Brema EKO 2.2
machining centre for real-time panel processing
When competitiveness means managing production with maximum efficiency
The market demands

a change in production processes to meet the ever-growing 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.

- 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.
High versatility in accordance with production needs

Brema EKO 2.2 machining centre for real-time panel processing
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.
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 support the machining of even the most delicate surfaces.

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

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.
Compact power

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.

VERTICAL DRILLING

The vertical position of the panel and the technical characteristics of these vertical boring machines allow for the processing of more delicate surfaces. A perfect combination of Biesse technology and Italian genius.
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.

Watch the bSolid ad at: youtube.com/biessegroup
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

**Technical specifications**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine size</td>
<td>5300x2300x2300 mm</td>
</tr>
<tr>
<td>Min. size of machined panel</td>
<td>200x35x8 mm</td>
</tr>
<tr>
<td>Max. size of machined panel</td>
<td>3200x1250x60</td>
</tr>
<tr>
<td>Vector speed</td>
<td>(x-y) = 65, z=20 m/min</td>
</tr>
</tbody>
</table>

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.
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 specialised 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 customised 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 fulfilment time optimised thanks to a global distribution network with de-localised, automated warehouses.**

| **87%** | of downtime machine orders fulfilled within 24 hours. |
| **95%** | of orders delivered in full on time. |
| **100** | spare part staff in Italy and worldwide. |
| **500** | orders processed every day. |
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.
Biesse Group is a multinational leader in the technology for processing wood, glass, stone, plastic and metal. Founded in Pesaro in 1969, by Giancarlo Selci, the company has been listed on the Stock Exchange (STAR segment) since June 2001.

1 industrial group, 4 divisions and 8 production sites.

€ 14 million p/a in R&D and 200 patents registered.

34 branches and 300 agents/selected dealers.

customers in 120 countries (manufacturers of furniture, design items and door/window frames, producers of elements for the building, nautical and aerospace industries).

3,400 employees throughout the world.

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