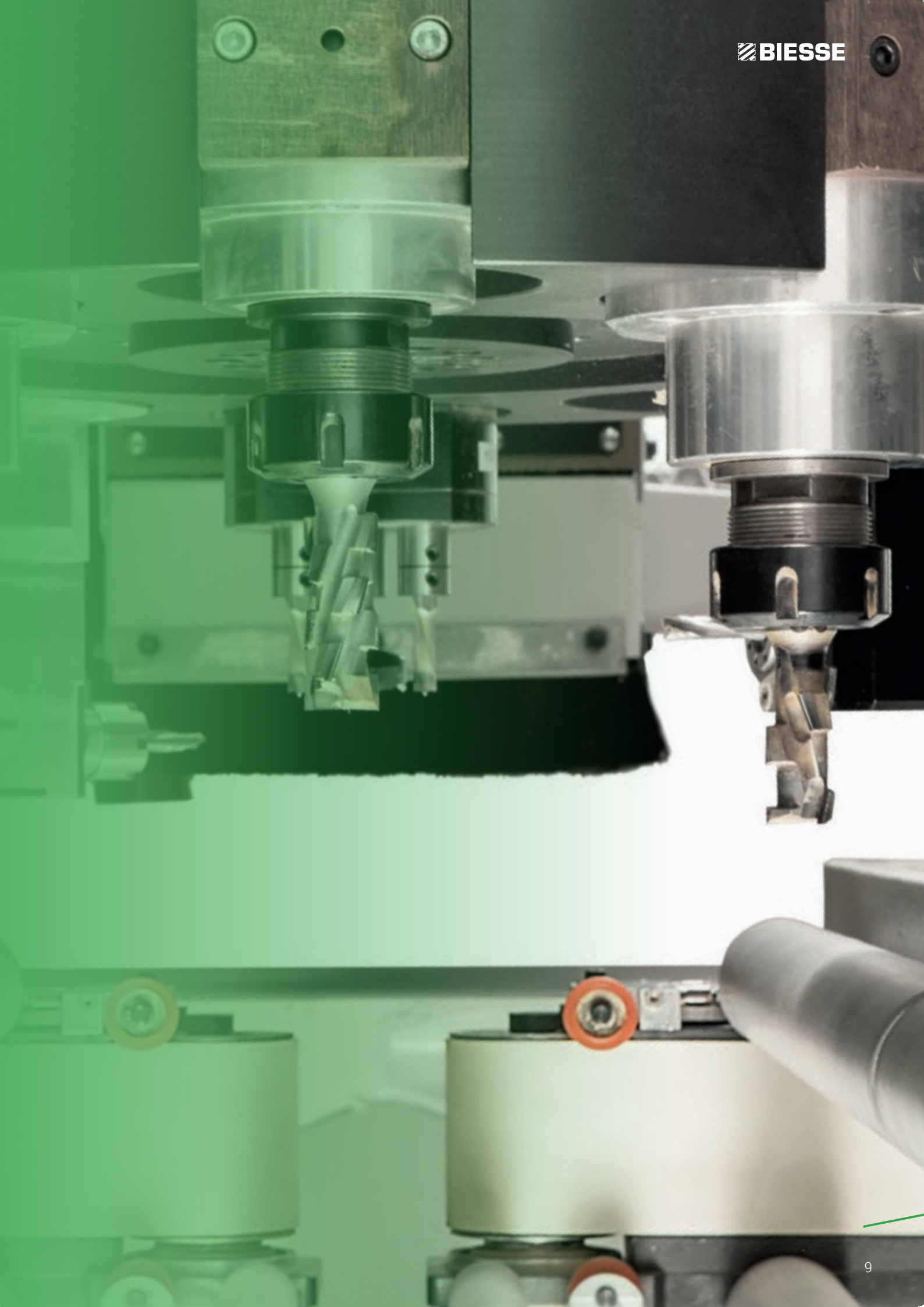


10 POSITIONS REVOLVER

QUICK TOOL CHANGEOVER

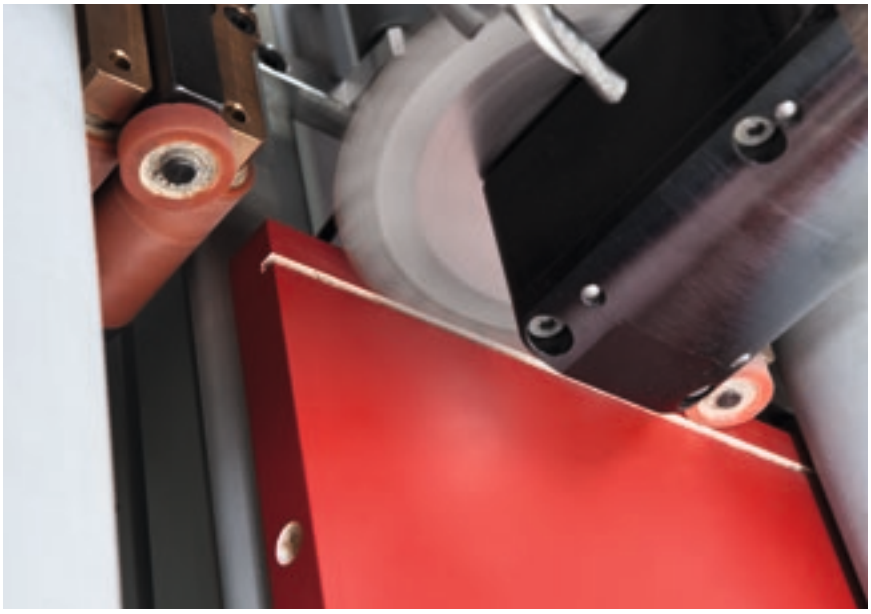
Tool change happens automatically in less than 2 seconds. Excellent configurability thanks to the aggregates available, and the possibility to create tailor-made aggregates. Optimised ergonomics with considerable savings in tooling set-up times.

The 10-position Revolver unit is managed by the N.C. The “Brema” aggregate locking system, and the 11 KW motor with direct drive transmission, ensure tool rotation control up to 18000 rpm. The speed is programmed directly via the control, and managed by an electronic inverter.



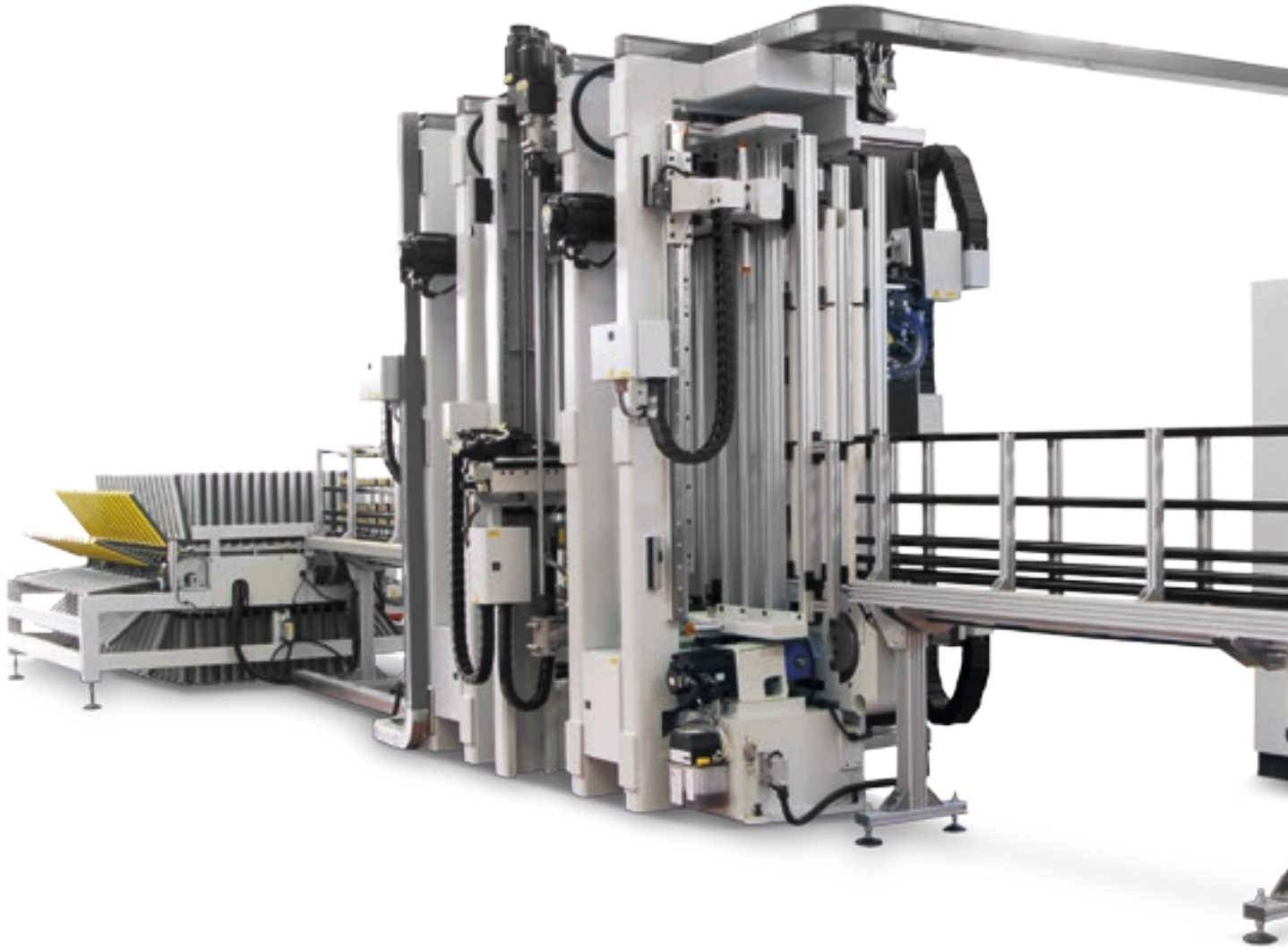
TO CARRY OUT EVERY TYPE OF MACHINING OPERATION

Flexible vertical through boring machine with NC, for sequentially boring, milling and cutting panels of various sizes without any manual set-up. Available with a configuration for managing hardware insertion.



EXCELLENT PERFORMANCE

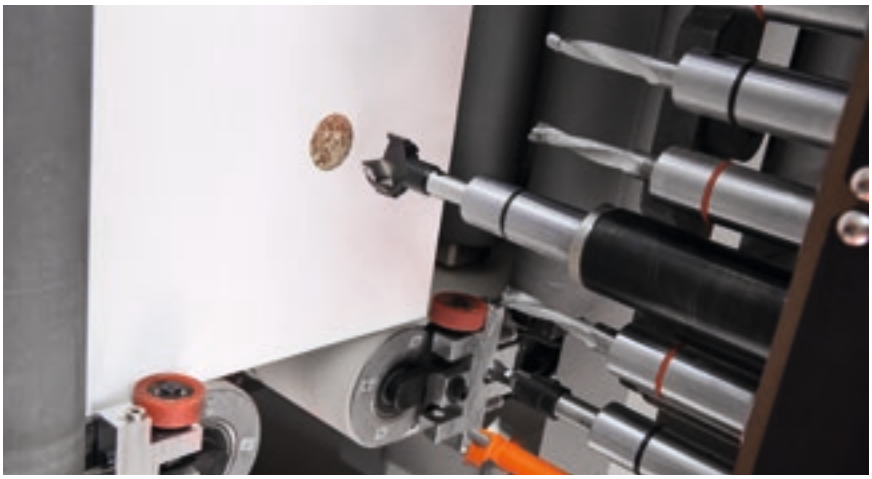
The Brema Vektor FC version is fitted with a specific unit for opposed boring, so that the two main faces of the panel can be machined in one single step.



Unit for opposed boring, for completing the machining operations on the rear face of the panel.

THE COMPLETE PROCESS, IN ONE MACHINE

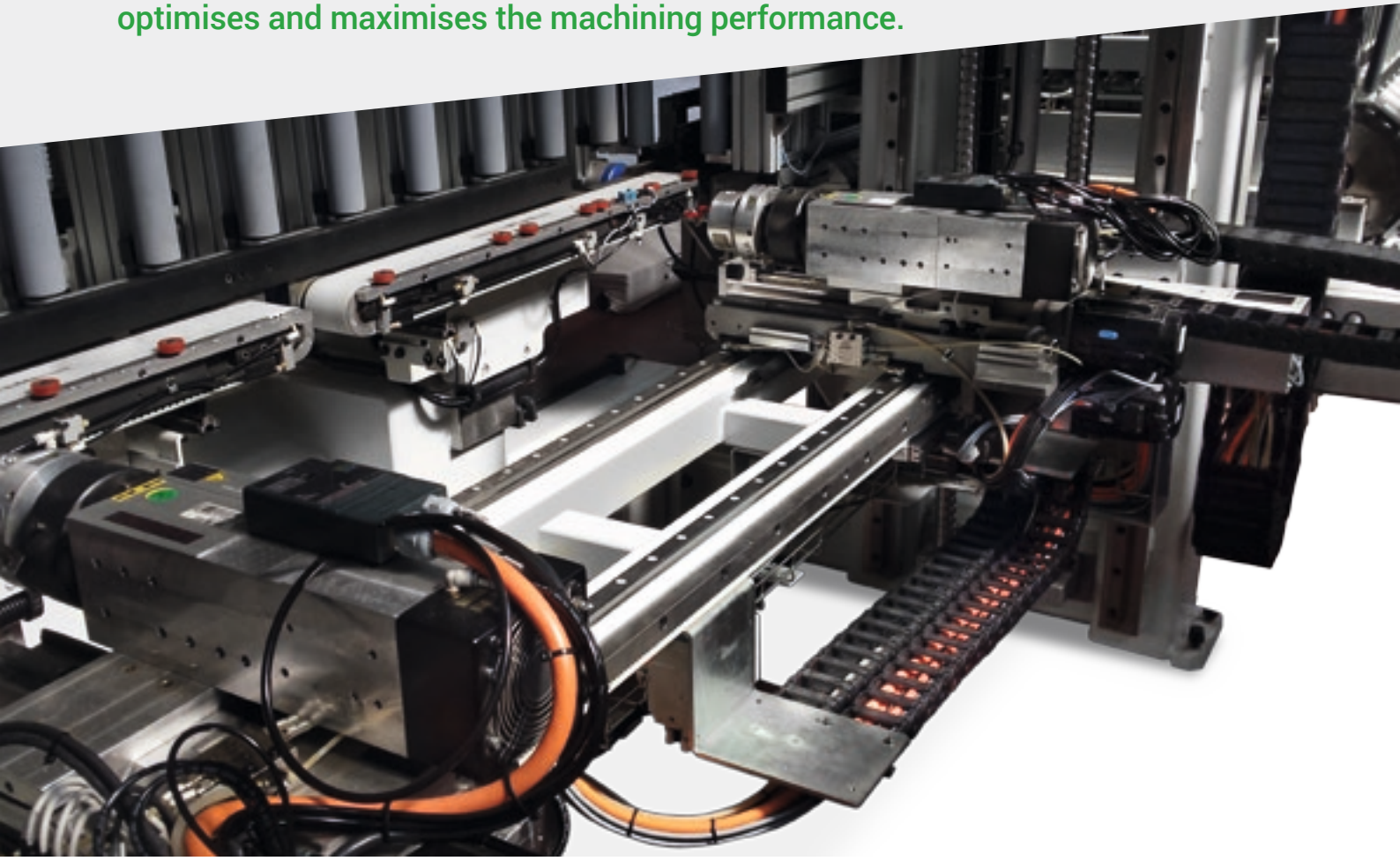
Vektor CS is the flexible, vertical boring machine with a built-in unit for inserting glue and dowels. A single machine for processing all the cabinet elements in just one step, with one operator and in a smaller space.

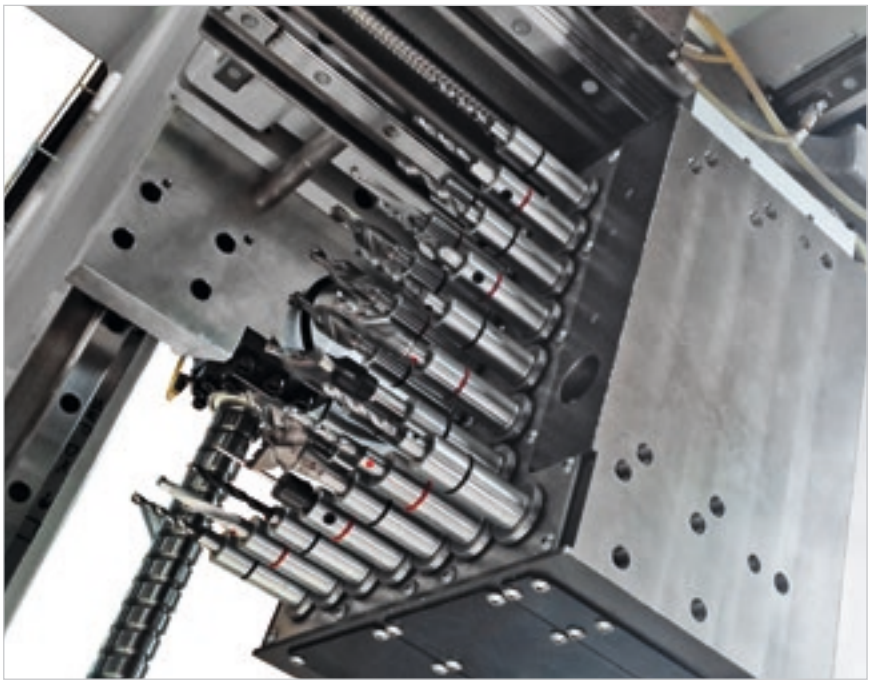


Unit for managing the boring operation and the insertion of glue and dowels.

FOR TOP PRODUCTIVITY LEVELS

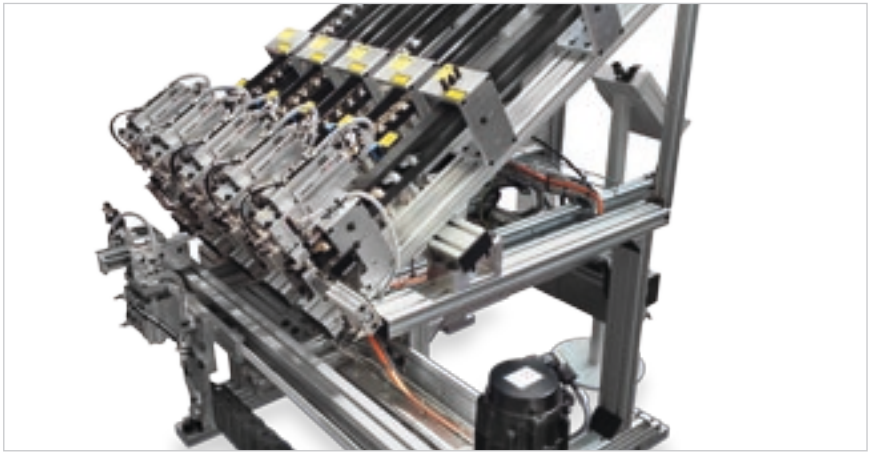
Borer and hardware inserter for specific lines with considerable batch one production volumes. The technology of the boring and hardware insertion optimises and maximises the machining performance.





Work units that help optimise the process, reducing the number of boring descents and therefore the overall machining times.

Solution with boring units with mobile axes in X and Y, for optimising the boring sequences.

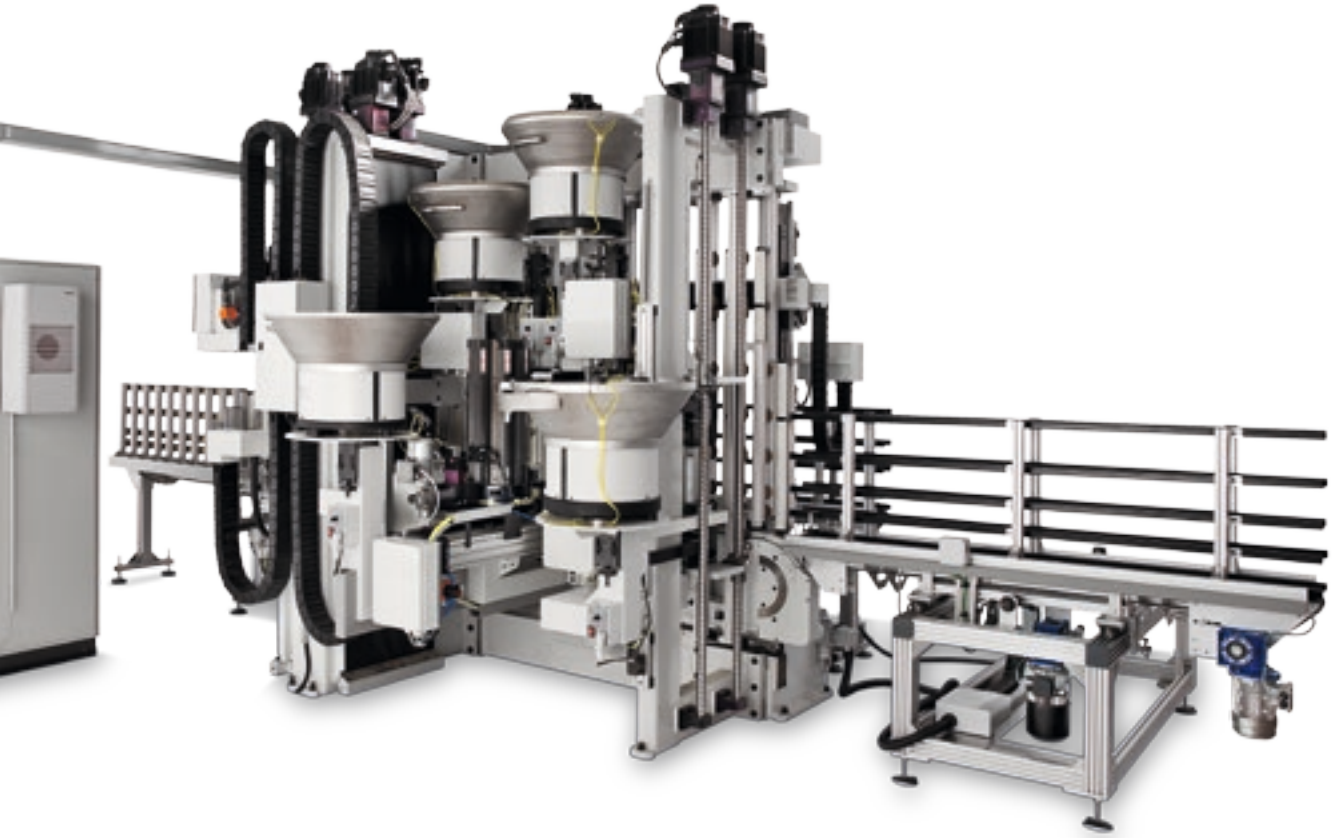


Multi-position insertion device for managing various types of hardware.

Solution for boring and inserting hardware in window frames.

THE TAILOR-MADE MACHINE

Flexible vertical through boring machine with NC, for sequentially boring, inserting, milling and cutting panels of various sizes without any manual set-up. Can be configured according to the specific machining needs, with a range of units for boring and inserting.



Unit with independent spindles for personalised boring operations.

LEAN AND EFFICIENT PRODUCTION FLOW

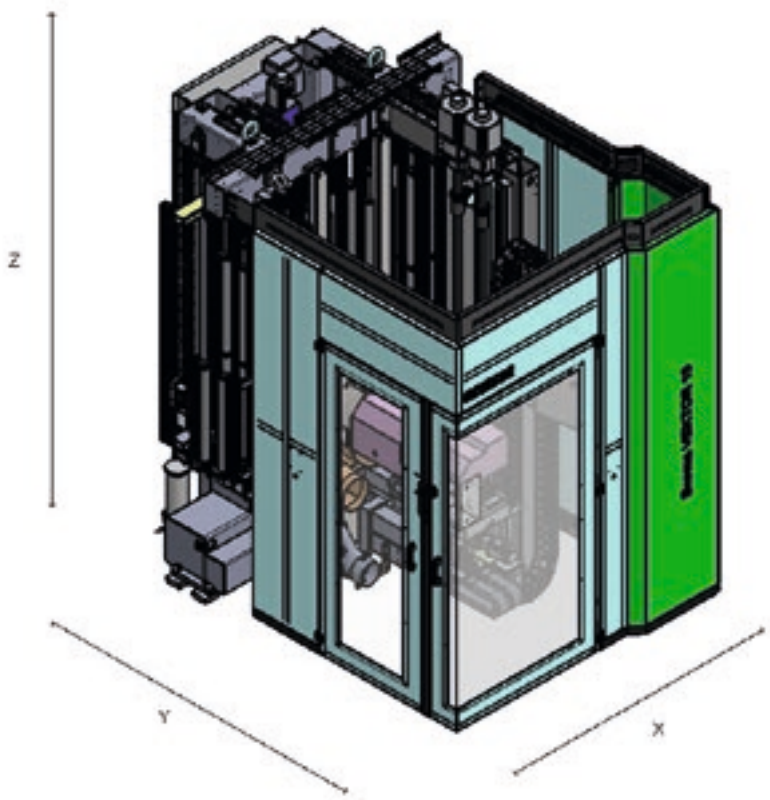
DESIGN OF INTEGRATED LINES OVER 100 METRES LONG

BiesseSystems provides a full project consultancy and management service to companies who wish to implement integrated technology solutions for their manufacturing processes.
A team of sector experts, capable of understanding and anticipating company needs, work with the customer from inception through to system installation and commissioning.

OVER 1000 SYSTEMS SOLD WORLDWIDE

- **Design and installation of turn-key systems.**
- **Design and installation of automated and integrated production lines.**
- **Upgrading, refurbishment and integration of pre-existing production systems.**

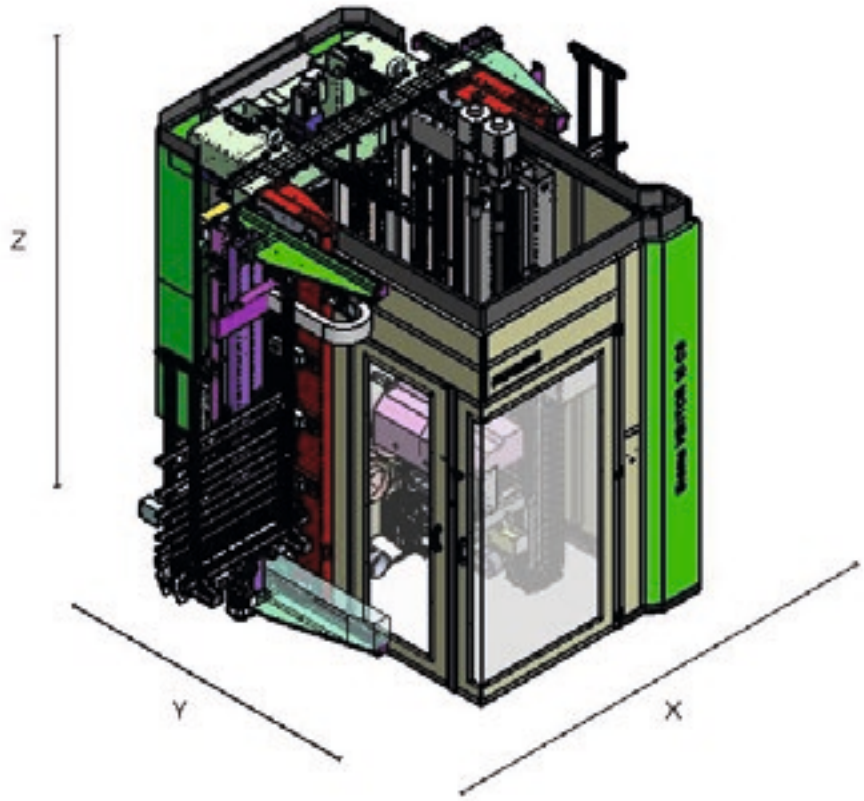
TECHNICAL SPECIFICATIONS



BREMA VEKTOR 15

	X	Y	Z
	mm / inch	mm / inch	mm / inch
Overall machine dimensions	2050 / 81	2750 / 108	3100 / 122
Min. size of machinable panel	300 x 40 x 8 (4 opt) / 12 x 6 x 0,31 (0,15 opt)		
Max. size of machinable panel	∞* x 1300 x 80 / ∞* x 51 x 3		

* Panel movement distinguishes the max. panel length that can be handled in the cell or line.



BREMA VEKTOR 15 CS

	X	Y	Z
	mm / inch	mm / inch	mm / inch
Overall machine dimensions	4130 / 163	2750 / 108	3100 / 122
Min. size of machinable panel	300 x 40 x 8 (4 opt) / 12 x 6 x 0,31 (0,15 opt)		
Max. size of machinable panel	∞* x 1300 x 80 / ∞* x 51 x 3		

* Panel movement distinguishes the max. panel length that can be handled in the cell or line.

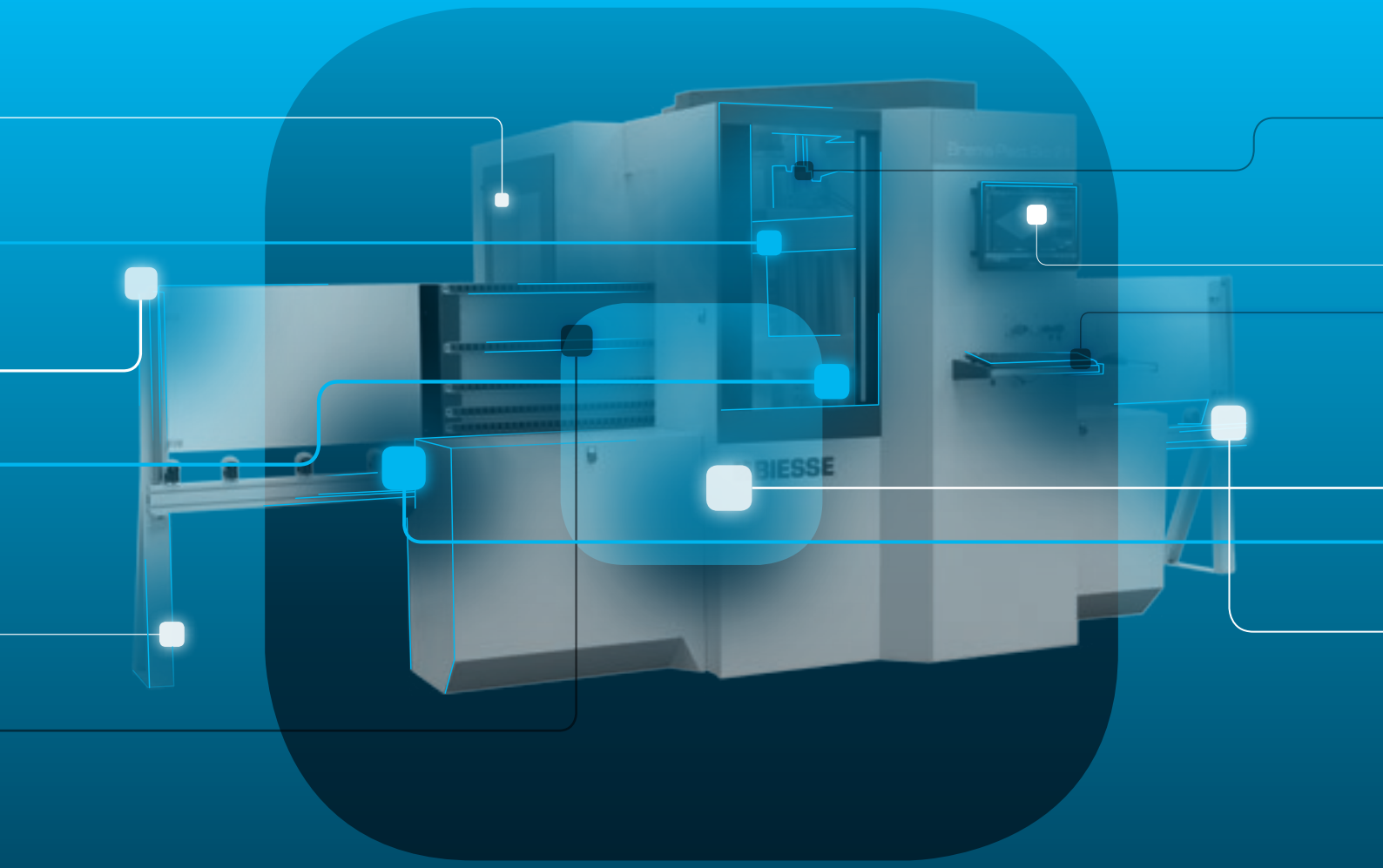
The technical specifications and drawings are non-binding. Some photos may show machines equipped with optional features. Biesse Spa reserves the right to carry out modifications without prior notice.

Weighted sound pressure level A (LpA) dB(A) 75 Weighted sound pressure level A (LwA) dB(A) 90 Measurement uncertainty K dB(A) 4.

The measurement was carried out in compliance with UNI EN 848-3:2007, UNI EN ISO 3746: 2009 (sound power) and UNI EN ISO 11202: 2009 (sound pressure levels at workstation) during panel machining. 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.

SOPHIA

GREATER VALUE FROM MACHINES



SOPHIA is the IoT platform created by Biesse in collaboration with Accenture which enables its customers to access a wide range of services to streamline and rationalise their work management processes.

It allows alerts and indicators to be sent to the customer in real time, in relation to production, the machines used and the type of process carried out. These are detailed instructions for more efficient use of the machine.

- 10% CUT IN COSTS
- 50% REDUCTION IN MACHINE DOWNTIME
- 10% INCREASE IN PRODUCTIVITY
- 80% REDUCTION IN PROBLEM DIAGNOSTICS TIME

SOPHIA TAKES THE INTERACTION BETWEEN CUSTOMER AND SERVICE TO A HIGHER LEVEL.

IoT SOPHIA

IoT - SOPHIA provides a comprehensive overview of the specific machine performance features, with remote diagnostics, machine stoppage analysis and fault prevention. The service includes a continuous connection with the control centre, the option of calling for assistance from within the customer app (such calls are managed as priorities), and an inspection visit for diagnostic and performance testing within the warranty period. Through SOPHIA, the customer receives priority technical assistance.

PARTS SOPHIA

PARTS SOPHIA is the easy new, user-friendly and personalised tool for ordering Biesse spare parts. The portal offers customers, dealers and branches the chance to navigate within a personalised account, consult the constantly updated documentation of the machines purchased, and create a spare parts purchase basket indicating the real time availability in the warehouse and the relative price list. In addition, the progress of the order can be monitored at all times.

BIESSE

in collaboration with accenture

SERVICE &PARTS

Direct, seamless co-ordination of service requests between Service and Parts. Support for Key Customers by dedicated Biesse personnel, either in-house and/or at the customer's site.

BIESSE SERVICE

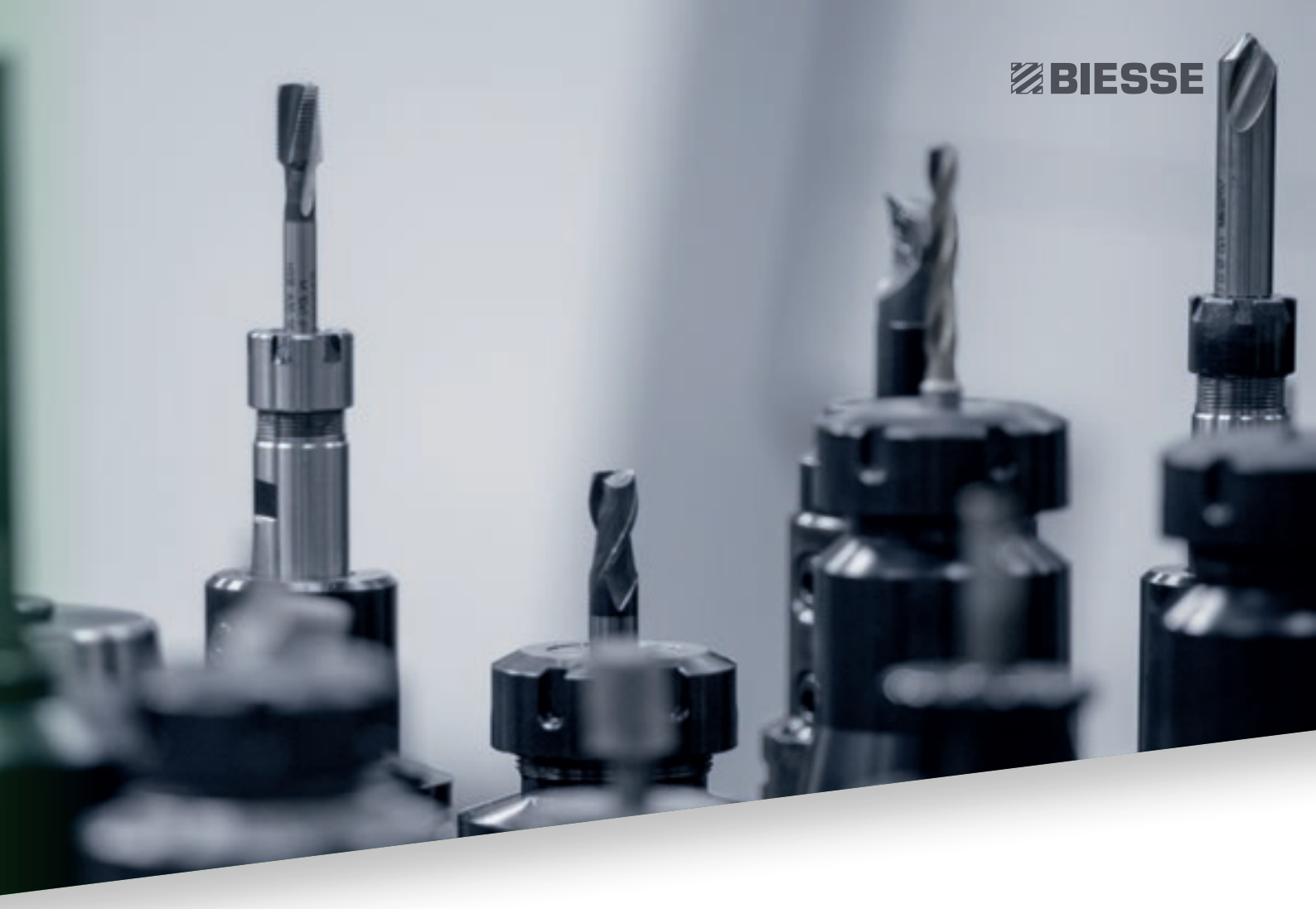
- Machine and system installation and commissioning.
- Training centre dedicated to Biesse Field engineers, subsidiary and dealer personnel; client training directly at client's site.
- Overhaul, upgrade, repair and maintenance.
- Remote troubleshooting and diagnostics.
- Software upgrade.

500
Biesse Field engineers in Italy and worldwide.

50
Biesse engineers manning a Teleservice Centre.

550
certified Dealer engineers.

120
training courses in a variety of languages every year.



The Biesse Group promotes, nurtures and develops close and constructive relationships with customers in order to better understand their needs and improve its products and after-sales service through two dedicated areas: Biesse Service and Biesse Parts.
With its global network and highly specialized team, it offers technical service and machine/component spares anywhere in the world on-site and 24/7 on-line.

BIESSE PARTS

- Original Biesse spares and spare kits customized for different machine models.
- Spare part identification support.
- Offices of DHL, UPS and GLS logistics partners located within the Biesse spare part warehouse, with multiple daily pick-ups.
- Order fulfillment time optimized thanks to a global distribution network with de-localized, automated warehouses.

92%
of downtime machine orders fulfilled within 24 hours.

96%
of orders delivered in full on time.

100
spare part staff in Italy and worldwide.

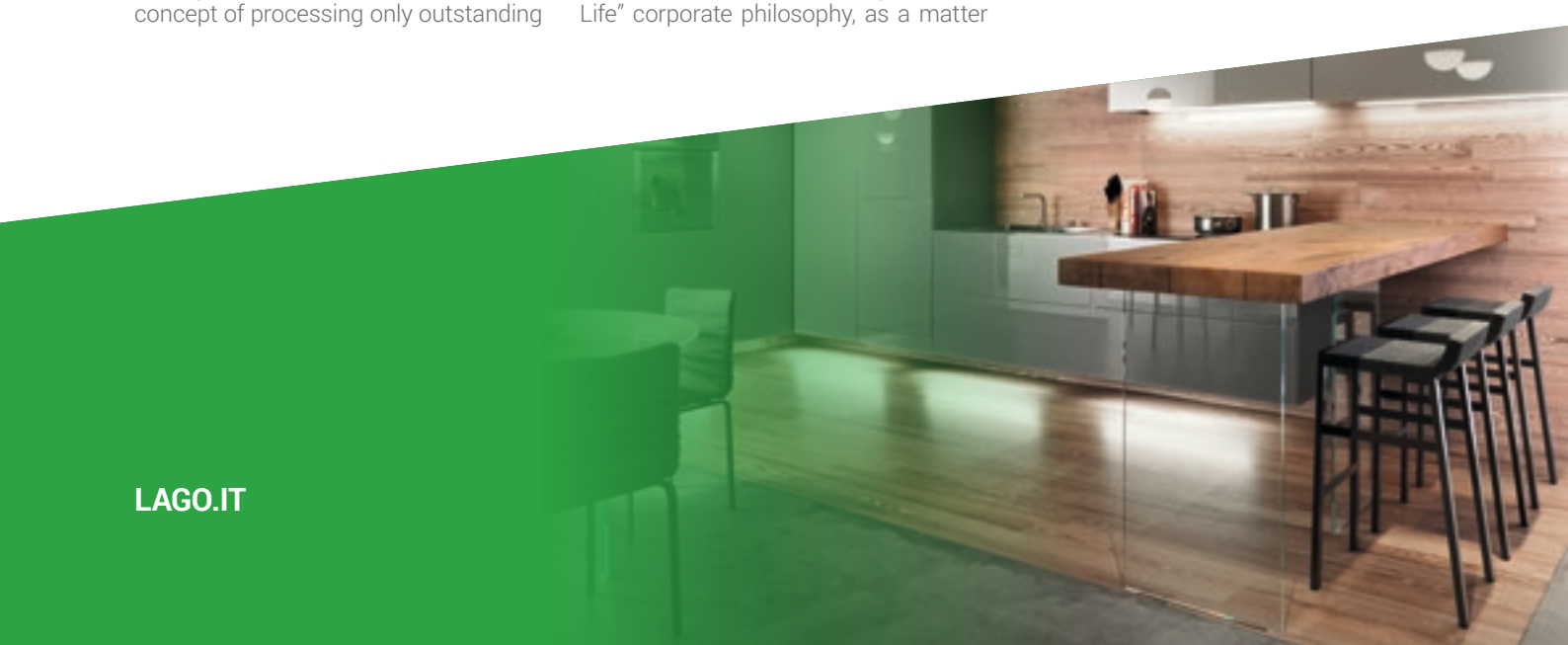
500
orders processed every day.

MADE WITH BIESSE

BIESSE GROUP TECHNOLOGIES JOIN FORCES WITH LAGO'S INNOVATION AND TOTAL QUALITY MANAGEMENT PROCESSES

In the crowded world of domestic design, Lago takes its place as an emerging brand, thanks to a collection of stimulating products and a corporate philosophy that embraces the interaction between business and art, coupled with on-going research into sustainable development.
"We created a number of projects, or rather, concepts - states Daniele Lago - that have shaped Lago as we see it today: we saw design as a cultural vision that applies not only to individual products, but rather to the entire business chain".
"Flexibility is the key word here at Lago" says Carlo Bertacco, Manufacturing Manager. "We started to introduce the concept of processing only outstanding orders, which enabled us to reduce our footprint and empty the site from the very beginning".
"The machinery that we purchased – states Bertacco – is great, it entailed a limited investment versus the capabilities it offers and is linked to a specific manufacturing approach. What I am talking about is a given manufacturing volume with Lago-standard quality levels and the possibility of customising as late as possible, at the customer's request: in short, the very basic principles of lean manufacturing".
Lago's flexibility offers customers modular elements with which they can build a personal space that reflects their individual character. The "Lago Interior Life" corporate philosophy, as a matter of fact, is aimed at creating empathy between interiors and the people who live in them, between environmental and inner well-being.

Source: IDM Industria del Mobile
Lago, our customer since 1999, is one of most prestigious Italian furniture brands in the world.



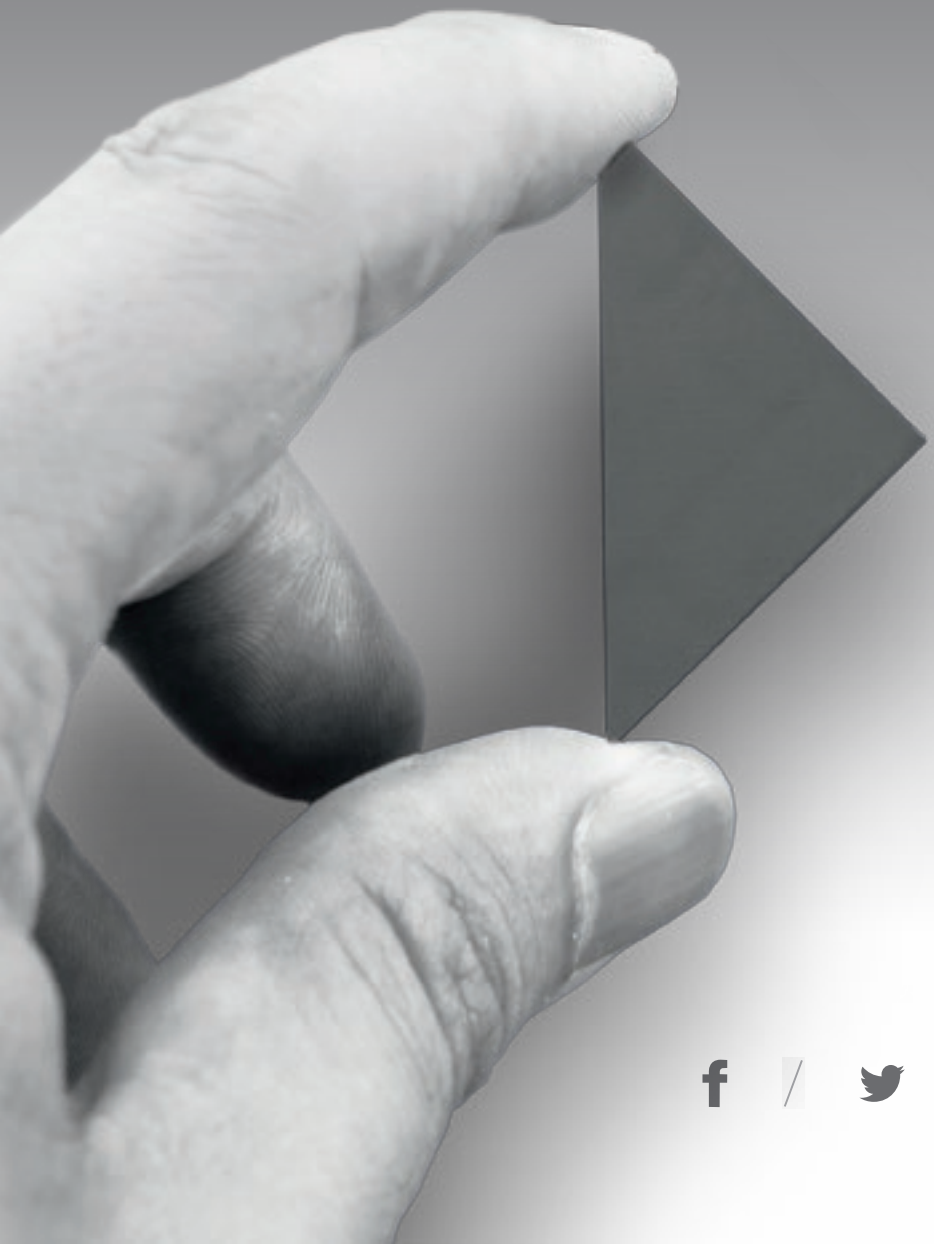
LAGO.IT

FALEGNAMERIA BIFFI, WHEN TECHNOLOGY LENDS A HELPING HAND

Falegnameria Biffi has been located in the heart of the Brianza area surrounded by the Mezzago countryside for over 50 years and has earnt itself a name in the industry for the professionalism and reliability it offers its customers.
"During this time, the company has kept pace with the economic and job development in Brianza and has gone from being a predominantly family-run business to a company with a workforce of almost thirty people," its founder Antonio Biffi said. "From wooden skirting and country-style lighting to office furniture, we have continued to expand our range of production processes and have specialised in recent years in manufacturing display units, cabinets and technical furniture for sales outlets, moving into a market that is closely linked to the advertising and commercial industry with its rapid delivery times, low costs and medium-high product quality. The market we operate in consists of a number of players who compete with each other by offering products would look similar in terms of characteristics and final performance, but which are actually quite different in terms of the materials they use, the construction techniques they employ and the price. For our part, we are committed to achieving the proper balance, limiting costs without sacrificing quality" Biffi continued.
Products are developed on the basis of the customer's projects/designs and we handle every phase of production so that technology plays a vital role in optimum performance.
By using the latest CNC machinery as well as automated and manual painting and owning the vehicles we use to deliver the merchandise, Falegnameria Biffi offers its customers a complete service and is even able to meet requests that a traditional carpentry shop does not usually meet including the machining of methacrylate, the creation of stands and exhibition spaces for trade shows and events, and the completion of semi-finished products.
"We have chosen Biesse as our partner in technology because we firmly believe that the greatest advantage offered by wood machining technology is productivity in terms of work hours and workloads. Biesse technology has helped us to reduce machining times considerably. Add to that the flexibility of the Rover series, which can handle everything from boring a single hole to creating complex shapes, and you get quality as well as quantity", its founder said.
The array of machines owned by Falegnameria Biffi includes a sizeable range of Biesse machines. The last one purchased in 2017 is a Brema Vektor15 but the list starts in the 1990s with the first Rover36, followed by the SelcoWN200 and the Rovers 342 and 321, and ending with the innovative Selco WNAR and EXCEL.
"By using Biesse machinery, we can handle virtually all machining operations used in the woodworking industry, i.e., cutting/sectioning, routing, boring and edgebanding. We also have a cutting-edge sanding and painting department and a large warehouse for storage and logistics which have helped us guarantee a high level of autonomy in production. We only rely on third parties for raw materials and very specific machining operations (powder coating of metal parts, pairing and gluing laminates and films on panels, etc.). However, we continue to value the contribution made by our personnel and their manual skills and experience which are especially important since they give that extra touch to each item and transform a simple semi-finished wood item into a product that is aesthetically pleasing to the eye.
We strongly recommend Biesse to everyone from craftsmen to small/medium-sized enterprises and large companies. What more proof is needed to show how valid the proposed technology is, technology that can be adapted to a wide variety of needs and a wide range of markets which extend beyond the woodworking industry?" Antonio Biffi concluded.

FALEGNAMERIABIFFI.WORDPRESS.COM

LIVE THE EXPERIENC



BIESSEGROUP.COM

50 YEARS

Interconnected technologies and advanced services that maximise efficiency and productivity, generating new skills to serve better our customer.

LIVE THE BIESSE GROUP EXPERIENCE AT OUR CAMPUSES ACROSS THE WORLD.

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