

# BRE MIA EKO 2.2

MACHINING CENTRE  
FOR REAL-TIME PANEL PROCESSING



 **BIESSE**

# HIGH VERSATILITY IN ACCORDANCE WITH PRODUCTION NEEDS



## THE MARKET EXPECTS

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

## BIESSE RESPONDS

with **technological solutions** in an extensive range of configurations which can meet the requirements of companies who manufacture to order, with significantly reduced costs and cycle times. **Brema Eko 2.2** is the new compact and versatile vertical boring machine with reduced footprint, for machining panels of different thickness and sizes. The ideal solution for "just in time" production, even for the most complex routing machining processes.



[WATCH THE VIDEO](#)

## **BREMA** EKO 2.2

- ✓ MAXIMUM MACHINE CONFIGURABILITY, IN ACCORDANCE WITH PRODUCTION REQUIREMENTS
- ✓ OPTIMISED PRODUCTION, THANKS TO THE ELIMINATION OF SET-UP TIMES
- ✓ ABILITY TO MACHINE A WIDE RANGE OF PANEL TYPES

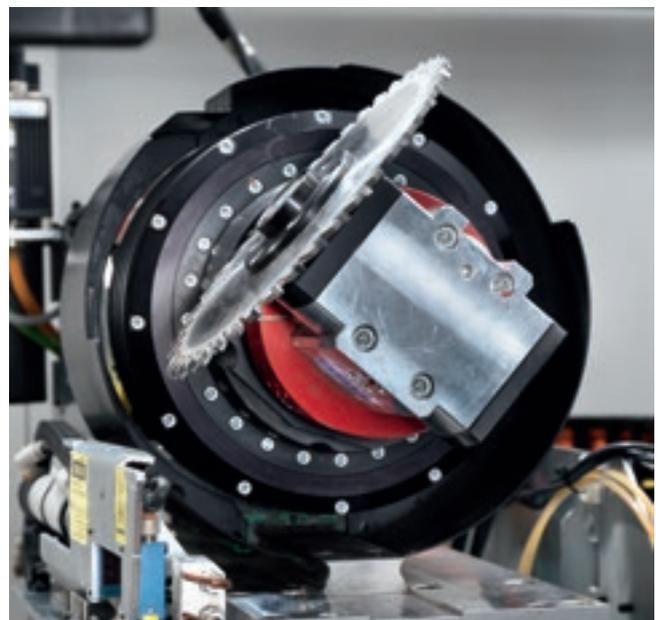
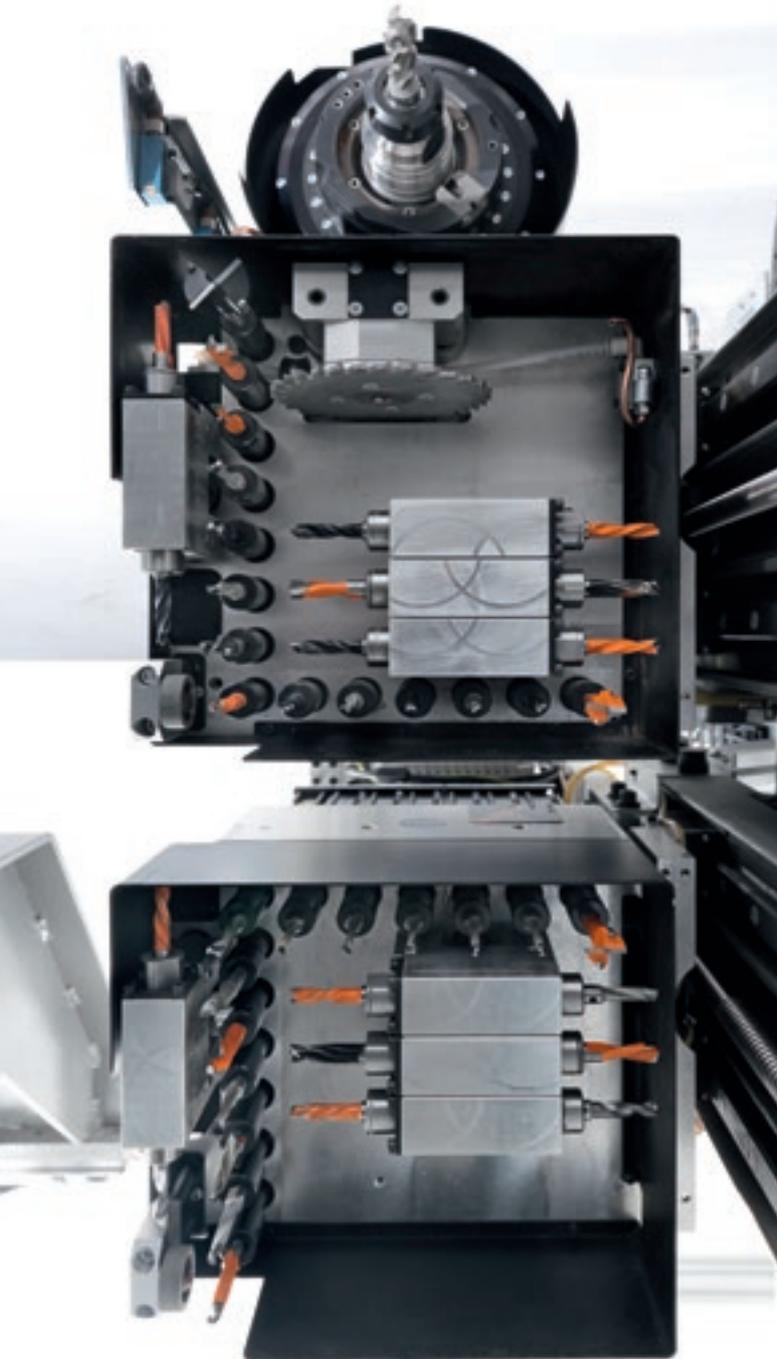
# MAXIMUM MACHINE CONFIGURABILITY, IN ACCORDANCE WITH PRODUCTION REQUIREMENTS

**Biesse uses the same high-tech components for all machines in its product range.**



Electrospindles, boring heads and aggregates are designed and manufactured for Biesse by HSD, the global leader in the mechatronics sector.

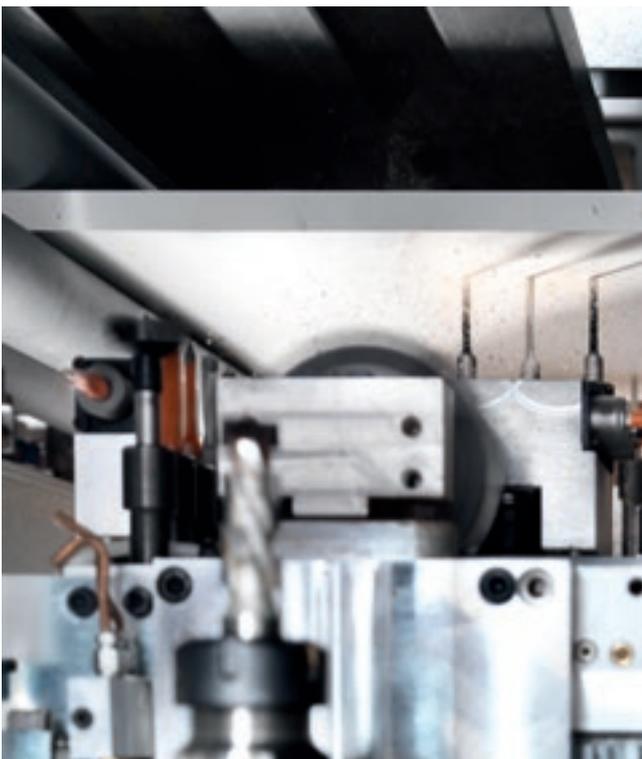
**BREMA EKO 2.2 ALLOWS USERS TO CONFIGURE THE DUAL-HEAD MACHINE WITH INDEPENDENT SPINDLES.**



**THE MACHINE'S STRUCTURE AND COMPONENTS GUARANTEE THE HIGHEST LEVEL OF PRECISION FOR ANY TYPE OF MACHINING OPERATION**



Cutting machine with integrated C-axis (optional).

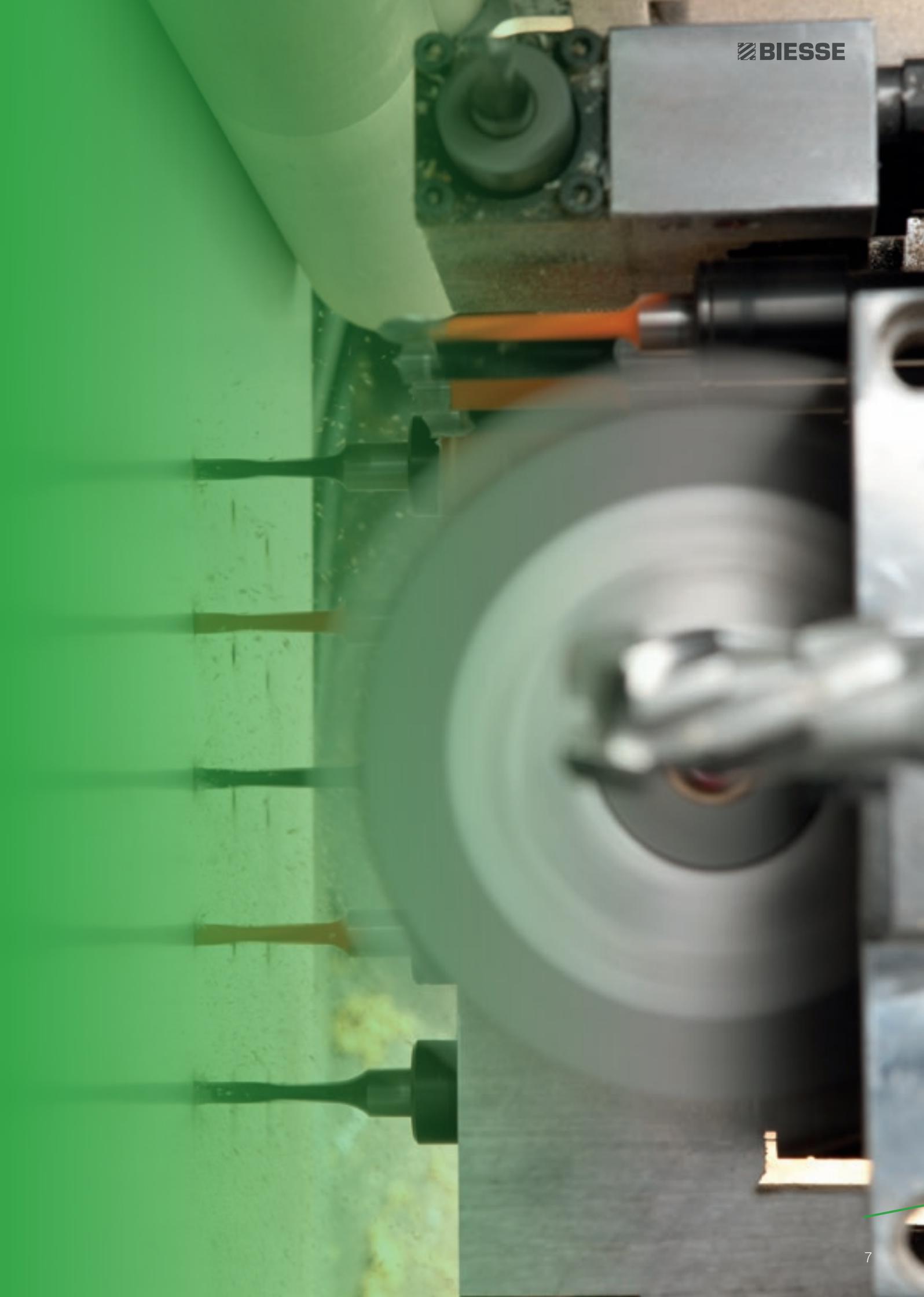


# VERTICAL DRILL ING

## COMPACT POWER

**The vertical position of the panel and the technical characteristics of these vertical boring machines allow for the processing of more delicate surfaces.**

Brema vertical boring machines can carry out all boring, milling and glue and dowel insertion operations, as well as boasting the ability to manage additional hardware inserts. The structure of these machines has been designed to achieve optimal loading and unloading ergonomics, with a small footprint which saves 50% of space, in addition to offering zero set-up times and high levels of productivity.



# MAXIMUM MANUFACTURING EFFICIENCY THANKS TO THE ELIMINATION OF SET-UP TIMES



8-position tool magazine that manages different types of aggregates, thus increasing the machine's versatility.



Unit for managing glue/dowel insertion with a patented system with tool change for recalling the work aggregate.

The vertical positioning of the panel and the work table with rubber rollers ensure ergonomically optimal loading/unloading which support the machining of even the most delicate surfaces.



The **laser scanner** system that detects the start and the end of the panel enables the machine to compensate dimensional errors, correcting the panel's X dimensions.



#### HP Kit

The High Performance Kit for the accelerated management of gripper movement along the X-axis allows for speeds of up to 110 m/min with rapid acceleration ramps. The kit helps significantly increase machine productivity thanks to the greater speed with which the panel movement and gripper repositioning phases are executed.

In addition, **the clamps** are fitted with a panel thickness detection system that enables the machine to modify the programme's values in real time, guaranteeing the precision of "Z"-axis machining operations.



The work table is fitted with a **counter-pressure system** that keeps the panel in position and perfectly aligned along its entire useful height, in accordance with the thickness of the machined piece, ensuring maximum precision.

# AUTOMATED, INTERCONNECTED PRODUCTION

BREMA EKO 2.2 CAN BE PERFECTLY INTEGRATED IN A LINE WITH ROBOTS (ROS). THE ROS ROBOTISED SOLUTIONS 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.



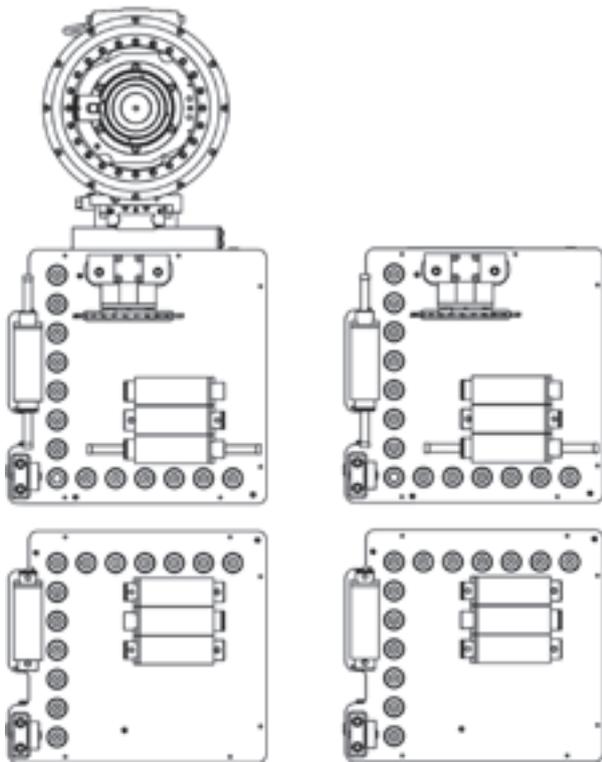
Idle times are drastically reduced, and the risk of damage to the material due to panel handling by the operator is practically nil.



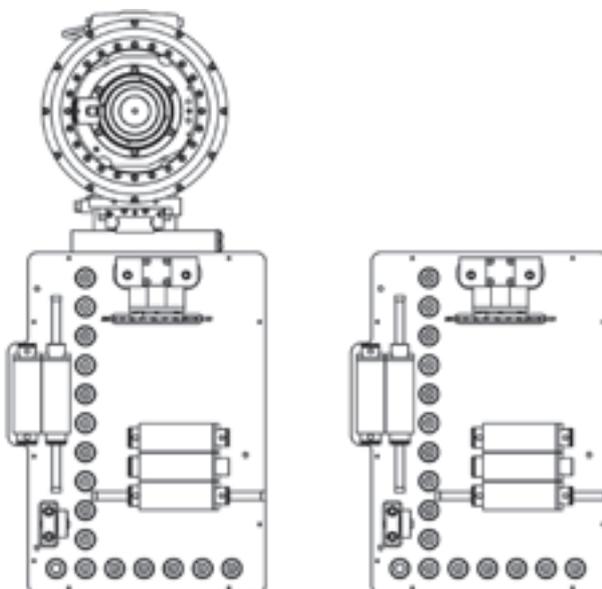
**BREMA EKO 2.2 + ROS enable productivity to be increased and production costs to be reduced, thanks to:**

- ▶ 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).

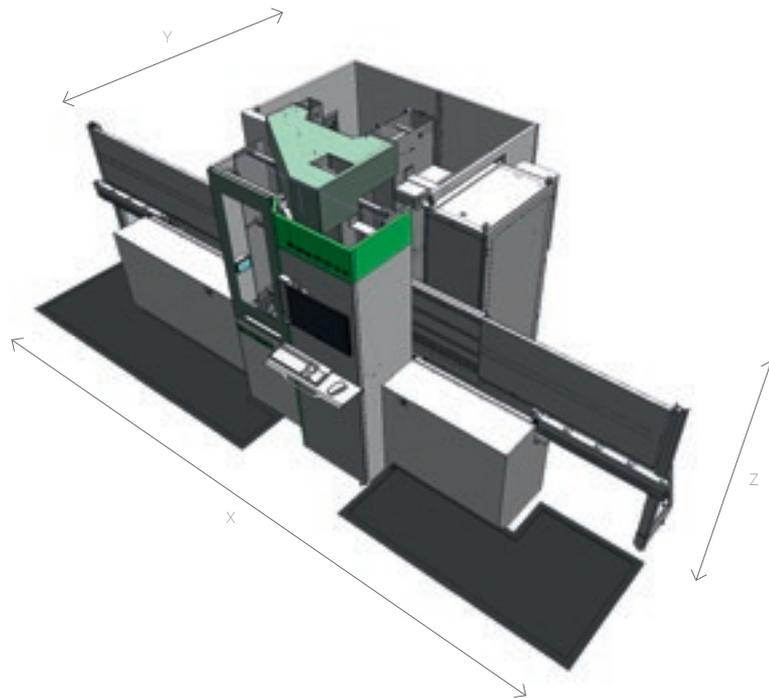
# MACHINE CUSTOMISATION DEPENDING ON PRODUCTION REQUIREMENTS



6.5kW HSK F63 as standard with integrated C-axis. Two bore configurations: single head with 28 tools, and dual head with 44 tools.



# TECHNICAL SPECIFICATIONS



Machine size	mm/inch	5300x2300x2300 / 209x90x90
Min. size of machined panel	mm/inch	200x35x8 / 8x1,3x0,3
Max. size of machined panel	mm/inch	3200x1250x60 / 126x49x2,3
Vector speed	m/min	(x-y) = 65, z=20

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 noise level A (L<sub>pfA</sub>) dB(A) 75. 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.

# HIGH-TECH BECOMES ACCESSIBLE AND INTUITIVE

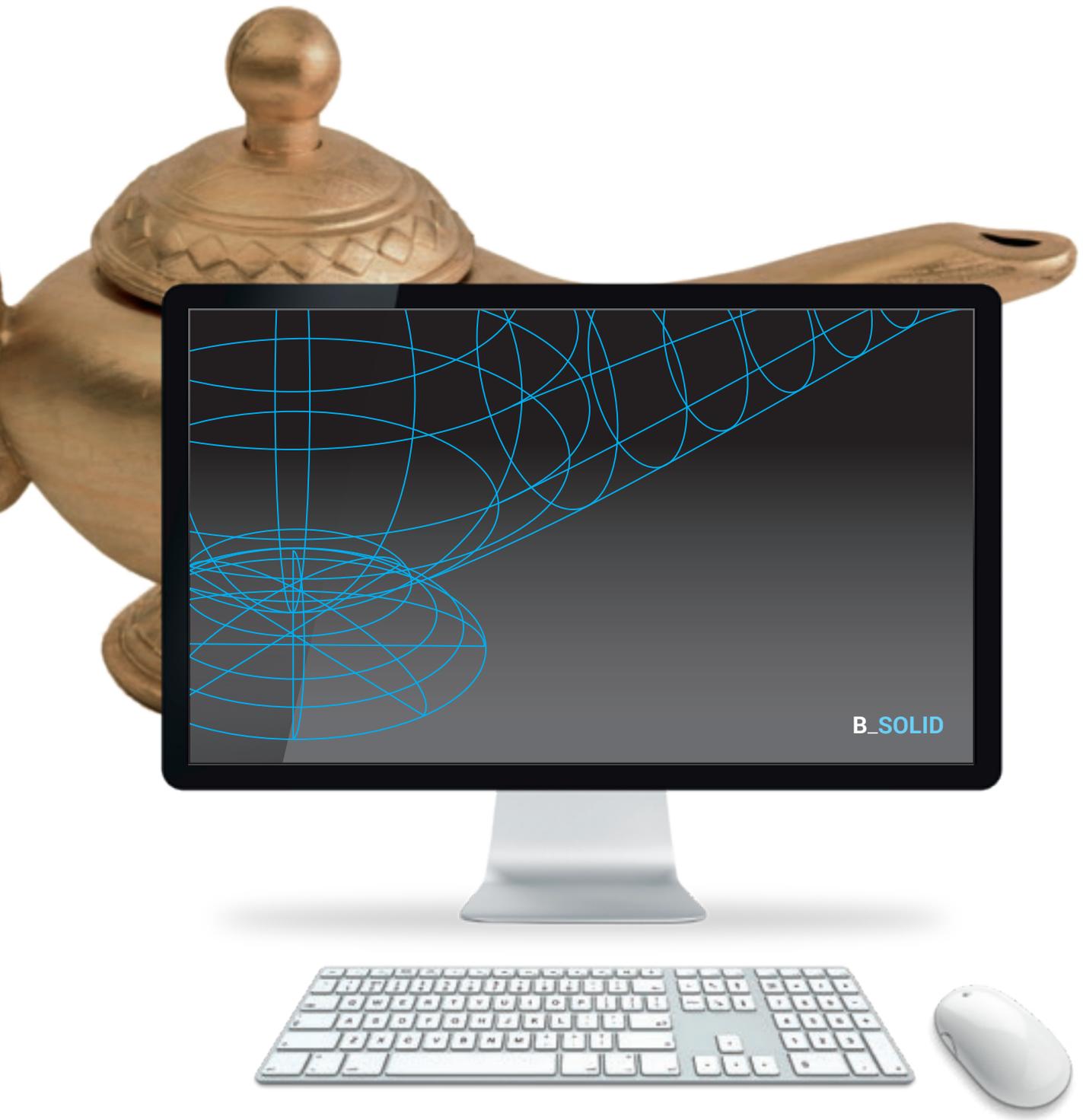


**B\_SOLID IS A 3D CAD CAM SOFTWARE PROGRAM THAT SUPPORTS THE PERFORMANCE OF ANY MACHINING OPERATION THANKS TO VERTICAL MODULES DESIGNED FOR SPECIFIC MANUFACTURING PROCESSES.**

- 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.

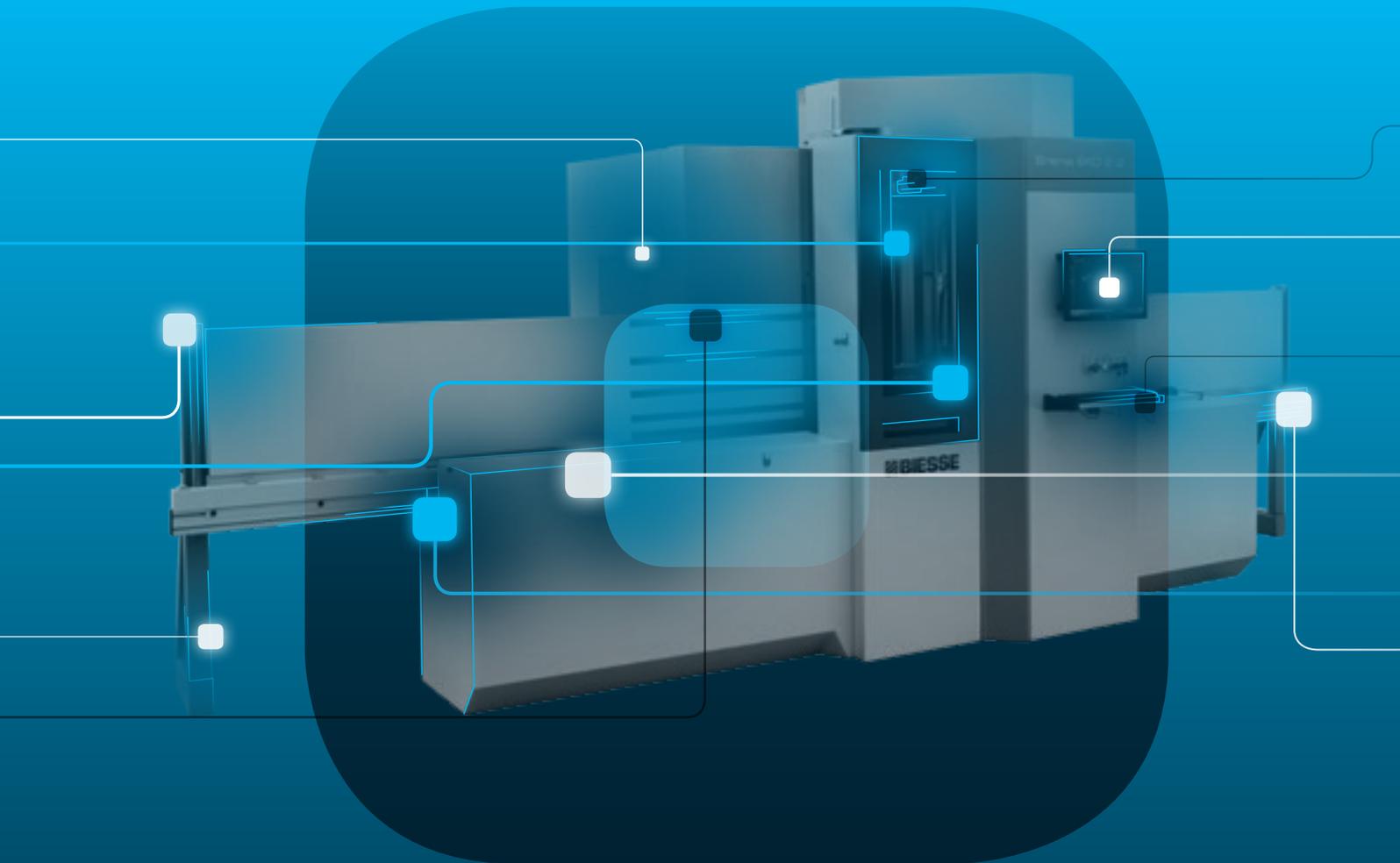


B\_SOLID



# 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.

A close-up photograph of several metal drill bits and tool components, arranged in a row. The bits are of different sizes and designs, some with standard double-flute and others with more complex, multi-fluted designs. They are set against a blurred background, highlighting their metallic texture and sharp edges.

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

## FOR A REVOLUTIONARY BUT CONSCIOUS DESIGN

**Conscious design that understands society and skilfully changes it for the better. That's the mission at the heart of Lago, a furniture company founded in 1976 with two simple concepts encoded in its DNA: curiosity and doing things well.**

The common ground for the Biesse Group and Lago, which reinforces the historic partnership between the furniture and carpentry sectors, is the Alliance project: a collection of brands, people and businesses that have decided to join the design company from Veneto on a journey of respect for our planet, ourselves and our future. The historic partnership is borne out by the innovative production plant that Biesse developed with Lago, completely restructuring the manufacturing site. The result is the inclusion of a new Batch One facility within the existing production context, in the spirit of personalisation, speed and flexibility.

The facility has a new square-edging cell with Stream MDS and Winner W1, a new drilling cell with Skipper 130 and a new Selco WNR 650 sizing centre connected to Win-

store 3D K1, which intelligently manages all the material to be processed.

"Including the 'batch one' process bolsters the 'just in time' objective set by Lago, reducing the warehouses needed for semi-finished products and raw materials, as well as reducing scrap material and elevating product quality. What's more, it improves efficiency, reduces time to delivery and offers complete control over the production flow," explains Mauro Pede, Biesse Systems Sales Director.

"The new investments have led us to a new productive flexibility that we will continue to implement, for a renewed production speed and even greater customisation of the range," adds Daniele.

Carlo Bertacco echoes the sentiment, "We are completing a 2,500 m2 expansion, to be even faster and more flexible while maintaining the extremely high level of quality that Lago is known for. It's an equation that relies heavily on technology: I'm referring to one of the particularly valuable machines we purchased from Biesse – a small 'Brema Eko' – not only is it extremely flexible, it allows us

to greatly simplify some steps, since we can process painted pieces without worrying about damaging them.

It's proof that with clear ideas and a precisely organised work flow one can find simple solutions that produce excellent results."

**LAGO BELIEVES  
THAT DESIGN MUST  
BE GUIDED BY MAN,  
BY HUMANITY AND  
EMPATHY**



**Daniele Lago**  
*Founder*



# MATCH WITH

 **BIESSE**

Biesse is the ideal partner throughout the entire production process. Courtesy of a complete range of cutting-edge products combined with the ongoing development of latest-generation technologies, Biesse is ready to respond to even the most complex requirements of companies within the sector.

We are on hand to recommend the ideal technologies to support your business, for efficient and competitive production: machining centres, panel saws, edgebanding machines, vertical and horizontal boring machines, sanders and handling and assembly solutions.

## STREAM A SMART

EVOLVING TECHNOLOGY



Stream A SMART is the new range of automatic single-sided edgebanding machines, designed for artisan producers and small companies looking for ease of use and customised production.

## ROVER A FT

LEADING TECHNOLOGY FOR QUALITY PRODUCTS



Rover A FT is the new high-performance machining centre for Nesting operations. Compact and efficient, with a gantry structure, the Rover A FT offers top-of-the-range technology and guarantees optimum precision in every machining operation.

 **BIESSE**

# LIVE THE EXPERIENC



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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**

 **BIESSEGROUP**

