

BRE MIA VEKTOR 15

VERTICAL DRILLING AND INSERTION
MACHINE WITH NUMERICAL CONTROL



 Biesse

HIGH PERFORMANCE WITH MINIMUM FOOTPRINT



THE MARKET EXPECTS

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

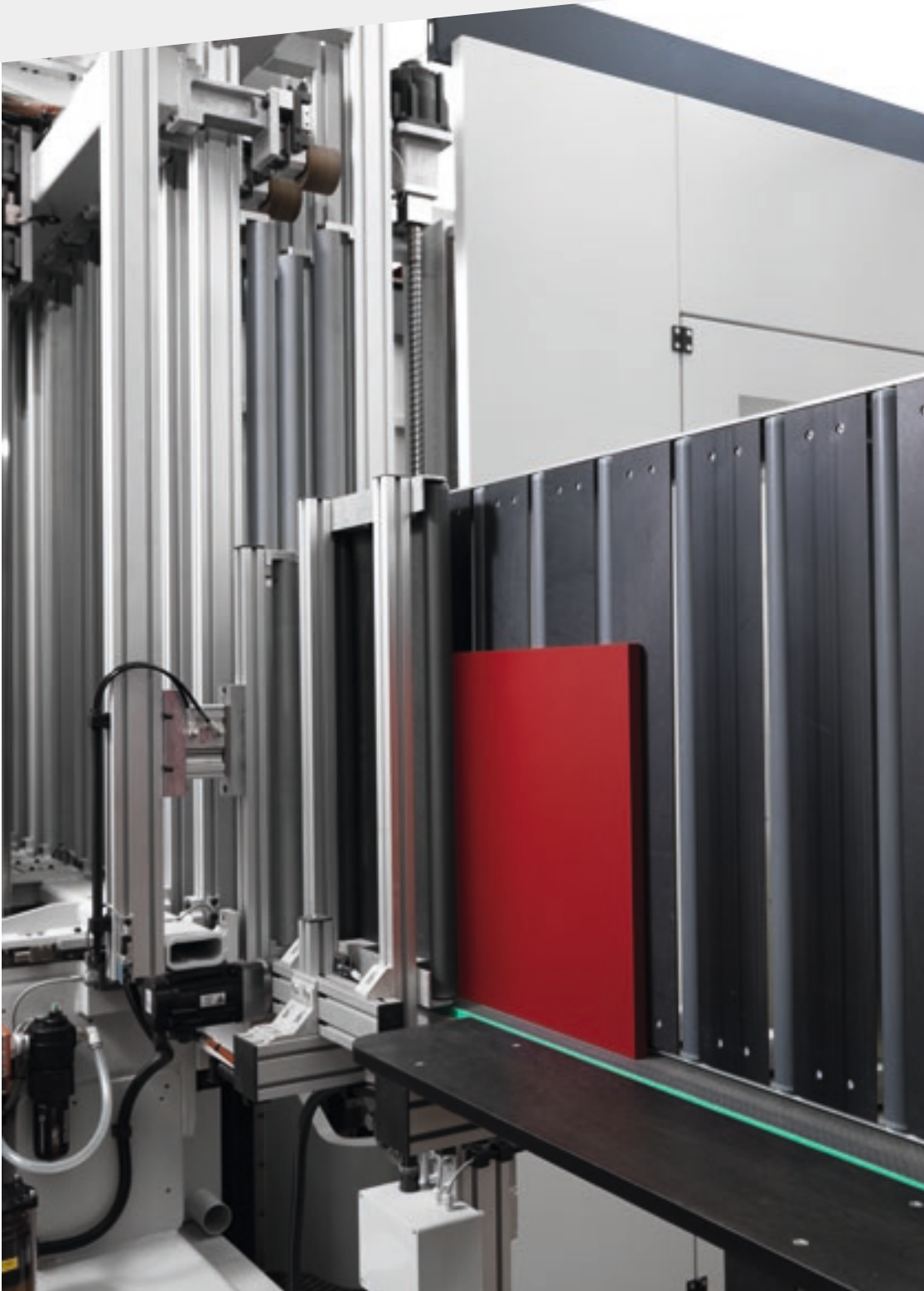
with **technological solutions** able to meet the requirements of companies who manufacture to order, with significantly reduced costs and cycle times. The **Brema Vektor 15** range offers a wide choice of vertical drilling and insertion machines to handle all production needs. Groundbreaking technologies for drilling, milling, cutting and inserting hardware on panels of various sizes, without any special set-up.



BREMA VEKTOR 15

- ✓ MAXIMUM QUALITY OF MACHINING OPERATIONS
- ✓ MAXIMUM MACHINE CONFIGURABILITY, IN ACCORDANCE WITH PRODUCTION REQUIREMENTS
- ✓ MAXIMUM FLEXIBILITY IN DRILLING AND HARDWARE INSERTION
- ✓ HIGHLY COMPACT

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 15 machines guarantees high precision in all machining operations.



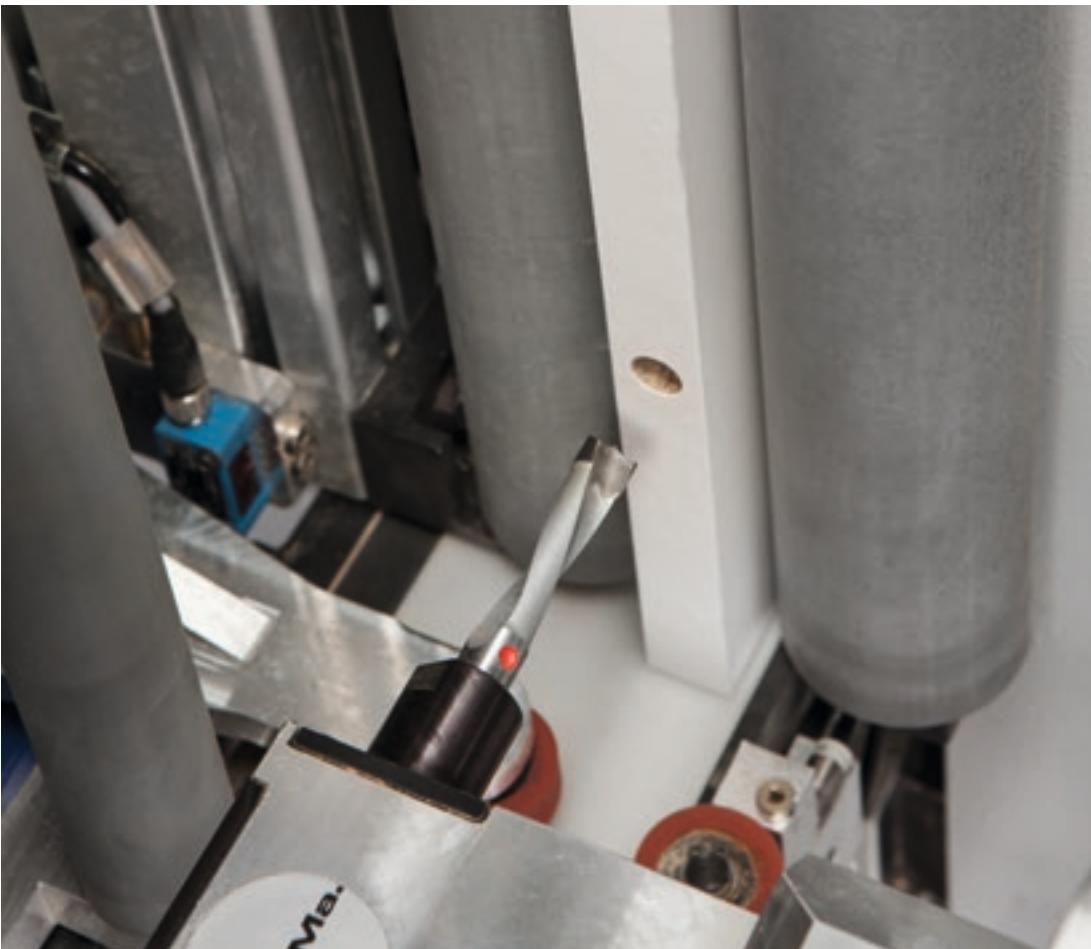
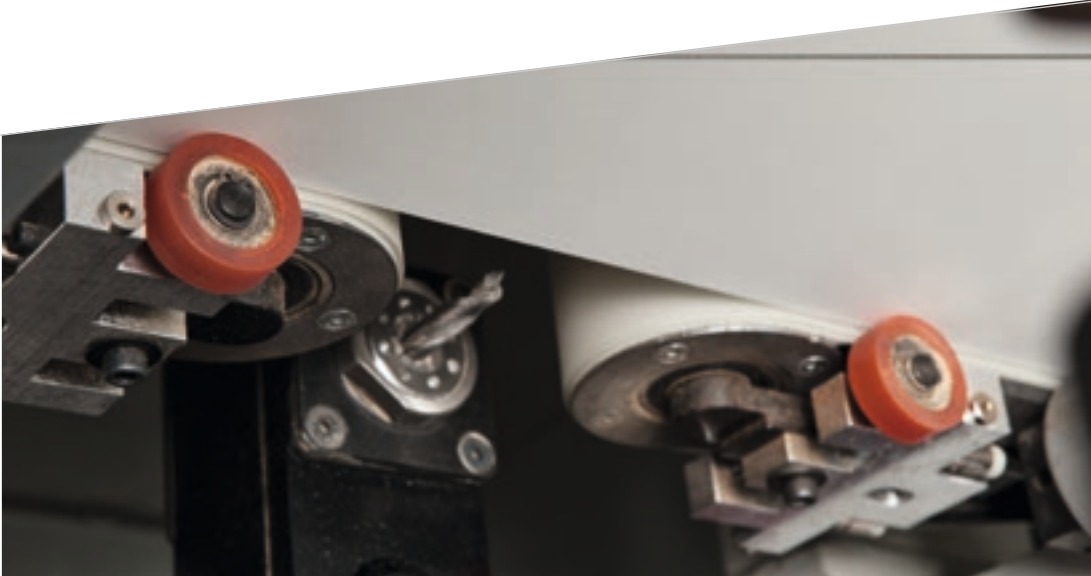
The longer-stemmed spindles allow users to successfully perform all drilling operations, guaranteeing optimum quality standards.



A laser system for detecting the origin in relation to the front and rear edges of the panel, so the machining positions in X and Y can be corrected to compensate for the dimensional tolerances (optional).

MAXIMUM MACHINE CONFIGURABILITY

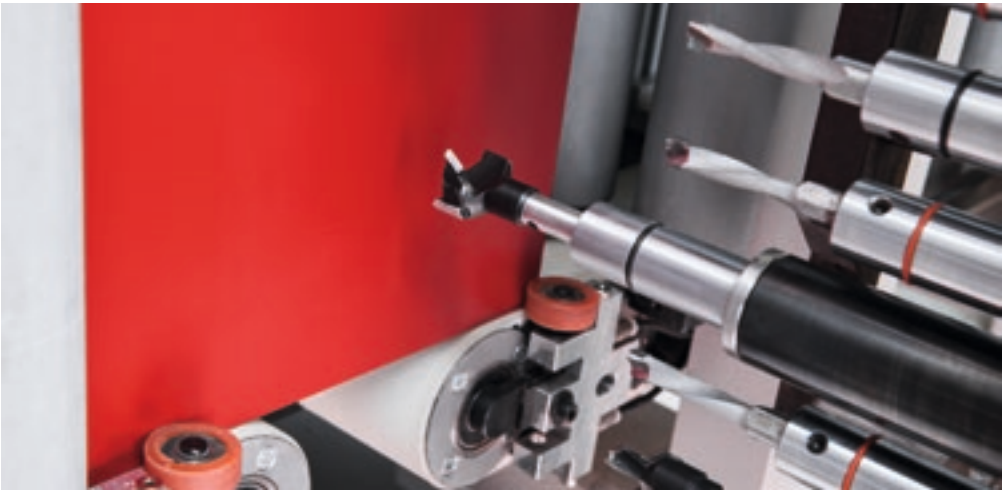
Unique technological solutions to meet productivity and flexibility requirements of the most demanding manufacturers.



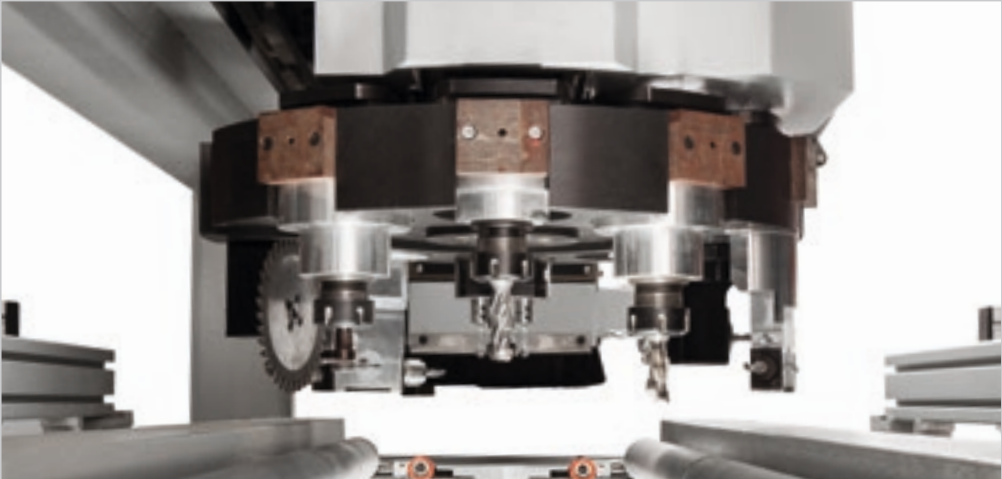
Dual-section haul-off for machining the 4 panel edges without limits.



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.



Reduced cycle times thanks to the "R10" revolver that can make a tool change in less than 2 seconds, during the machining operation.



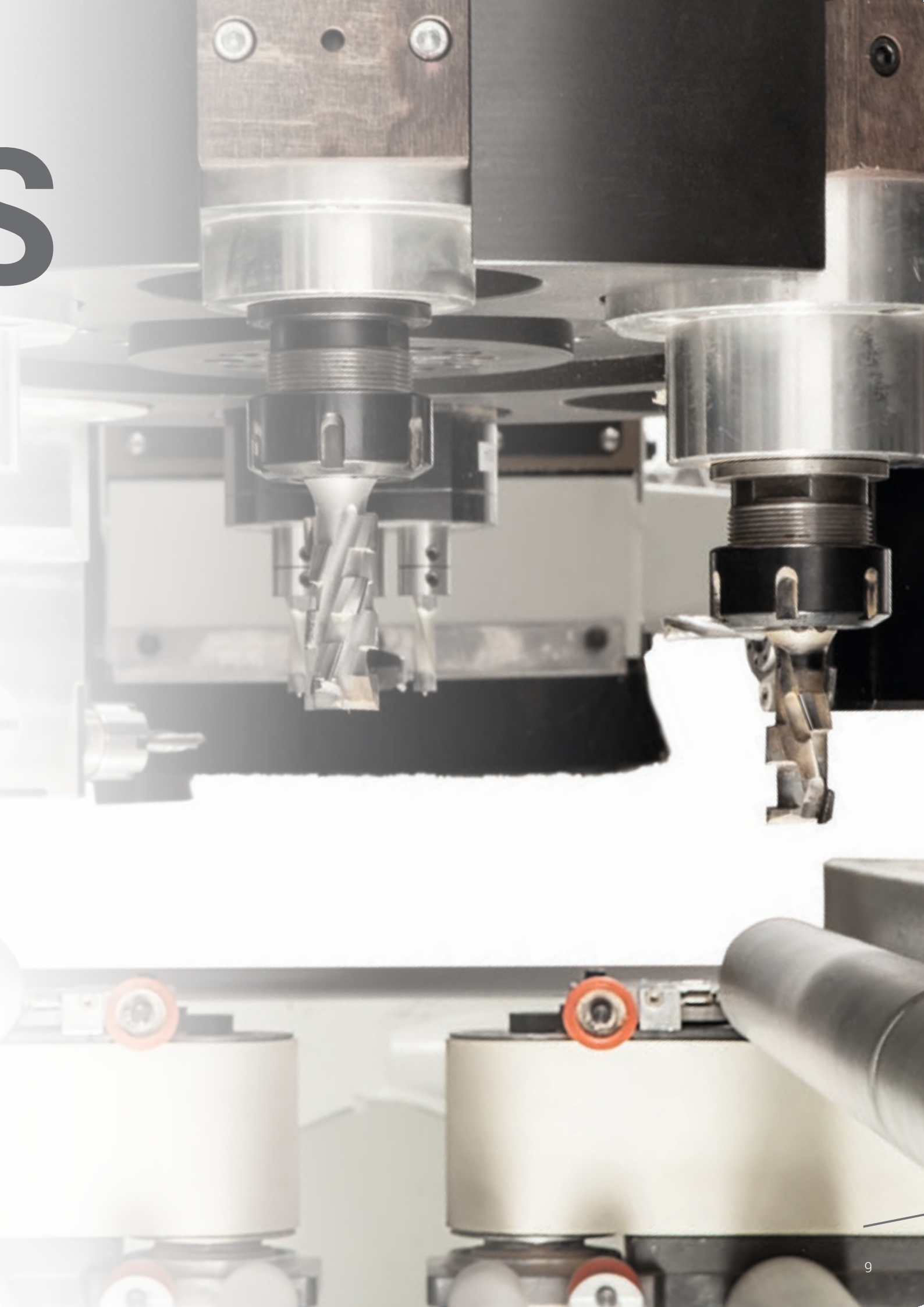
10 POSITIONS REVOLVER

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.

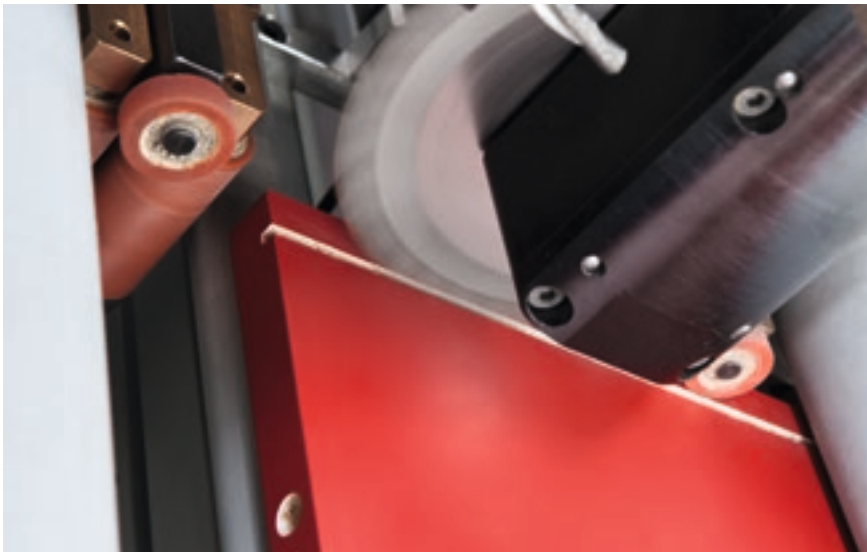
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SUITABLE FOR A HUGE RANGE OF MACHINING OPERATIONS

Brema Vektor 15 is the flexible through NC drilling machine capable of drilling and milling panels of different sizes without any manual set-up.





THE COMPLETE PROCESS, IN ONE MACHINE

Brema Vektor 15 CS is the flexible through NC drilling 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 the minimum footprint and only one operator.





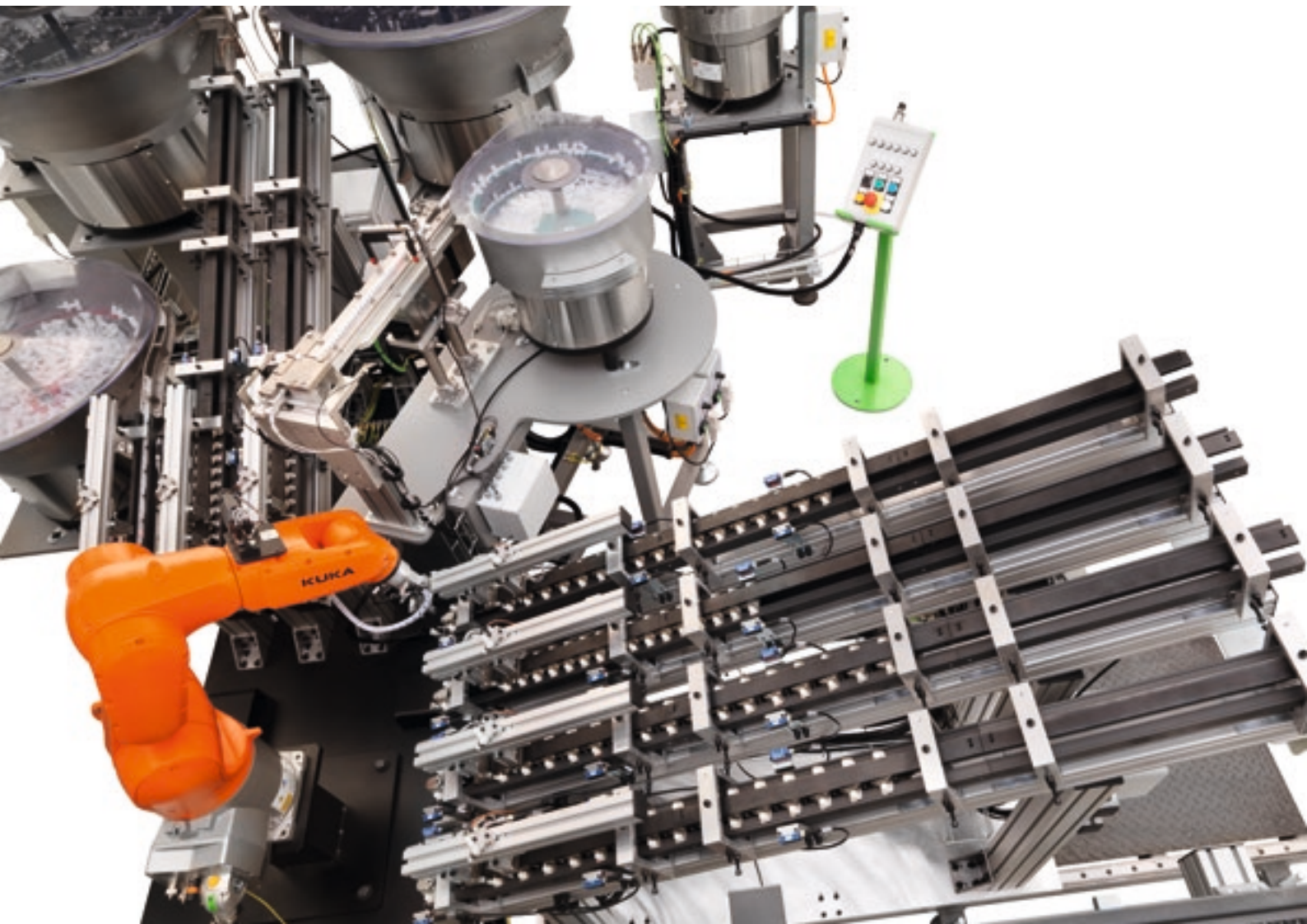
Unit for managing the drilling operation and the insertion of glue and dowels.

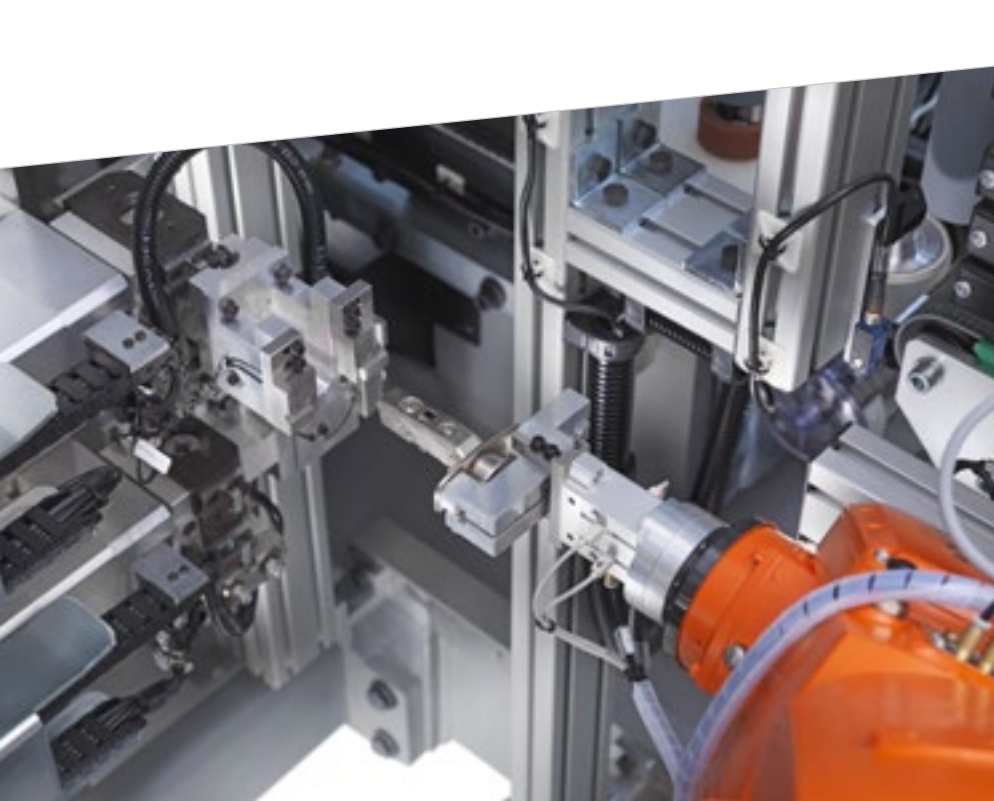
MAXIMUM INSERTION FLEXIBILITY

Brema Vektor 15 INS is the solution for automatic hardware insertion. The NC through drilling and inserting machine maximises processing flexibility in the minimum space.

Exclusive advantages of the robot solution:

- ✔ Increased productivity and reliability
- ✔ Possibility to manage more hardware insertion operations
- ✔ Reduced installation and start-up times
- ✔ Optimum ergonomics in the replenishment of vibrating devices
- ✔ Reduced maintenance times in the event of hardware modifications

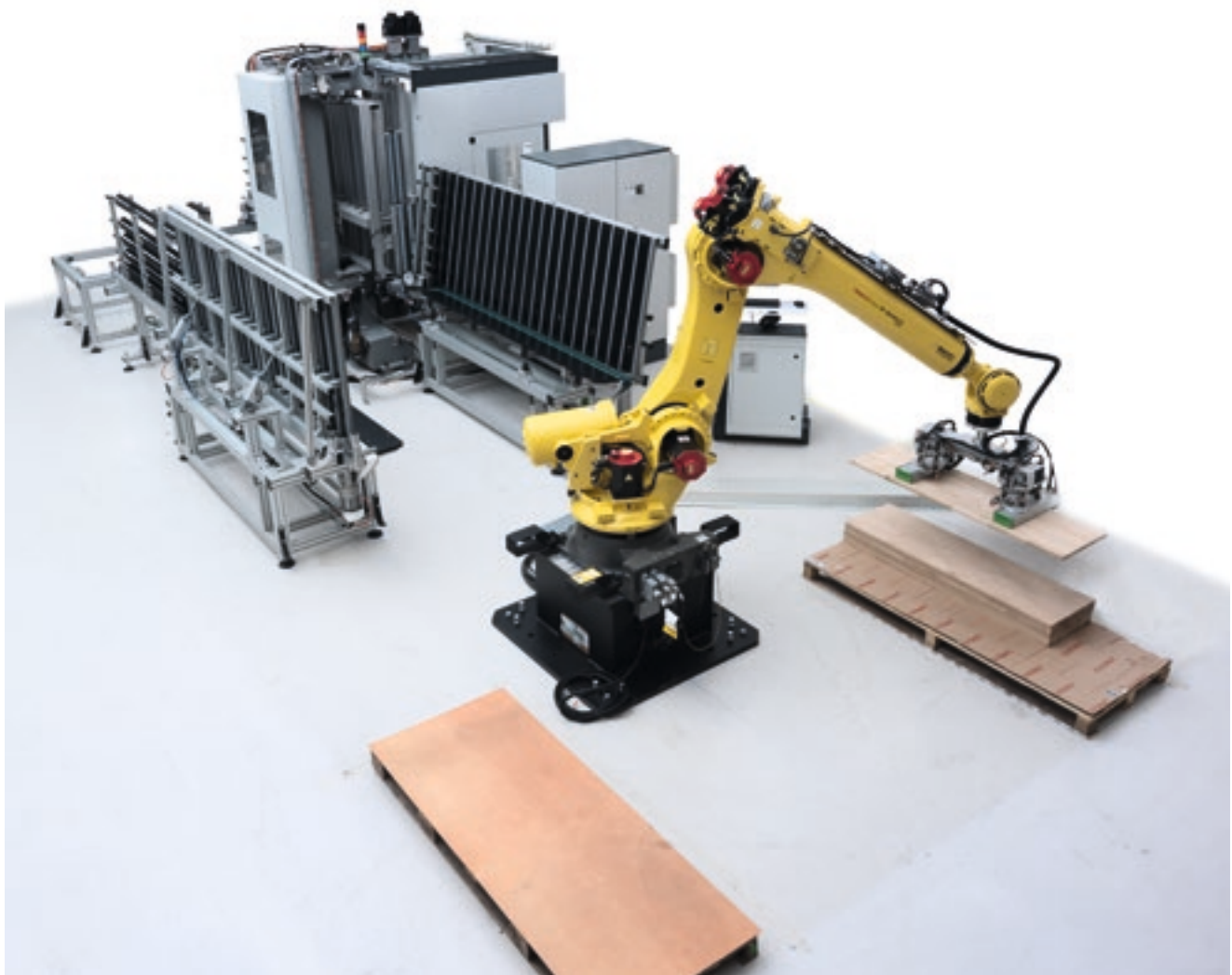




Brema Vektor 15 INS can manage all the most common types of hardware: hinges, concealed hinges, mounting plates, hooks, clips, buffers, bushings with screw or push-in insertion, shelf pegs, etc.

AUTOMATED, INTERCONNECTED PRODUCTION

Brema Vektor 15 can be perfectly integrated in a line with the robotised solutions ROS. ROS ensures 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.



Idle times are drastically reduced, and the risk of damage to the material due to panel handling by the operator is practically nil.

BREMA VEKTOR 15 + ROS enable productivity to be increased and production costs to be reduced, thanks to:

- The possibility of working with twin stations, with piece loading and unloading while the machine is running
- 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)



COMPLETE INTEGRATION WITH THE FACTORY WORK FLOW





DESIGN OF INTEGRATED LINES OVER 100 METRES LONG

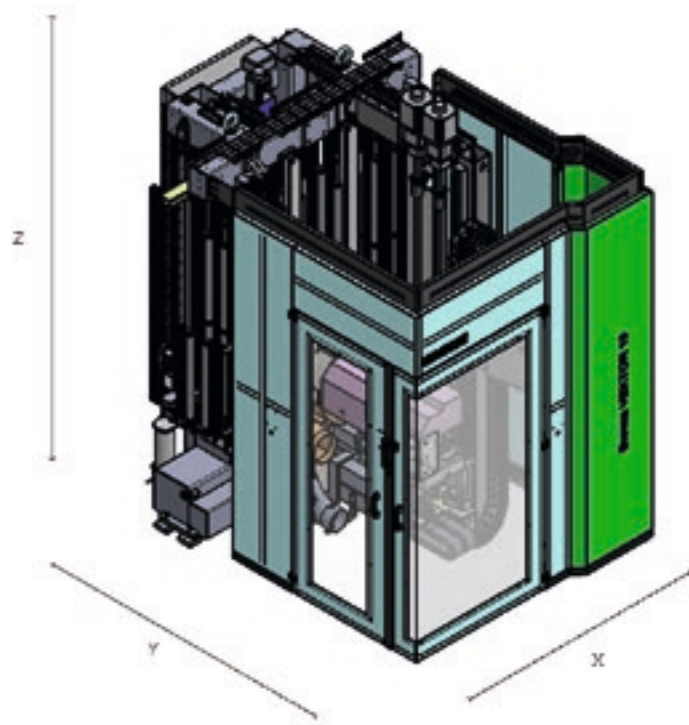
BiesseSystems provides a full project consultancy and management service to companies who wish to implement integrated technology solutions for their manufacturing processes.

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.

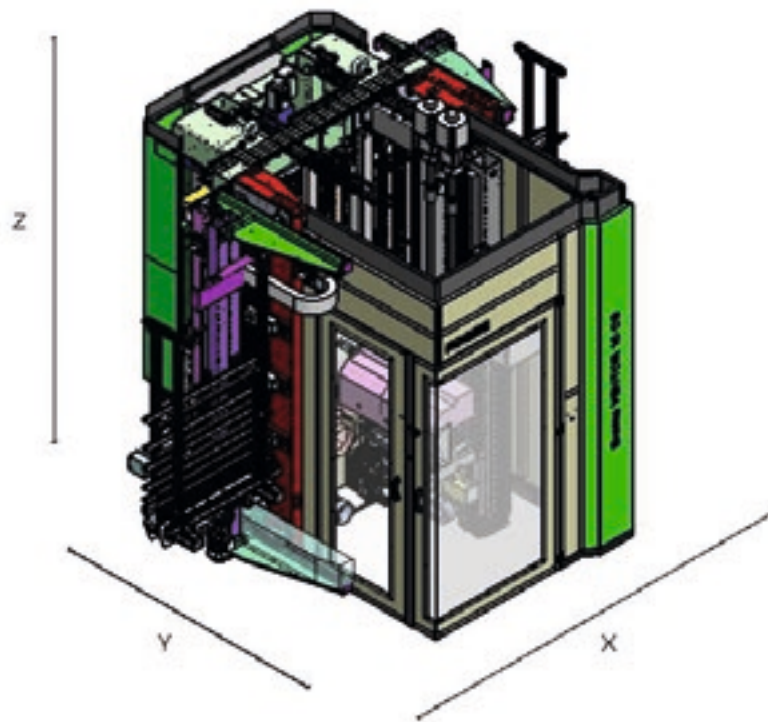
TECHNICAL SPECIFICATIONS



BREMA VEKTOR 15

	X	Y	Z
	mm / inch	mm / inch	mm / inch
Overall machine dimensions	2050 / 81	2750 / 108	3150 / 124
Min. size of machinable panel	240 x 40 x 8 / 9.4 x 6 x 0.31		
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	4280 / 168.5	2750 / 108	3150 / 124
Min. size of machinable panel	240 x 40 x 8 / 9.4 x 6 x 0.31		
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 surface sound pressure level (L_{pfA}) in the operator workstation: 80 dB (A). Weighted sound pressure level A (L_{wA}) 100 dB (A). Uncertainty of measurement K = 4 dB (A). The measurement was carried out in compliance with UNI EN ISO 3746, UNI EN ISO 11202, UNI EN 848-3 and subsequent modifications.

The noise levels indicated are output levels and do not necessarily represent safe operational levels. Even though there is a relation between emission levels and exposure levels, this cannot be used reliably to establish whether or not further precautions are necessary. The factors determining the actual noise levels to which the operative personnel are exposed to include the length of exposure, the characteristics of the work environment, other emission sources, i.e. the number of machines and machining operations in the vicinity. In any case, this information will help the machine user to better assess the danger and risks involved.

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.



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



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



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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

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 PRODUCTION START-UP - IN JUST A FEW SIMPLE, INTUITIVE STEPS.

THANKS TO SMARTCONNECTION, 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

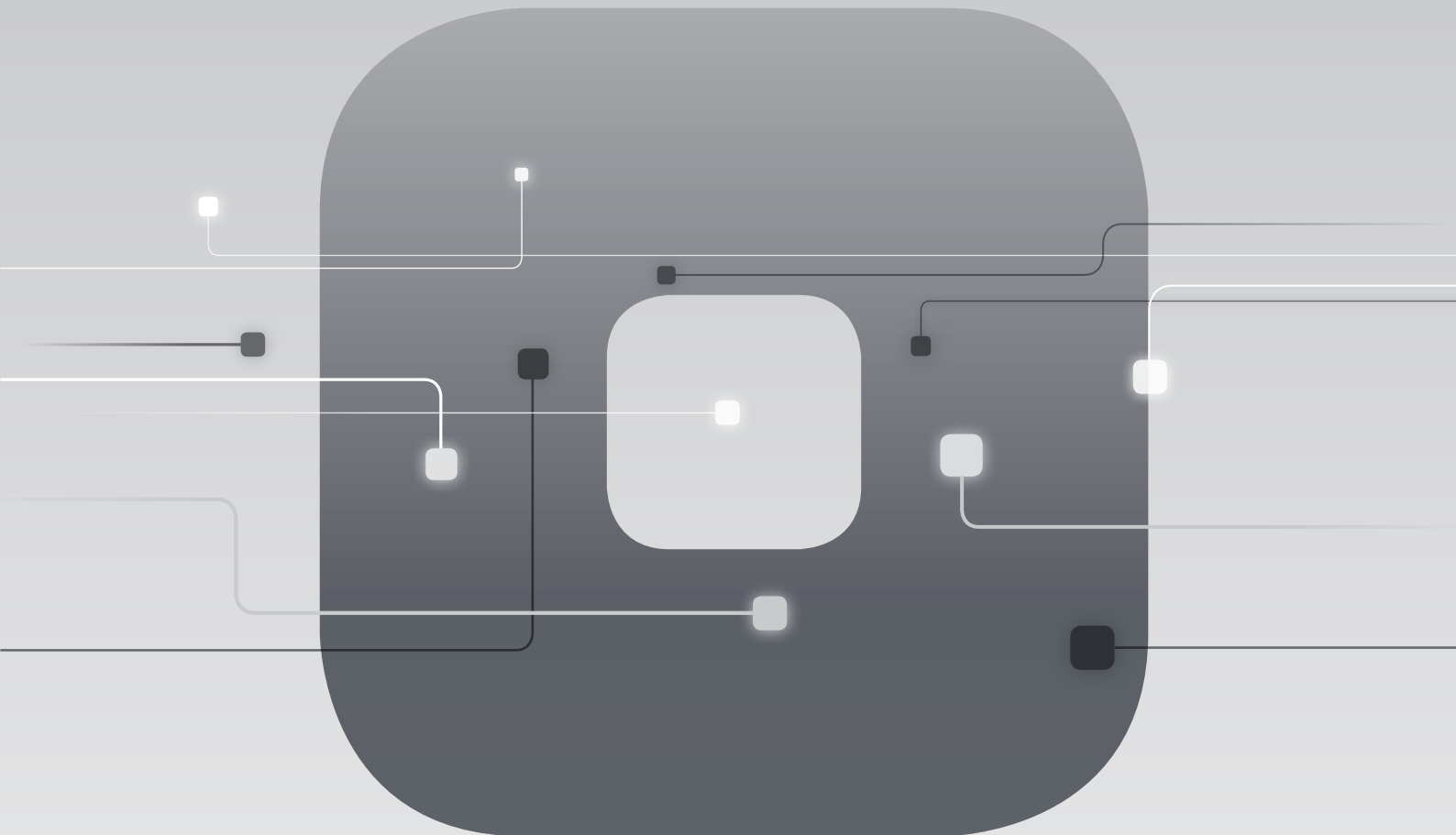
WORK



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

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.*



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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