

BRE MIA 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. **Bremma Eko 2.1** is the new compact and versatile vertical boring 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 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.

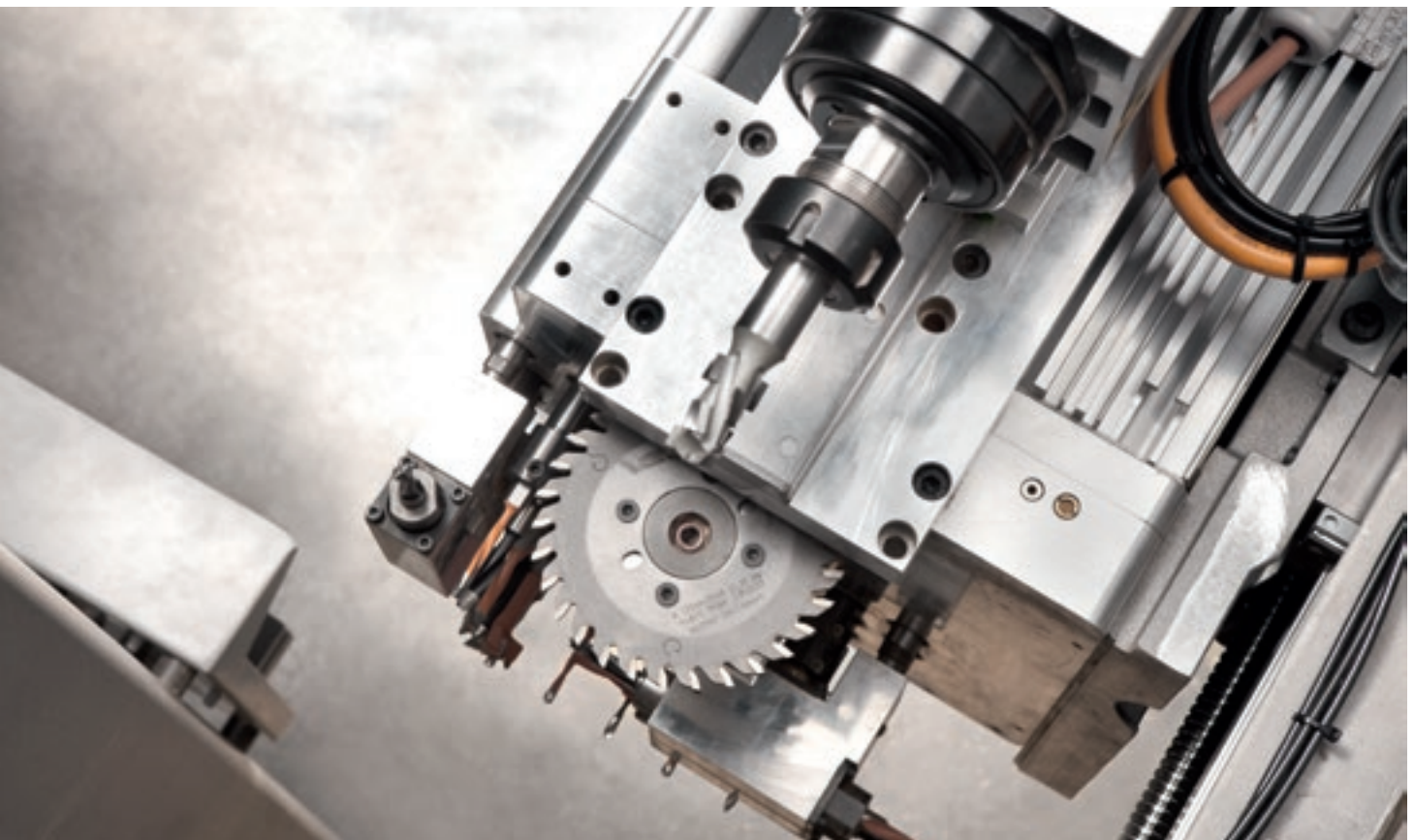


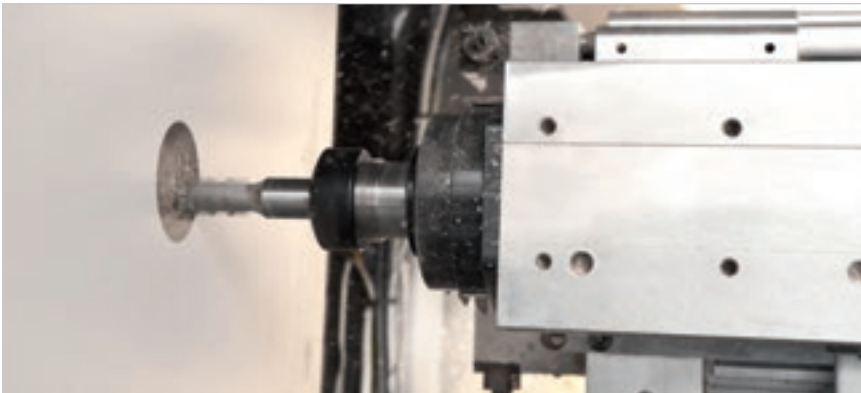
OPTIMAL PRODUCT QUALITY

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

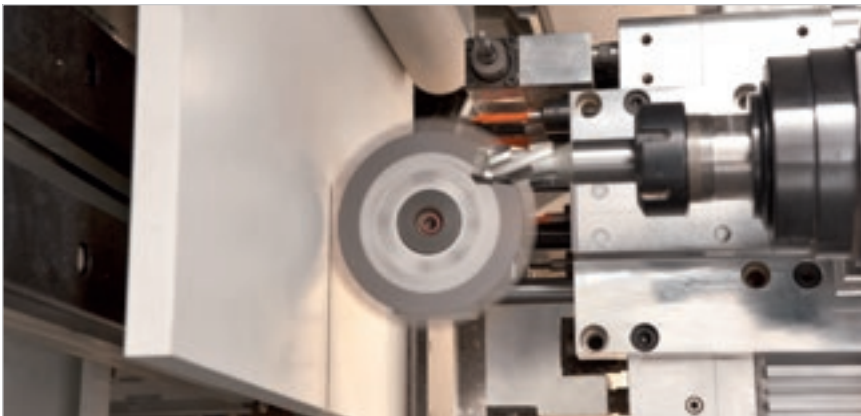


Electrospindles, boring heads and aggregates are designed and manufactured for Biesse by HSD, the global leader in the mechatronics sector.





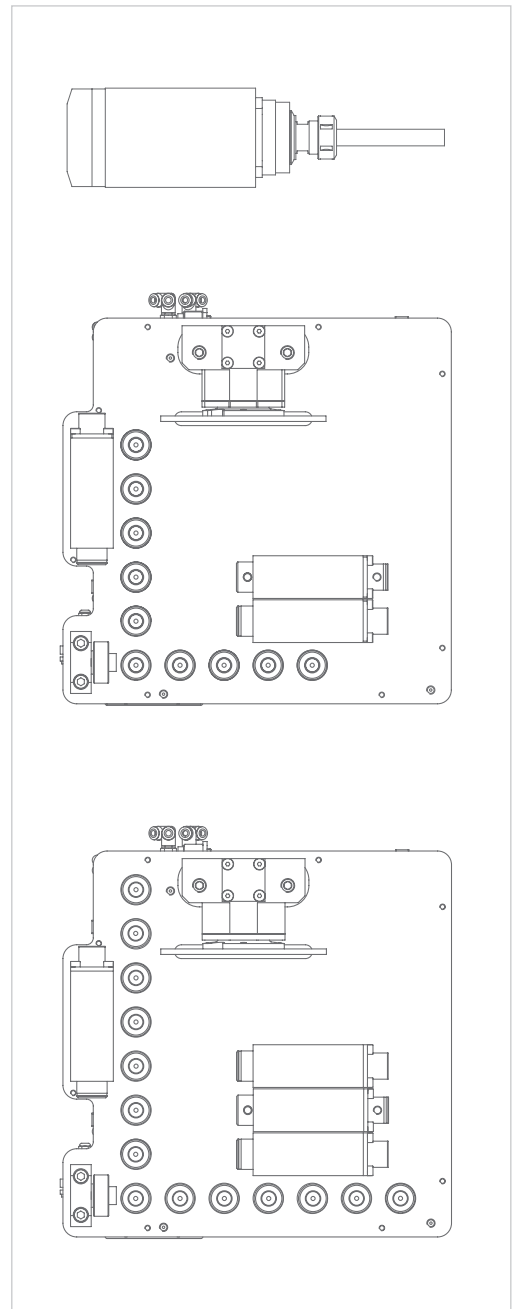
The machine's structure and components guarantee the highest level of precision for any type of machining operation.



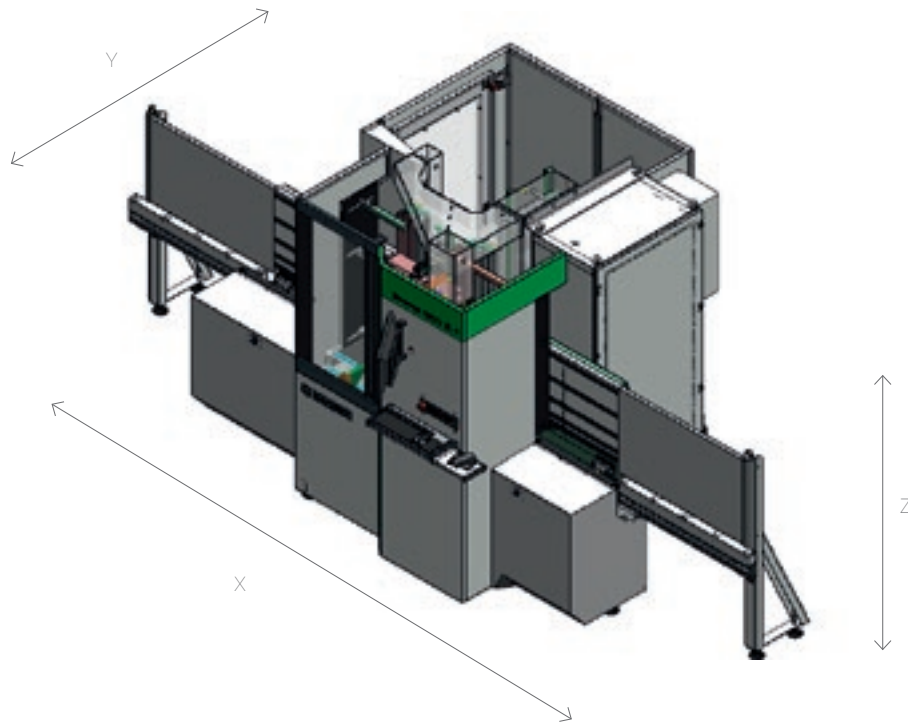
MACHINE CUSTOMISATION DEPENDING ON PRODUCTION REQUIREMENTS



Milling units from 4.5 to 5.5 kW and boring 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

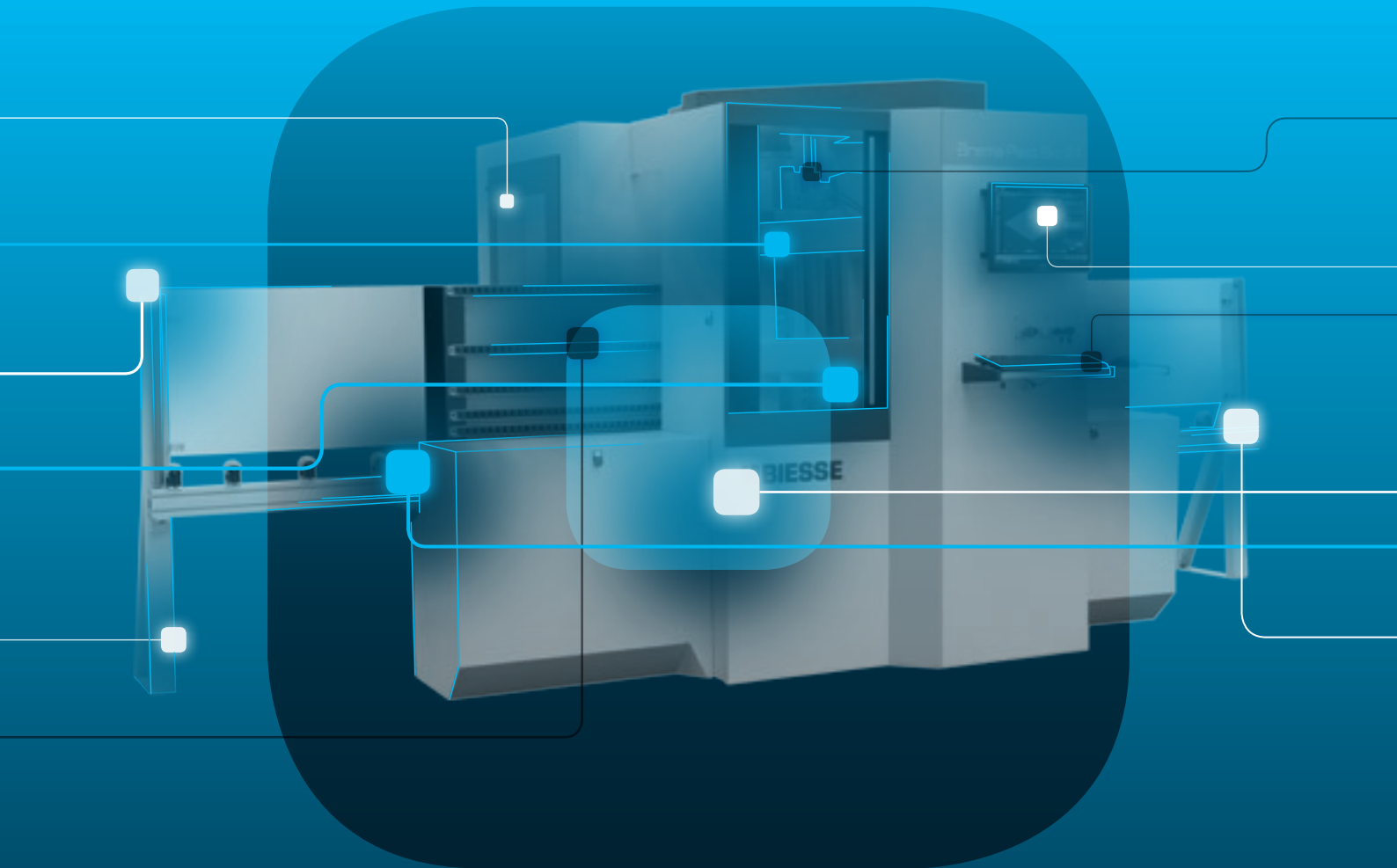
The technical specifications and drawings are non-binding. Some photos may show machines equipped with optional features. Biesse Spa reserves the right to carry out modifications without prior notice.

Weighted 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**

HIGH-TECH BECOMES ACCESSIBLE AND INTUITIVE

BSOLID 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, with endless possibilities.
- 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.





SERV ICE & 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

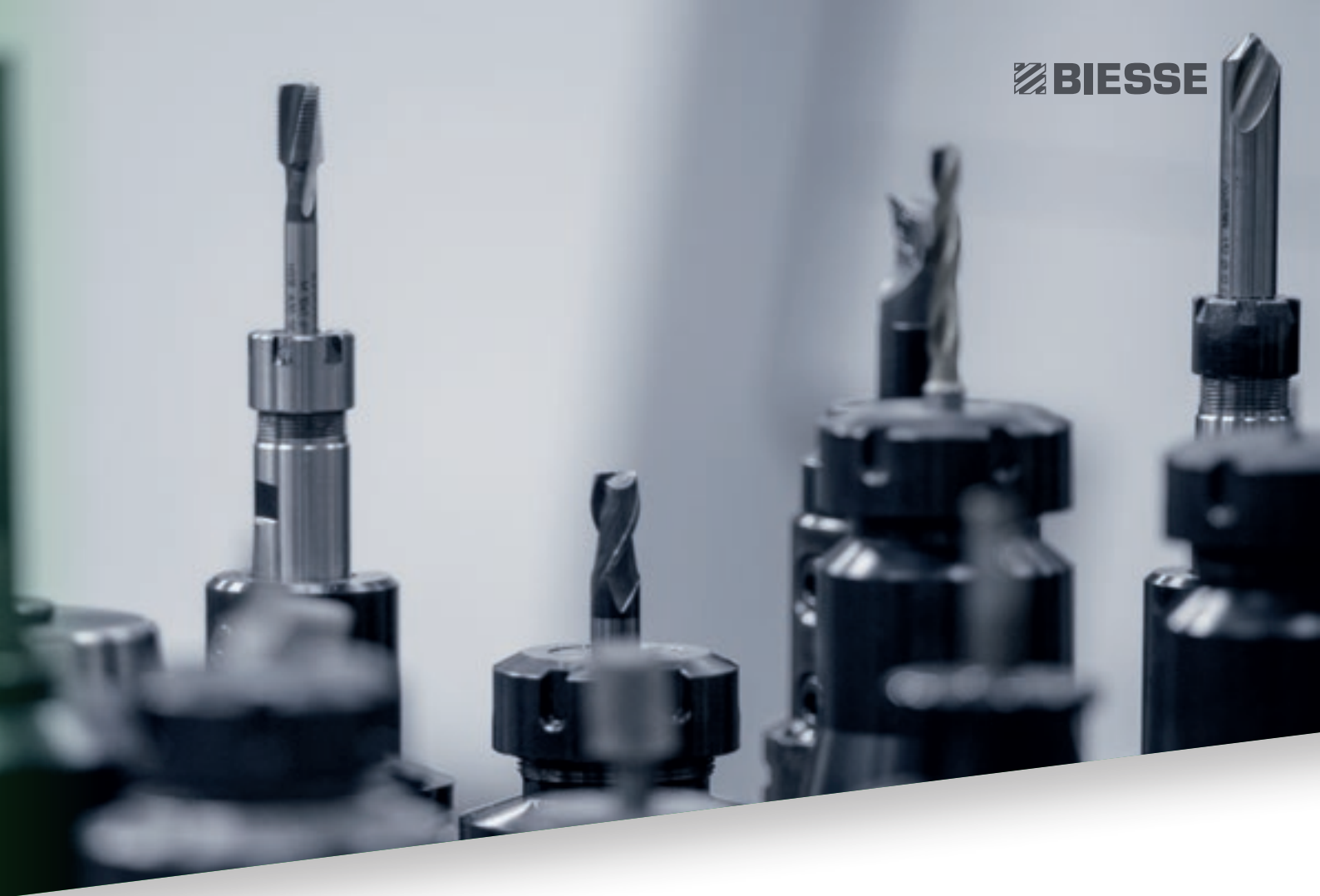
Biesse engineers manning a Teleservice Centre.

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 precision engineering.

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 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

BIESSEGROUP.COM



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**

