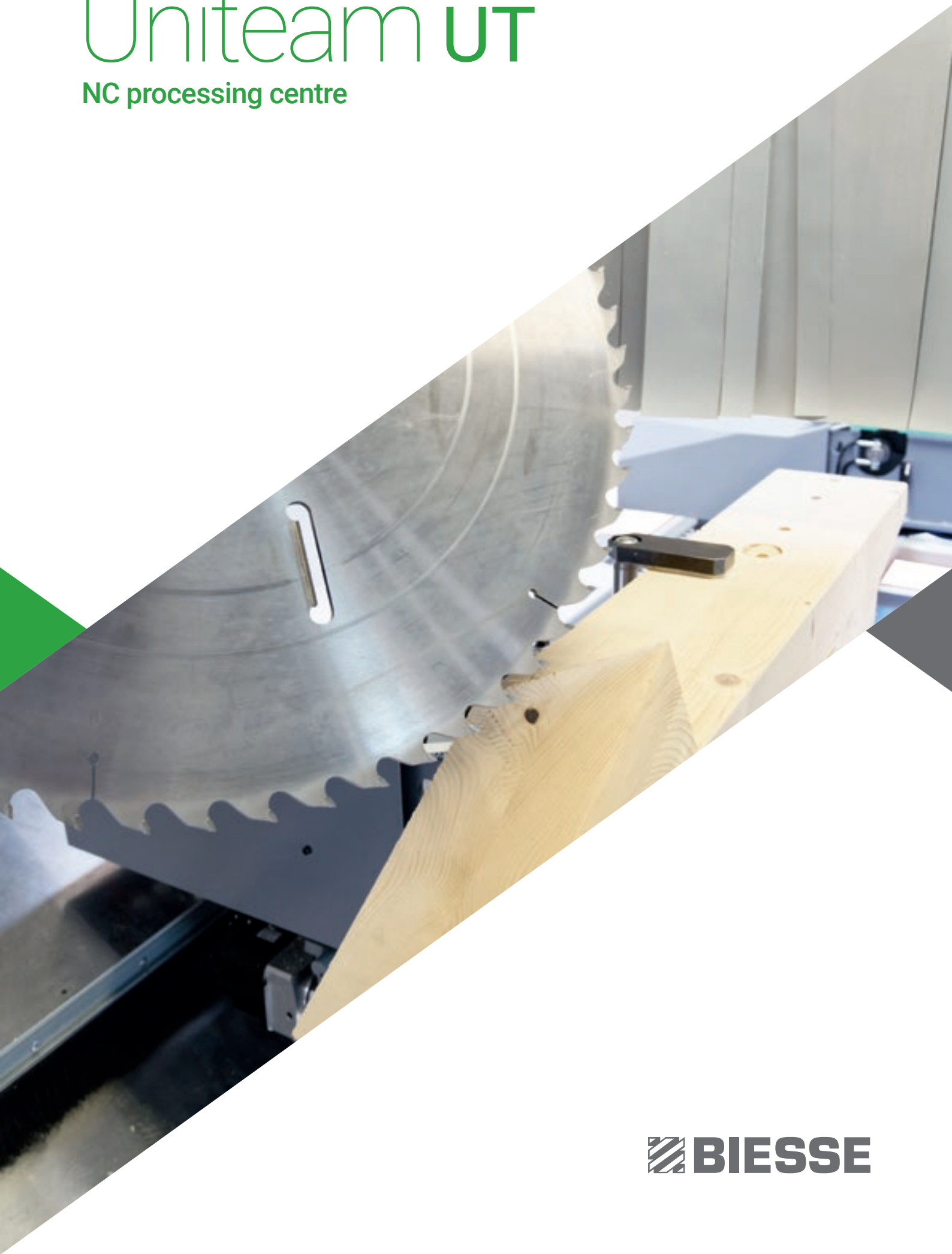
Uniteam **UT**

NC processing centre



BIESSE

When competitiveness means knowing how to machine different types of panel

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 meets these requirements

with **technological solutions** that enhance and support technical expertise as well as process and material knowledge.
Uniteam UT is the work centre that can be used to machine very large beams or elements with more complex shapes.

- **Machine panels of various dimensions.**
- **Reduction of production cycles.**
- **Various configurations available to meet all requirements.**
- **A wide range of possible machining operations.**

Made In Biesse

BIESSE

The fast, high-performance work centre

Uniteam **UT**

NC processing centre


BIESSE
Uniteam LIT

Optimal finish quality

The system guarantees excellent precision and quality of all elements created.

Uniteam UT is equipped with a robust fixed doorway structure that houses the high-performance working units used for the main machining operations.

The structure is composed of a supporting base and an electro-welded steel beam. The overhead beam has a wide cross-section and was created using combined sections designed to guarantee extreme sturdiness.

The mobile carriages that support the beam being processed run across the base below.

The machine is available in three sizes: 14-16-18-24 metres.

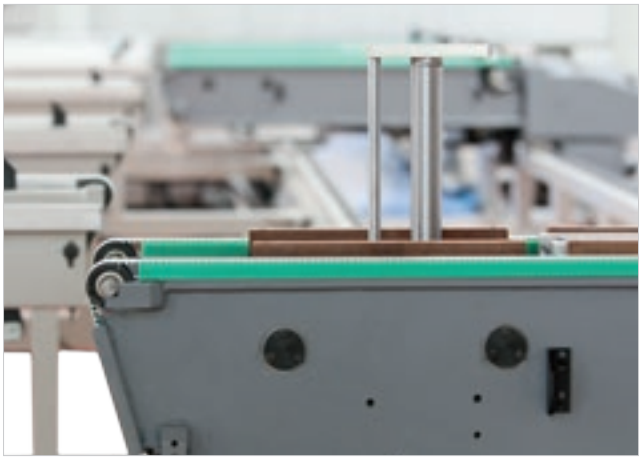
Maximum reliability when locking the panels in position

The Uniteam UT work table guarantees a secure grip on the panel.

The work table is equipped with a hydraulic clamp with 250 mm vertical stroke for clamping the panel in position, along with a horizontal pushing device for securing the workpiece against the relevant stopper.

The system that moves the beam through the machine consists of four carriages equipped with vertical and horizontal hydraulic blocking systems.
The number of carriages has been increased to six, in sizes from 16-24 metres, in order to distribute the weight of the panel more effectively.

A second version of the clamp is available for locking elements or panels of up to 1250 mm in length in place.



The table blocks either long or short pieces with equal efficiency.

Hydraulic clamp composed of an electro-welded steel cross-piece.

Machine panels of various dimensions

A work table that is totally unique on the market, enabling panels of any shape and size to be locked in place quickly and easily, significantly reducing tooling time.

The suction cup device enables very wide or curved panels to be machined, as well as those made from X-Lam. The piece is locked in position by the suction cups without no mechanical fastening devices, which would hinder perimeter machining operations. This system can be used with traditional solutions for securing panels, enabling it to be applied and removed as necessary.
The device for reading the original piece, which consists of a reader with a camera located on the top of the machine, detects the position of two or more points marked on the panel to be machined, determining the exact position of this and adjusting all of the machining operations in accordance with the orthogonal axes determined by the software and controlled by the commands.

Uniteam UT can machine any panel that fits within a working area of 3000x16000-18000-24000 mm, including curved beams.

The table blocks either long or short pieces with equal efficiency.

Superb performance

Uniteam UT can be configured with various types of motor of up to 22 kW of power, in line with the various production requirements, for increased speed of execution.
The work table, which is the only one of its kind on the market for this range of machines, enables panels of various formats to be locked in place, from very small pieces to larger panels of up to 24 metres in length, as well as X-Lam panels.
The structure of the machine ensures maximum machining precision.

UNITEAM RANGE

High configurability, fast and powerful working units to support even the heaviest tools, a large work table that can lock a wide variety of panel sizes in position, and machining operations performed to the highest possible standards. This is Uniteam UT technology.

Reduction of production cycles

Technological solutions created to reduce both machining times and manual operations.

The clamps have a 90° hydraulic rotation system that allows for all six faces of the piece to be machined without needing a second intervention.

The preloader selector at the entrance to the machine consists of a series of conveyance supports positioned in parallel, with the first of these closer together, with the distance progressively increasing towards the last of these. The conveyance device for the supports is motorised via dual-speed gearmotors, one for slower movement and another for faster movement, in order to insert each panel to be worked in phases.

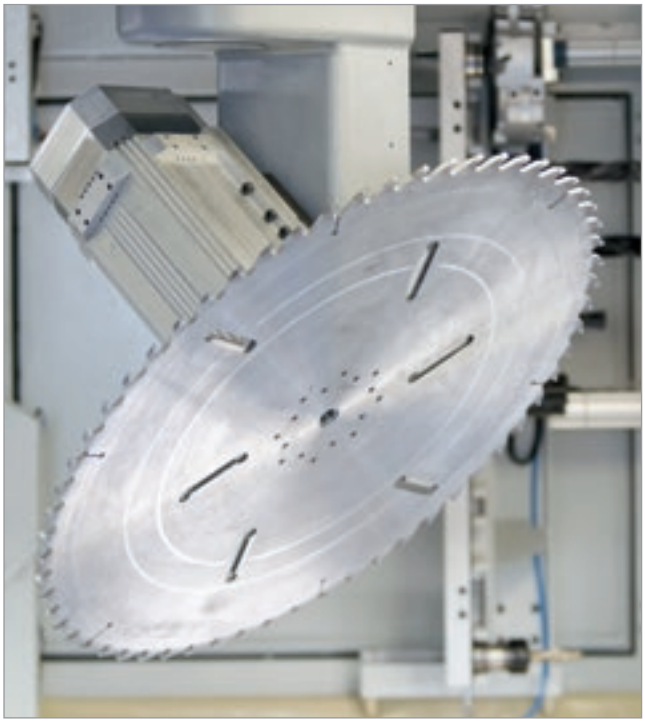
The unloader device at the output area of the machine consists of a series of supports with idler rollers for removing the machined panel.

A range of configurations are available for various machining requirements

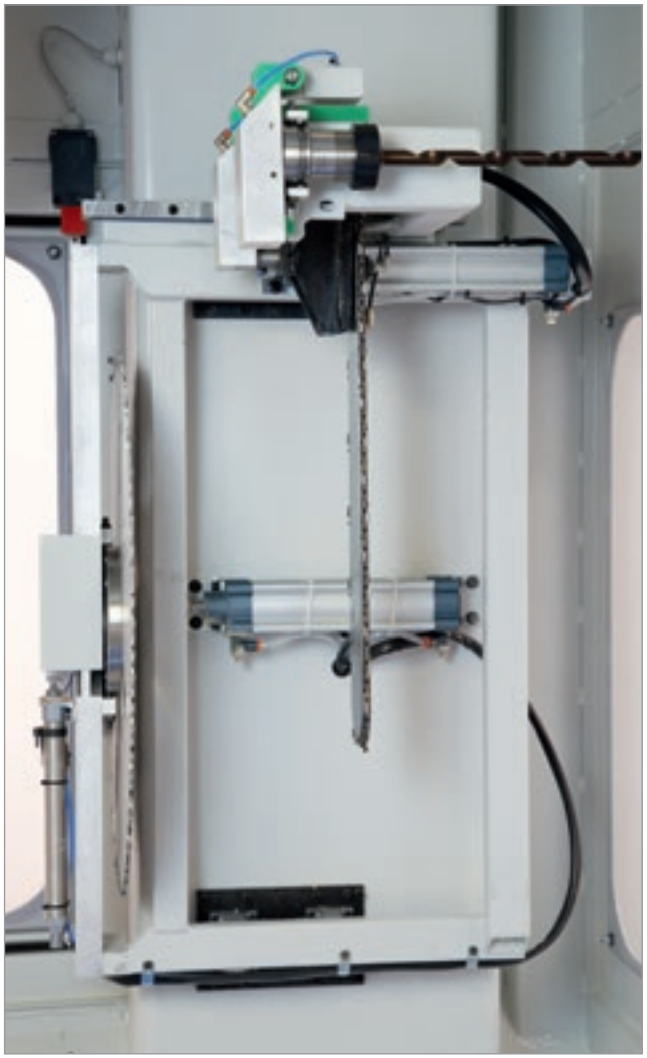
Uniteam UT was designed for performing machining operations on X-Lam (CLT) panels or on very long or unusually-shaped workpieces. These processes require the machine to be equipped with several very powerful working units, as well as a range of large tools.

With the various options available, the machine can be fitted with up to 3 working units.

5-axis unit available with 17 or 22 kW of power.
Dedicated blade unit with diameter of up to 900 mm.
Every electrospindle has a dedicated 8-position magazine, along with a blade magazine with a diameter of 640-850 mm.



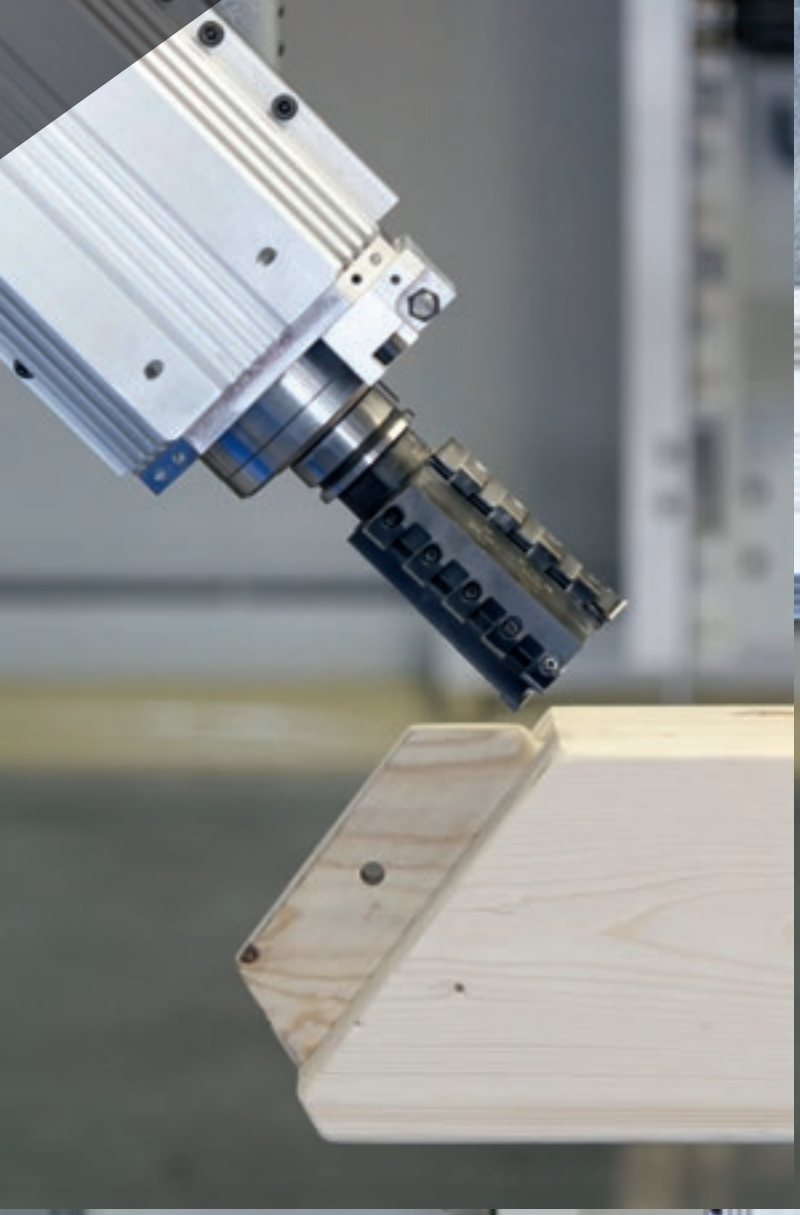
2-position pick-up for bits measuring up to 420 mm in length.

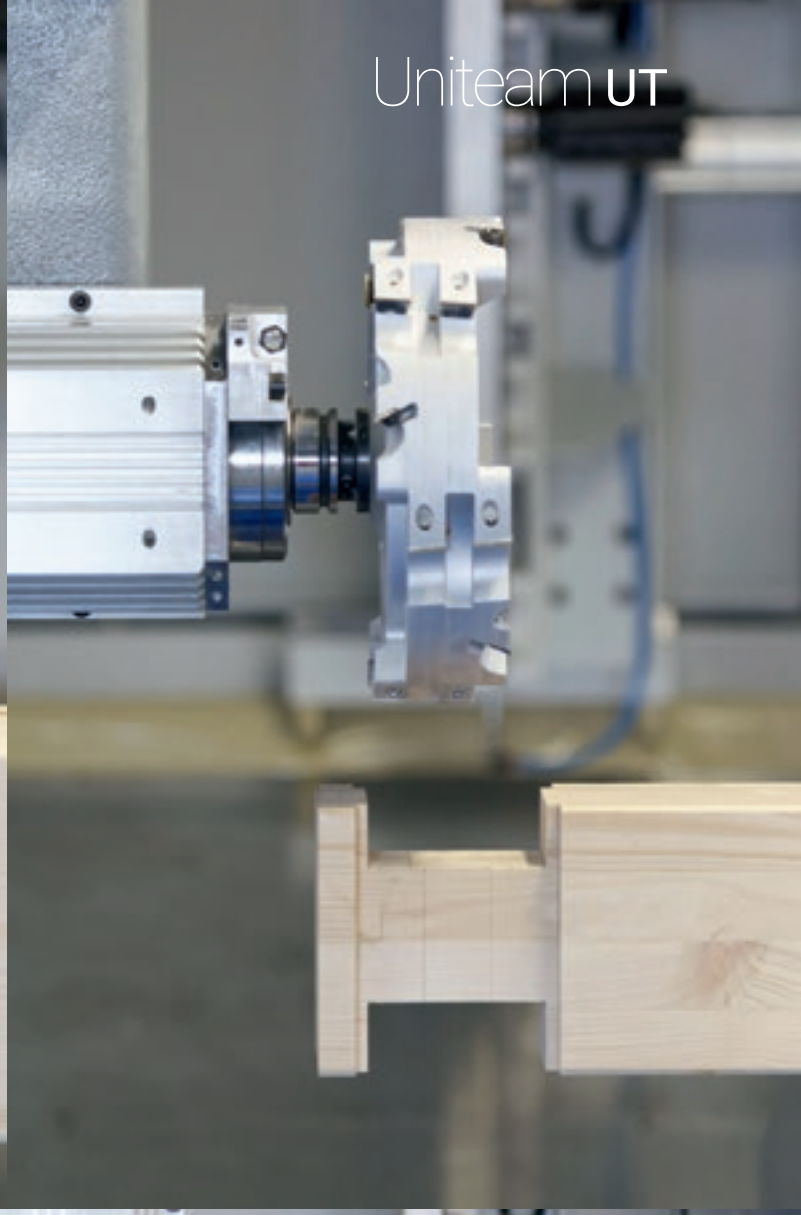


Magazine for chain-type aggregate used for blind holes or notches where metal joint plates can be inserted.

A wide range of machining options

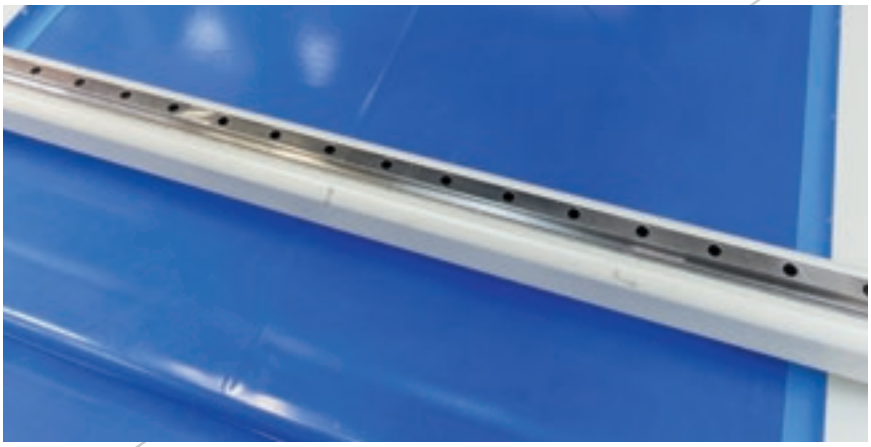
The configurability and the work table of the Uniteam UT enable machining operations to be carried out on panels with complex shapes, ensuring quality, accuracy and total reliability over time.




Uniteam UT

Technology to help operators

The Uniteam range is characterised by a series of solutions designed to simplify machine use for everyday work.

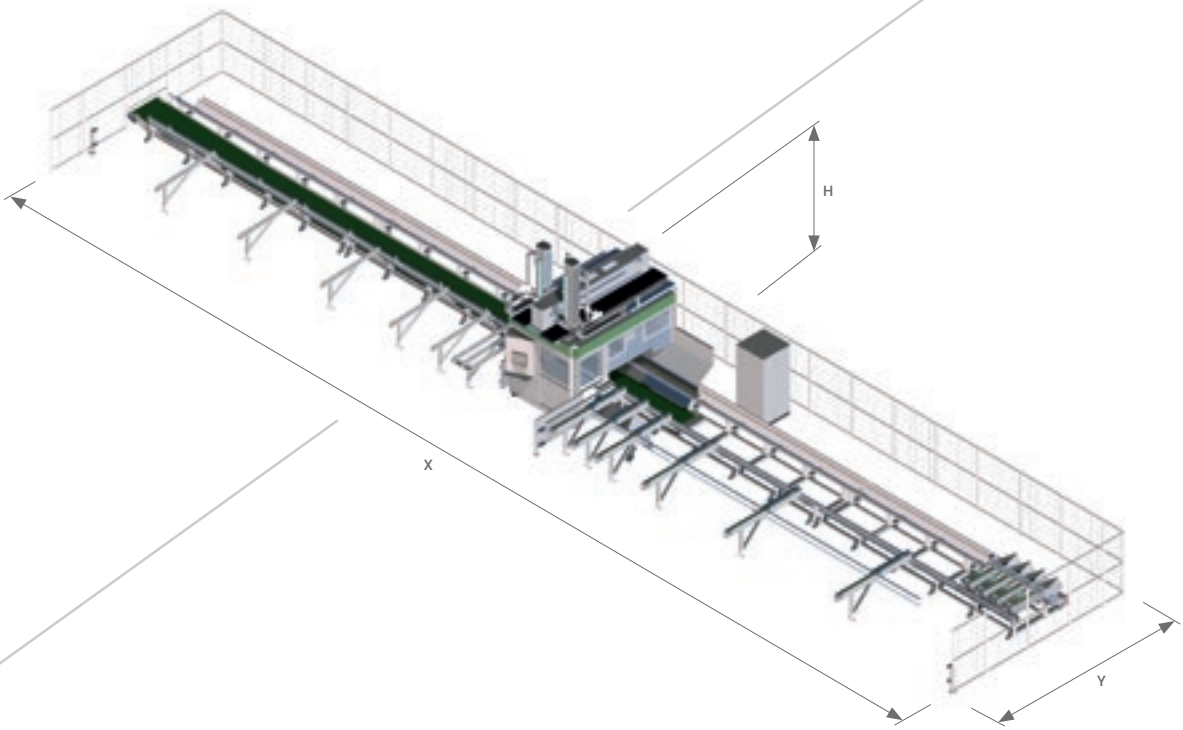


Motorised conveyor belt for the removal of chips and waste.

The Uniteam range of solutions for the housing sector is equipped with an extremely powerful NC unit,
the latest-generation Osai Open M. Courtesy of its special characteristics, the CNC OPENcontrol family of machines enables high finish quality when machining panels, as well as optimum management of work centres. Systems can be completely customised through graphic HMI software and embedded PLC.

The CAD/CAM software used for UNITEAM machines is ideal for designing both straight and curved beams. It was specifically designed for the sector and 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 operations. 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 specifications



Working fields

	X	Y	Z
	mm	mm	mm
Min/max	500/18000	50-600/1000	50/600

Working dimensions

	X	Y	Z
	mm	mm	mm
Uniteam UT	33200-37200-41200	7420	4600

X/Y/Z axis speed 80/60/30 m/1'

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.

The range

The Uniteam range is an innovative series of machining centres dedicated to machining beams of solid or laminated wood. The range offers the best performance available on the market.

UNITEAM CK

UNITEAM UT

UNITEAM E MIX

UNITEAM E BM3

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.

BIESSEGROUP

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