Uniteam E BM3

NC processing centre

BIESSE

When competitiveness means increasing productivity

Made In Biesse

The market demands

a change in manufacturing processes, enabling companies to **accept the largest possible number of orders**. This is coupled with the need to maintain high quality standards and customisation of products with quick and defined delivery times, as well as responding to the needs of highly creative designers.

Biesse responds

with technological solutions that enhance and support technical expertise along with process and material knowledge. **Uniteam E BM3** is the line processing centre specifically designed for CLT machining and suitable for automated lines. This solution is one of a kind, for unbeatable quality and productivity.

- **Reliable, precise technology.**
- **Perfect panel hold.**
- **Power and top quality results.**
- **Practical, user-friendly technology.**

This processing centre for CLT machining operations offers the best results on the market

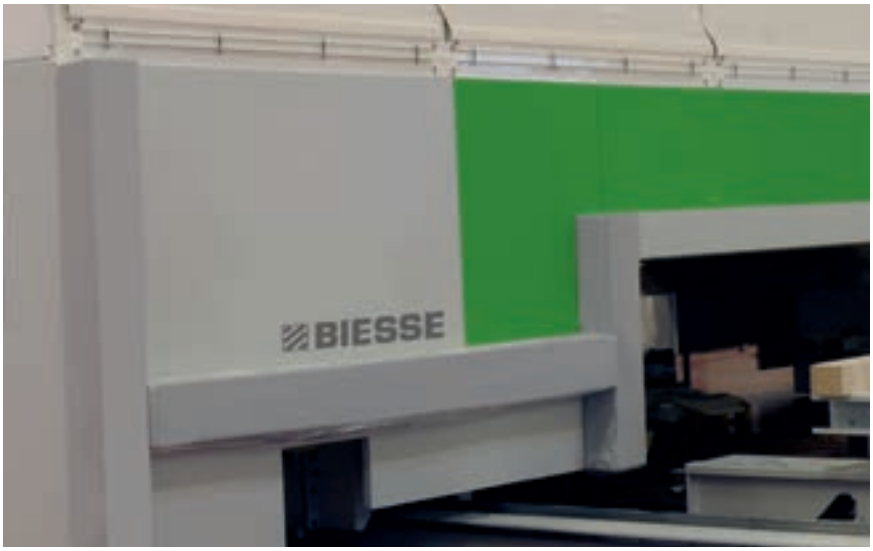
Uniteam E BM3

NC processing centre

Reliable technology

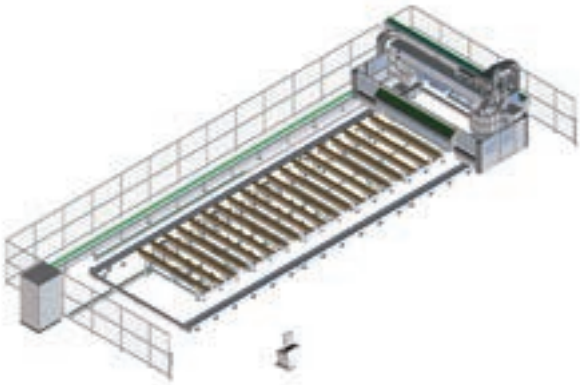
The structure of the machine is extremely robust and rigid, sized with cutting edge calculation and design tools.

The **modular base** with its electro-welded steel tracks guarantees extreme rigidity, and allows the machine length to be developed to suit the customer's specific needs.

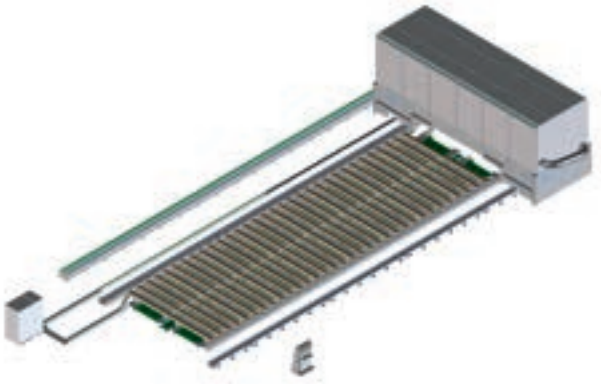


Protective **bumper** all over the machine frame.

Uniteam E BM3 adapts perfectly to the production needs and layout of the factory. It comes in various sizes, with X of 13500 - 16500 - 18500mm and Y from 3000 to 6000mm.



Mechanical **perimeter guards**, or with a photocell.



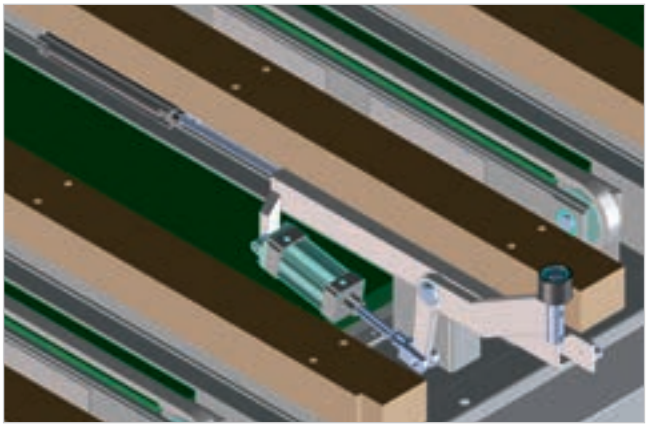
Possibility to **enclose the entire machine in a cabin structure**, to keep the surrounding environment and the whole factory as clean as possible.

Perfect panel hold

The Biesse work table guarantees an optimum hold on the piece and quick, easy tooling.

The **vertical clamps** are even able to block elements with a limited section, thereby increasing machining flexibility.

Suction cups with a vacuum fixing system making it easier to clamp even the thinnest panels.



The sturdy **reference stops** ensure the piece is correctly positioned on the work table. Thanks to the system for automatic stop exclusion, machining operations can be carried out on the edge of the piece, in total safety.

The upper **pressure rollers** (in front of the work unit, and behind it) guarantee an optimum hold during the machining phases, even with major part removal operations.
Suction mouths for cleaning the panel at the end of the cycle.

Motorised rollers interposed with the wooden crossbars, for longitudinal piece feed.

Lateral transfers - with a Teflon-coated chain to avoid damaging the panel - for movement along the X axis or for loading the piece.

Both the motorised rollers and the transfers have a **system for lifting the piece** to free it from the friction restraints and avoid any damage.

Unbeatable performance

A robust base to eliminate vibrations, a modular structure to meet a range of machining needs, powerful and fast working units for major cutting and removal operations.
A solution designed to satisfy high productivity requests without limiting the quality of the end product.

Power and reliability are guaranteed by the technology of Uniteam E BM3 - the line processing centre specifically designed for machining CLT panels and suitable for automated lines. This solution is one of a kind, for unbeatable quality and productivity.

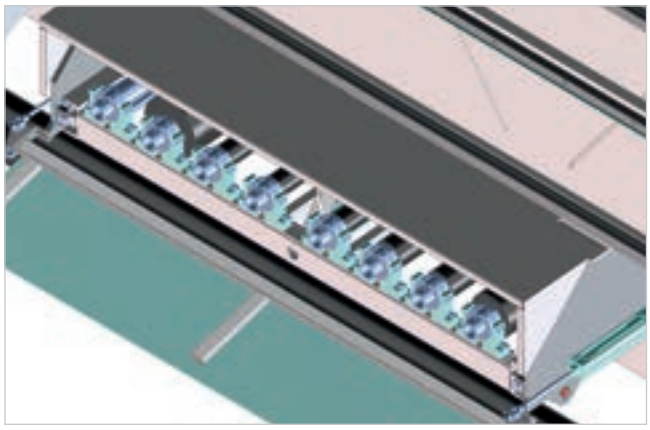
Power and top quality results

Unique technological solutions that meet the requirements of even the most demanding manufacturers.

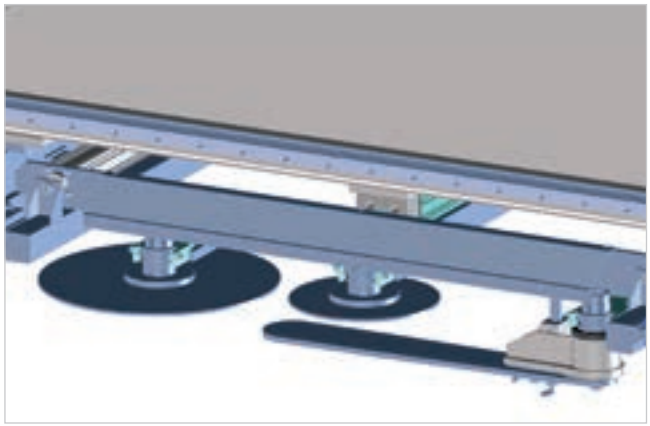
Maximum machining power, thanks to the **fixed blade** with its 1100mm diameter, that works at right angles to the table and can rotate 360°. Fitted with a special suction hood for cleaning both the piece and the machine.

A wide range of machining operations can be carried out thanks to the **HSD electrospindle** (50-65 kW and 1000-15000 rpm) with its oil-lubricated bearings and HSK connection device. Equipped with a fixed deflector (automatically excluded when necessary).

Up to 33 tools always available on the machine.



10-place tool magazine for quick tool changes



3-position magazine for large tools, including the chain tool if necessary.

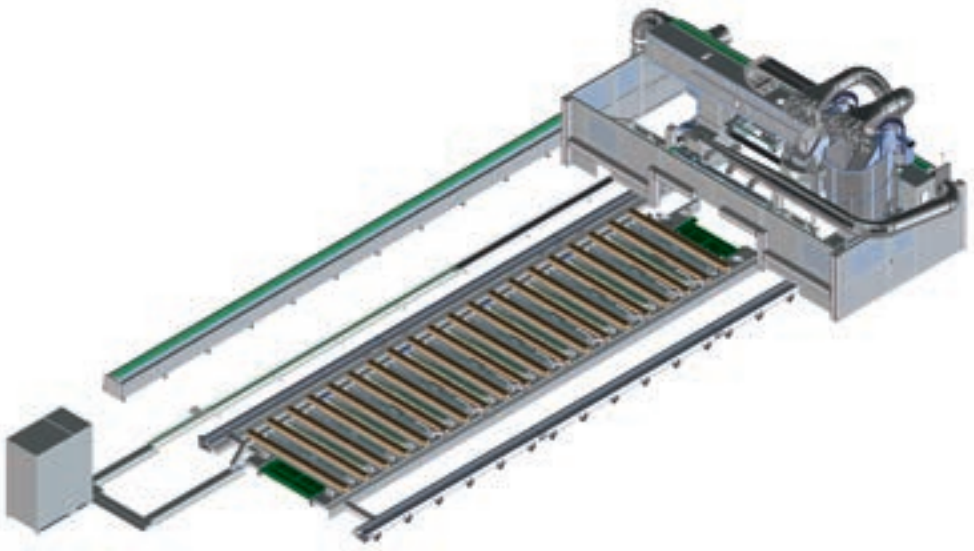
20-position revolver magazine to ensure that a wide selection of tools is always available on the machine.

Practical, user-friendly technology

The Uniteam range designed for housing is equipped with a very powerful **NC** - the pioneering **Osai Open M**. Thanks to its characteristics, the CNC OPENcontrol family of machines ensures an excellent finish on the piece and optimum processing centre management. The systems can be fully customised using graphic HMI software and an embedded PLC.

The **CAD/CAM software** used in Uniteam machines is ideal for designing both straight and curved beams. Specifically created for this sector, it simplifies machine use, guaranteeing process optimisation and significantly increased productivity.
Once the project has been imported in Btl format, the CAD/CAM module automatically associates the appropriate machining processes. The software shows the piece on the screen with the machining operations applied and is equipped with a 3D simulator for the machining centre.
The machine CAD allows full freedom in designing flat pieces, curved pieces and a variety of profiles. Designs can also be imported from third-party CAD systems.

Technical data



Working fields

	X	Y	Z
	mm	mm	mm
Min/max	13000-16000-18000-24000	3500-4500	400

Working dimensions

	X	Y	Z
	mm	mm	mm
Uniteam CK	23000-26000-28000-34000	11400	5100

X/Y/Z axis speed	25 - 30 - 20 m/min

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.

A-weighted sound pressure level (LpA) during machining for operator workstation LpA=79dB(A). A-weighted sound-pressure level (LpA) for operator workstation and sound power level (LwA) during machining LwA=83dB(A). K measurement uncertainty 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.

Made With Biesse

The innovation behind the Uniteam machining centre takes centre stage in the Japanese housing market

Sky Corporation is one of the top Japanese companies to produce CLT panels. Founded in 1990, the company grew significantly and currently owns 6 factories, 2 sales offices, 3 logistics centres, a team of 195 people and revenues of 50 million USD per year. The company produces components for wood houses, structural materials for non-residential buildings up to 3,000 m2 (pre-cut using CAD/CAM), panels and other wood products.
"We have a vast range of customers, from builders to woodworkers, and from companies that sell wood to other businesses. Very different companies share a common interest in quality materials machined with the utmost precision, with no errors or defects and limited costs" stated Yukitsugu Takahashi, Sky Corporation president. "What sets us apart from our competitors is our technology, no other company in the sector has a high-tech production process that can compare," Yukitsugu Takahashi continued. In 2015, Sky Corporation purchased a Uniteam machining centre to be able to handle machining that the company couldn't achieve with the equipment it already owned. "Thanks to this new purchase, we are now able to use a machine for machining operations that were previously done manually, thus improving productivity and performance. We are able to process pre-cut panels for non-residential use with Japanese machines, but we use the Uniteam machining centre for longer components, complex joints, and CLT panels, which our previous machines were unable to handle. Thanks to its powerful and efficient CAD/CAM software, the Uniteam has significantly cut the number of cases where manual work was required as well as significantly cutting costs and helping optimise company logistics. Plus, the CAD/CAM software used by the Uniteam can interface with all CAD software available on the market".
Sky Corporation decided on the Uniteam machining centre after a scrupulous visit of the Italian Company. "Before buying, I visited their factory to see the Uniteam in action, I learned about their approach to developing this technology and met with their very enthusiastic and efficient team. The company that produces Uniteam has become a valid partner of ours, and we have worked together on improving the machine's performance to meet our production needs. The fact that Uniteam became part of the Biesse Group further motivated us to strengthen our collaboration. The financially sound company and continued investments in consulting and services further back up their skill and reliability," the president of Sky Corporation explained.
Sky Corporation is happy to use the Uniteam machining centre as part of its production process, especially to meet market demand in Japan following the recent introduction of CLT panels. "Owning this technology allowed us to accept a growing number of orders from customers who are building houses and other structures based on this new technique. It was a wise investment and has helped us grow significantly," Yukitsugu Takahashi concluded.

The innovation was also featured on local television and published online: http://youtu.be/8XA76a8eLAo.

Biesse Group

In — **1 industrial group, 4 divisions and 9 production sites.**

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

Where — **37 branches and 300 agents/selected dealers.**

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

We — **3,800 employees throughout 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 STAR sector of Borsa Italiana since June 2001 and is currently a constituent of the FTSE IT Mid Cap index.

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