

# BRE MA EKO 2.1

REAL-TIME PANEL  
MACHINING CENTRE

 **BIESSE**

# MINIMUM FOOTPRINT, MAXIMUM PERFORMANCE



## THE MARKET REQUIRES

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

## BIESSE RESPONDS

with **technological solutions** able to meet the requirements of companies that manufacture to order, with notably reduced costs and cycle times. **Brema Eko 2.1** is the new compact and versatile vertical drilling machine that supports the machining of different thickness and size formats within a reduced footprint. It is the ideal solution for "just in time" manufacturing for artisans, small companies and special components within large companies.



## **BREMA** EKO 2.1

- ✓ MAXIMUM MANUFACTURING EFFICIENCY  
THANKS TO THE ELIMINATION OF SET-UP TIMES
- ✓ OPTIMAL PRODUCT QUALITY
- ✓ MACHINE CUSTOMISATION DEPENDING  
ON PRODUCTION REQUIREMENTS

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



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



The work table is fitted with a **counter-pressure system** that keeps the panel perfectly in position within the machine depending on the thickness of the machined piece, ensuring maximum precision.



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 **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.



The upper sensor systems consists of two photocells that can detect the panel's height and correct the size with respect to the "Y" axis.



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

# VERTICAL DRILL ING

## COMPACT POWER

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

Brema vertical drilling machines can carry out all drilling, 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.



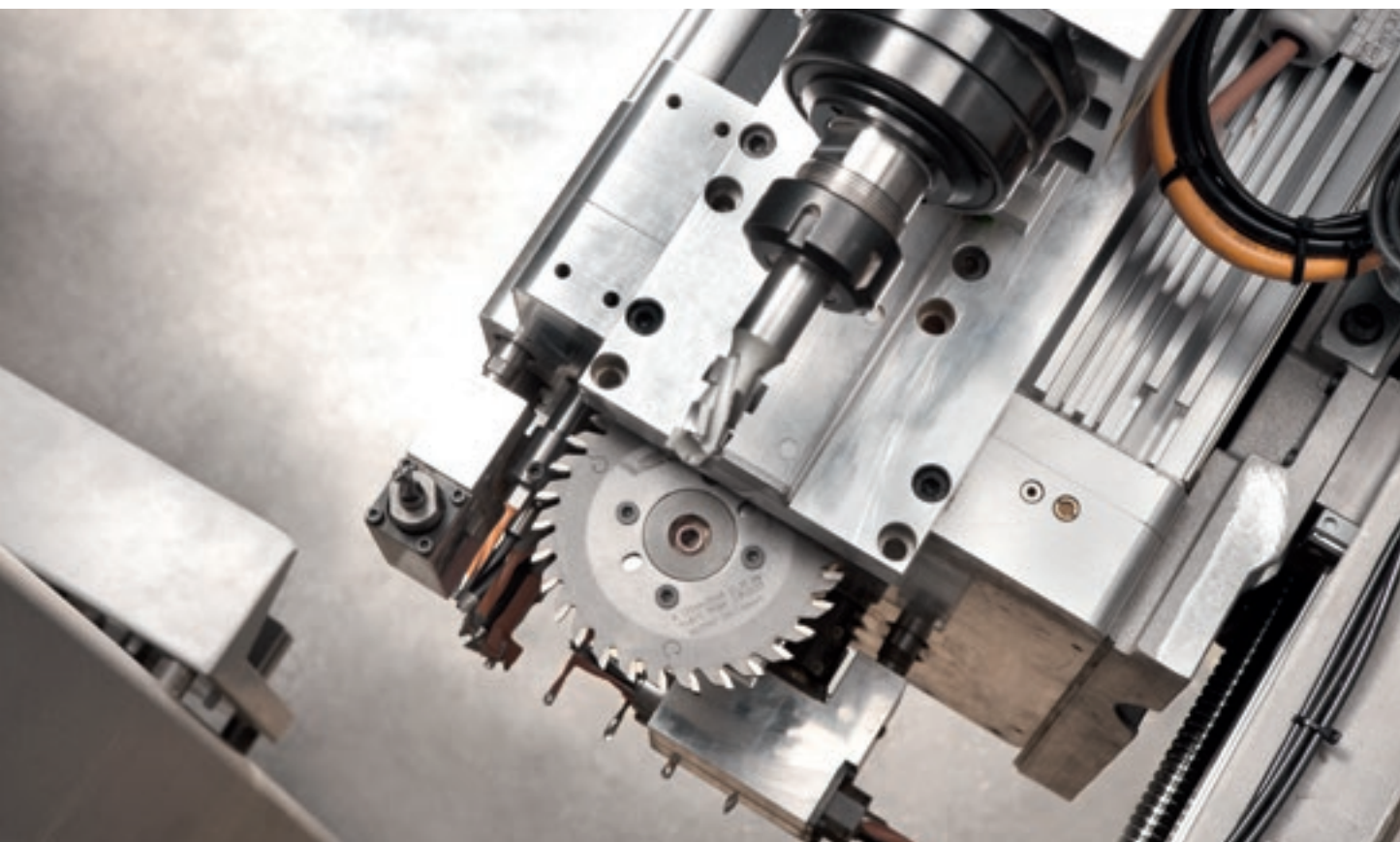


# OPTIMAL PRODUCT QUALITY

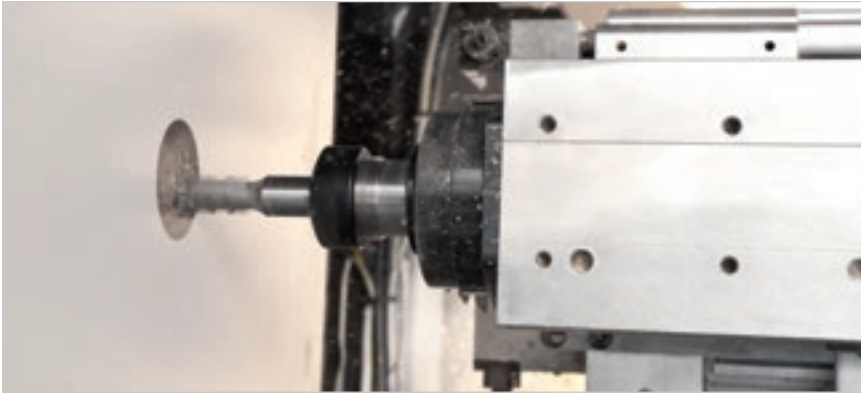
Biesse uses the same high-tech components for all machines in its product range.



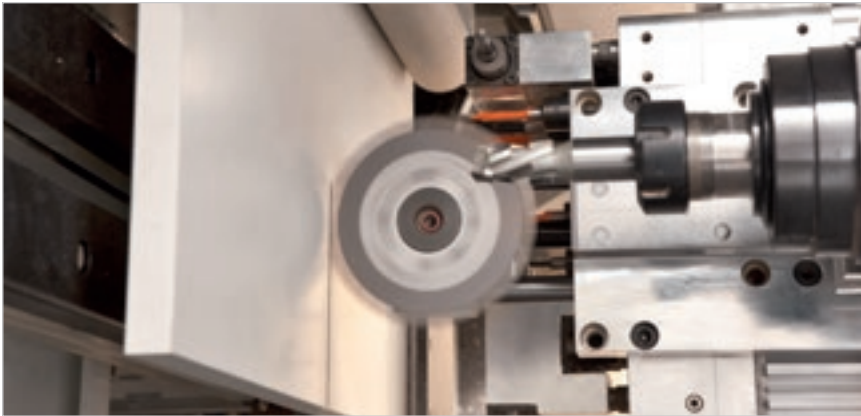
Electrospindles, drilling heads and aggregates are designed and manufactured for Biesse by HSD, the global leader in the mechatronics sector.





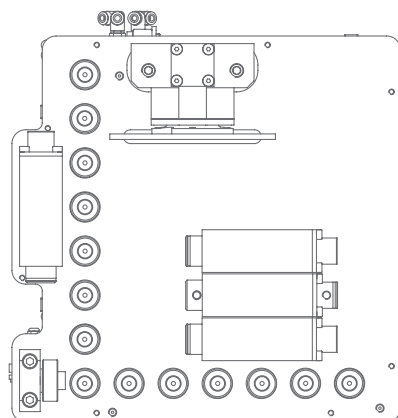
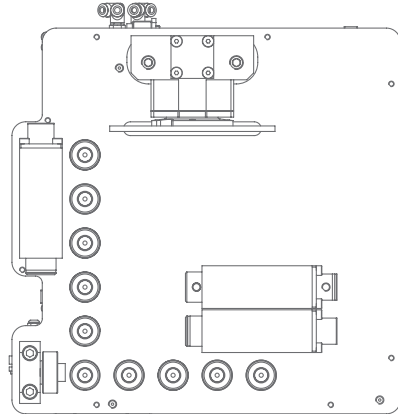
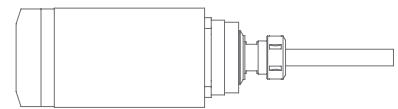


The machine's structure and components guarantee the highest level of precision for any type of machining operation.

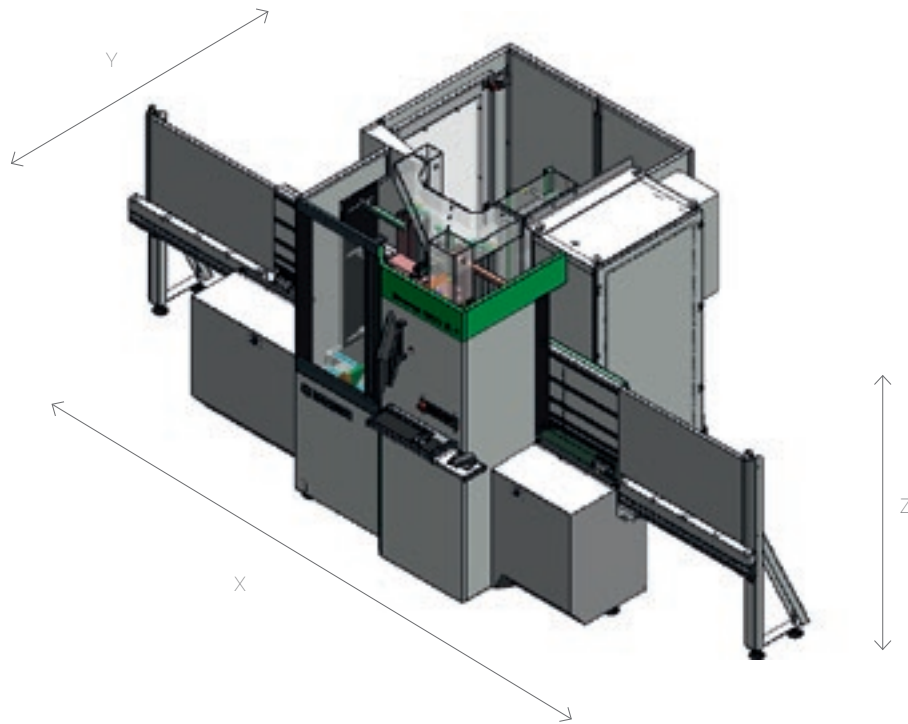


# MACHINE CUSTOMISATION DEPENDING ON PRODUCTION REQUIREMENTS

Milling units from 4.5 to 5.5 kW and drilling units with 17 or 23 tools are available.



# TECHNICAL SPECIFICATIONS



Machine size	mm/inch	2800x1940x2000 / 110x76x79
Min. size of machined panel	mm/inch	200x35x8 / 8x1,3x0,3
Max. size of machined panel	mm/inch	2600 (3200)x900x60 / 102 (126)x35x2,3
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).

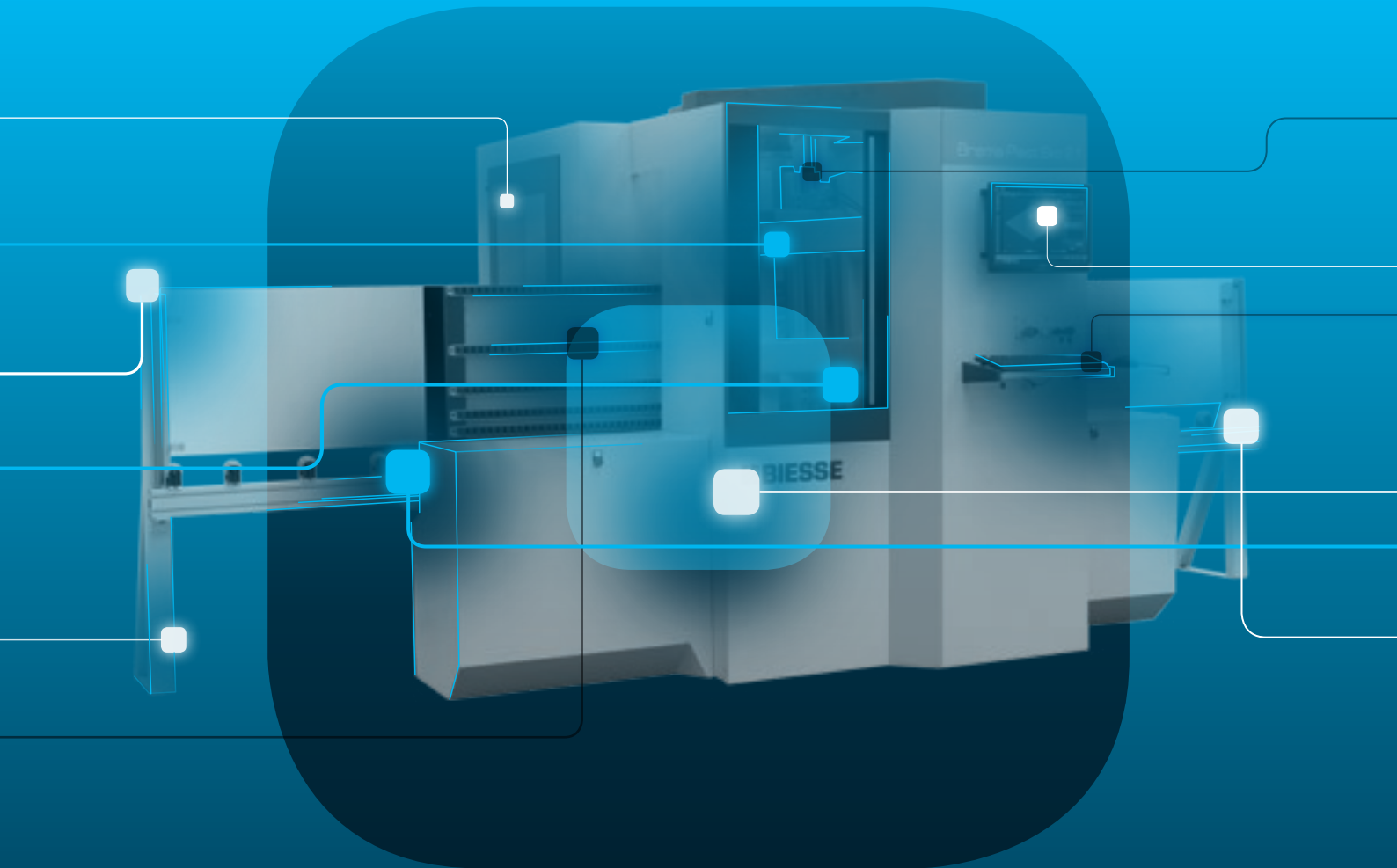
The measurement was carried out in compliance with UNI EN ISO 3746, UNI EN ISO 11202, UNI EN 848-3 and subsequent modifications. The noise levels indicated are output levels and do not necessarily represent safe operational levels.

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.

# 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 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 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.



# 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.



# 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

## 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 pro-

cessing 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.*



# LIVE THE EXPERIENCE



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.**

