

HANDLING

HANDLING SYSTEMS



 **BIESSE**

 YEARS
 **BIESSE GROUP**

COMPLETE CUSTOMISATION FOR EVERY PROCESS

HANDLING

- ✓ SYSTEM EFFICIENCY
- ✓ SEAMLESS INTEGRATION
- ✓ PERFECT SYNCHRONISATION
- ✓ FACTORY OPTIMISATION
- ✓ REDUCTION OF MANUAL OPERATIONS
- ✓ HIGH FLEXIBILITY.

THE MARKET DEMANDS

a change in manufacturing processes that enables **companies to accept the largest possible number of orders**. This is coupled with the need to maintain high quality standards and high **productivity, with quick and definitive delivery time scales**.

BIESSE MEETS

these requirements **with technological solutions** that enhance and support technical expertise as well as process and material knowledge. Thanks to the wide-ranging expertise developed in finding the most appropriate solution to individual customers' specific requests, **Biesse** offers a comprehensive range of highly reliable and highly engineered **panel handling** systems that can be seamlessly integrated into any machining cell.



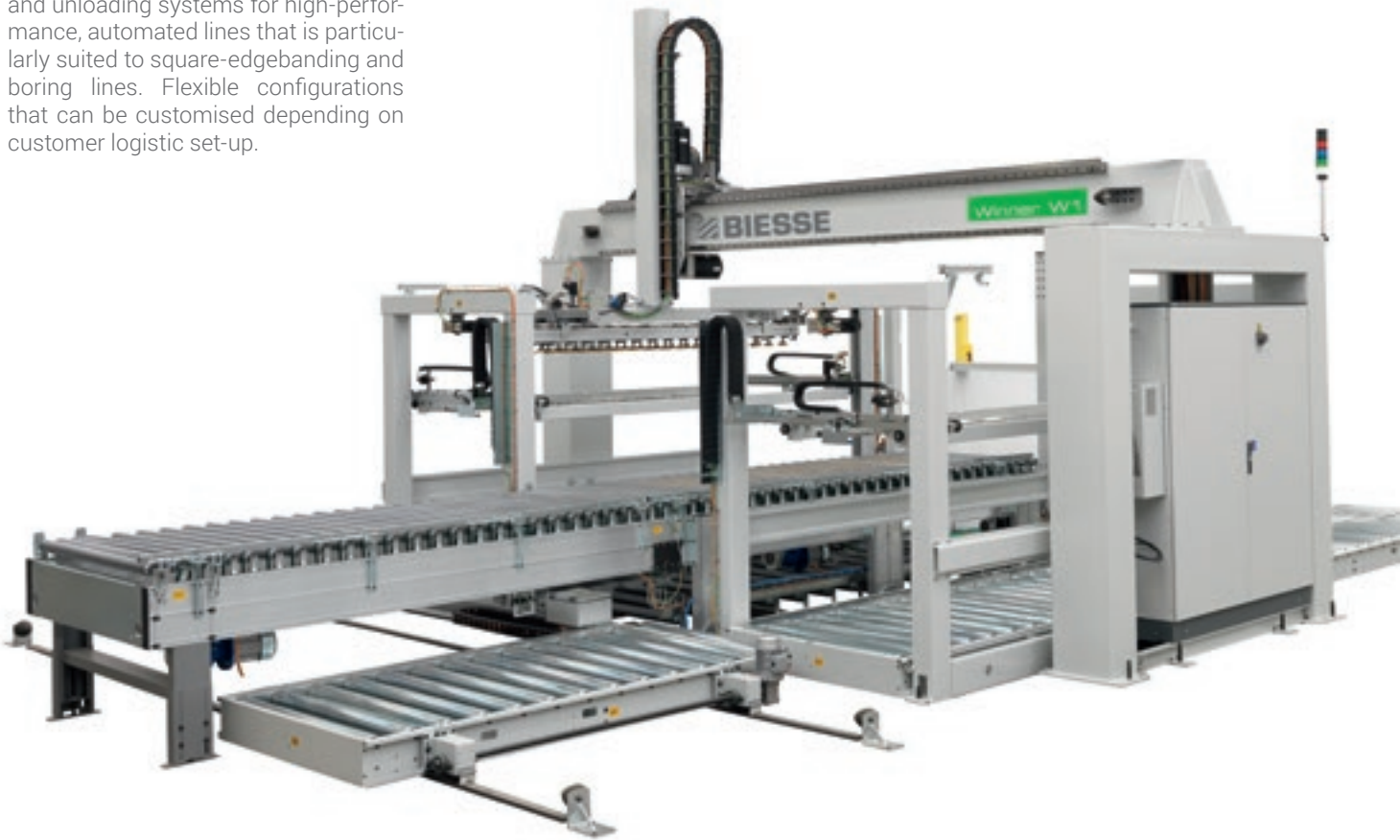
SYSTEM EFFICIENCY

High performance and productivity.

Winner W1 is the range of panel loading and unloading systems for high-performance, automated lines that is particularly suited to square-edgebanding and boring lines. Flexible configurations that can be customised depending on customer logistic set-up.

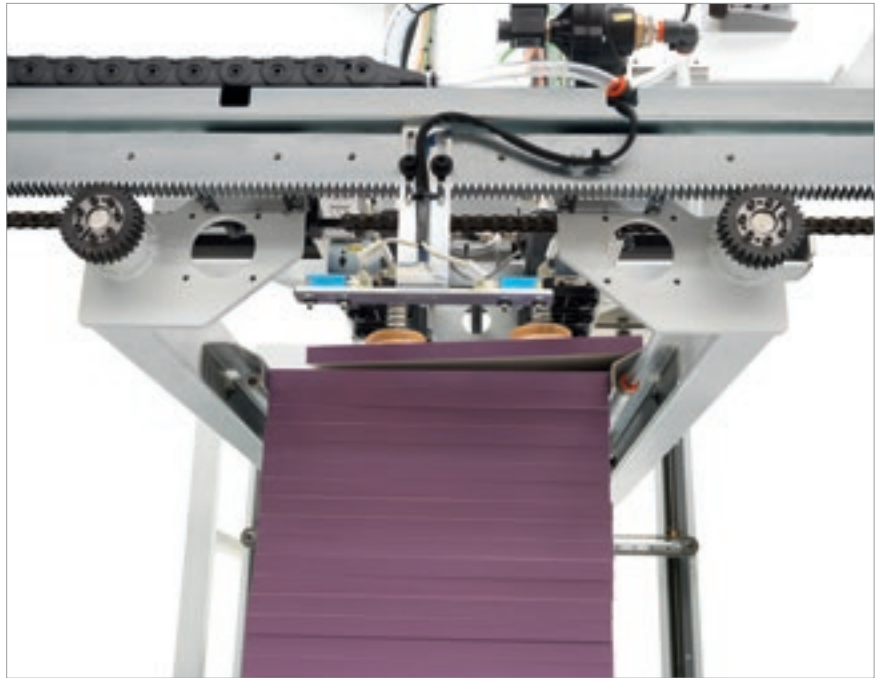


Winner W1



**99.8% MANUFACTURING PROCESS
GUARANTEED RELIABILITY.**

Reliable and guaranteed piece detachment, for panel stacks in single or double rows in width. The system consists of slanted blades with an integrated air jet, which, apart from ensuring panel detachment, guarantees the alignment of the panel stack at picking stage.



High productivity up to 1000 pieces per shift

Seamless integration and full customisation in flexible square-edging processes. Automatic management of panel tracking on the line.

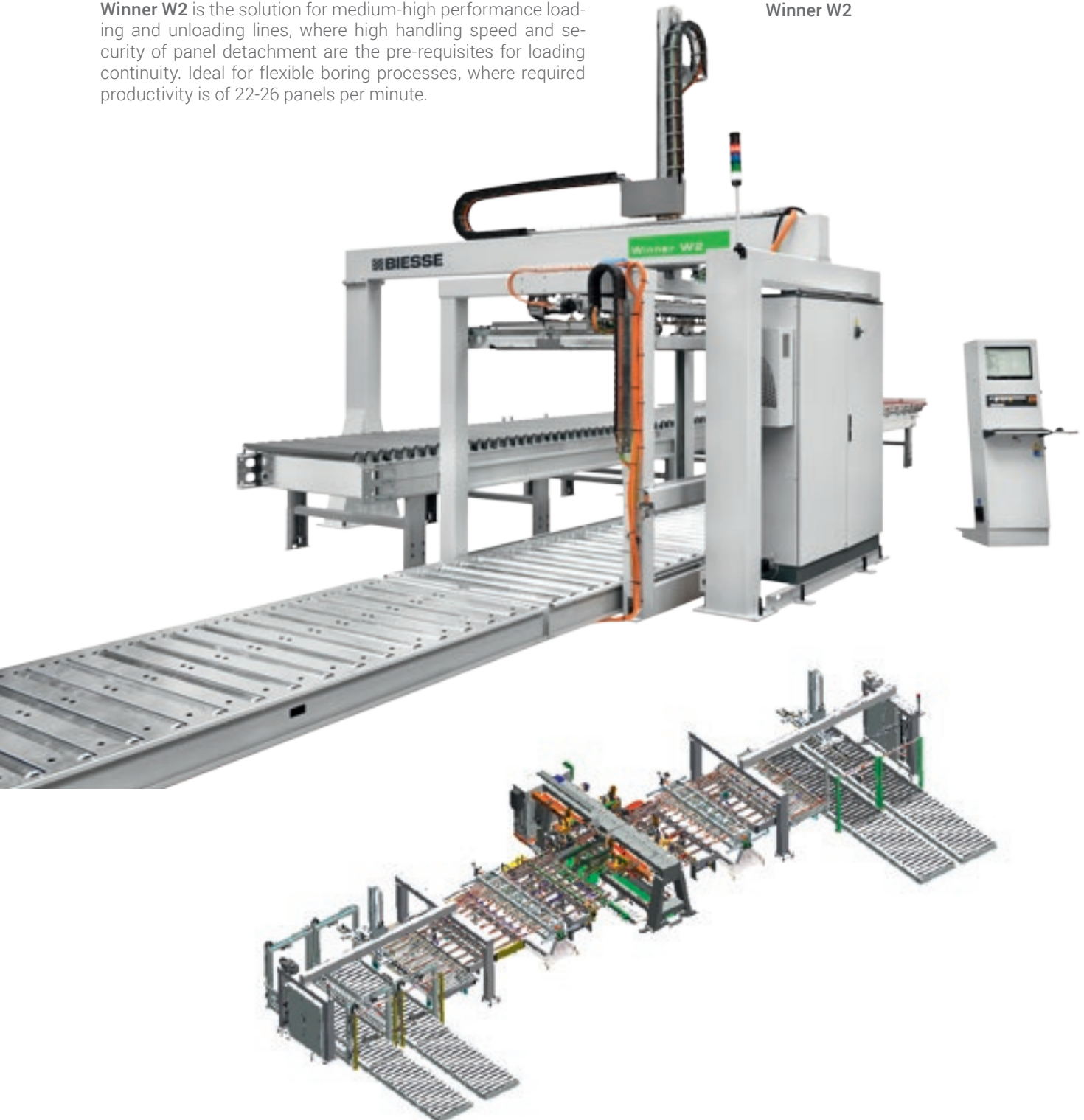


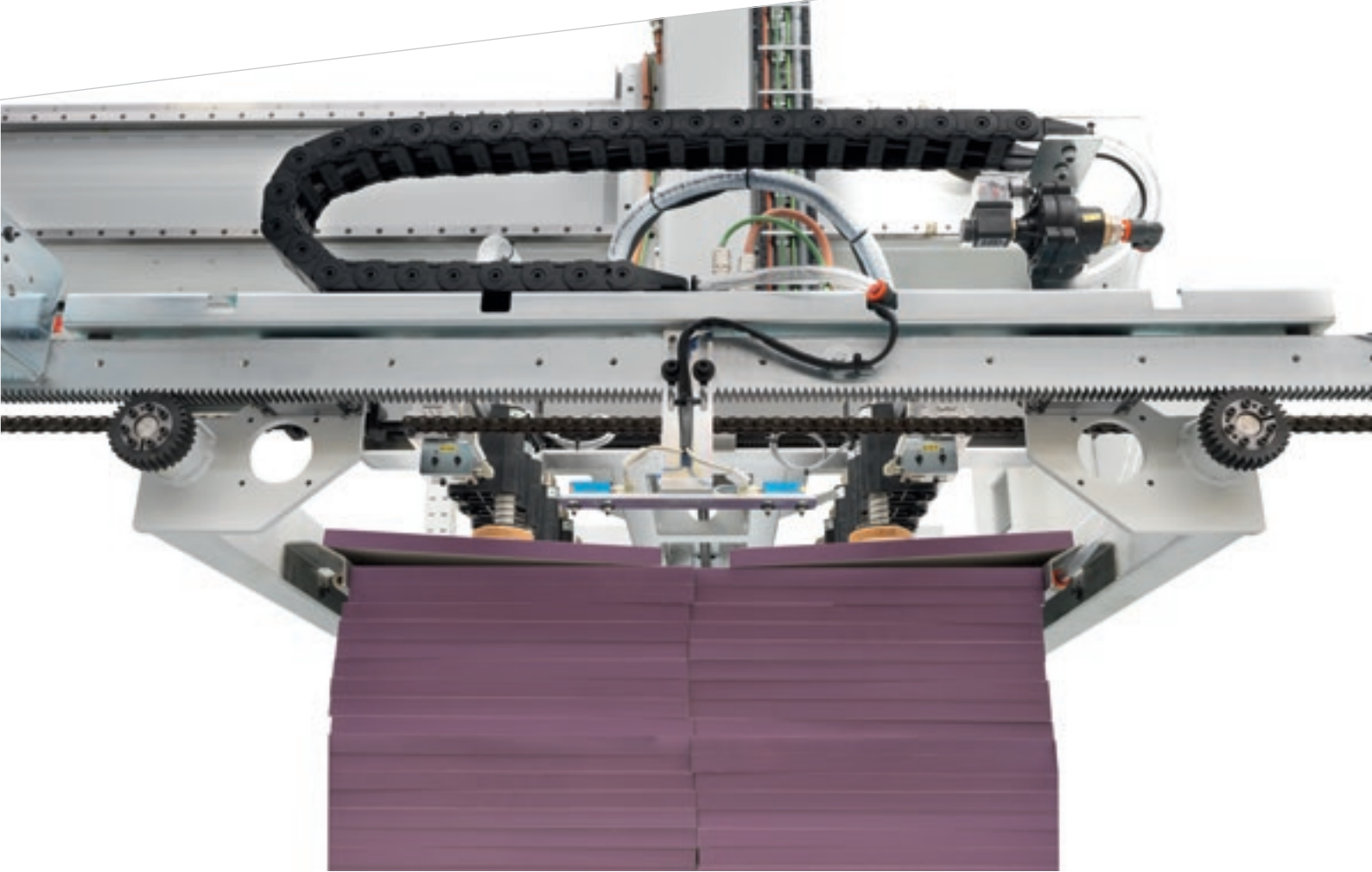
GUARANTEED RELIABILITY COUPLED WITH A COMPACT FOOTPRINT

Winner W2 is the solution for medium-high performance loading and unloading lines, where high handling speed and security of panel detachment are the pre-requisites for loading continuity. Ideal for flexible boring processes, where required productivity is of 22-26 panels per minute.



Winner W2



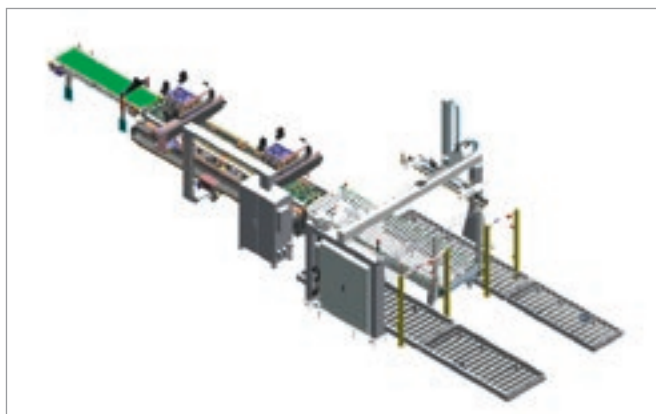


Guaranteed efficiency and reliability thanks to automatic set-ups and a piece detachment system for any type of panel stacks, both single or double-row. It consists of slanted blades with integrated air jet, which, apart from ensuring panel detachment, guarantees the alignment of the panel stack at picking stage.



Automated management system for loading panels in double rows. It guarantees perfect production line timing.

HIGH FLEXIBILITY



SEAMLESS INTEGRATION OF FLEXIBLE EDGEBANDING

Productivity of up to 600
pieces per shift.



The **Winner W4** loading system can be perfectly integrated with single-sided edge banding machines, allowing operators to automatically manage the handling of the panels to be edgebanded. The graphical interface is extremely intuitive and easy to use, with an innovative touch-screen panel.



The sensors for the detection of the panel render the machine completely independent.



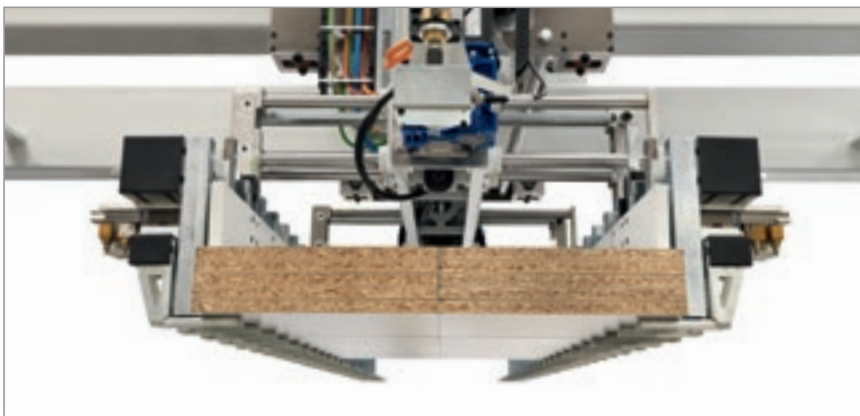
Withdrawal system for recirculation and unloading of panels with rotation. Automatic positioning via the dimension detection system.

PERFECT SYNCHRONISATION

Lifter L1



Gripper unloading system for **high-productivity angular cutting systems**. Integrated software management for the perfect synchronisation between cutting scheme and unloading configuration.



The gripper frame with pressor ensures grip over both single and double-row packs.

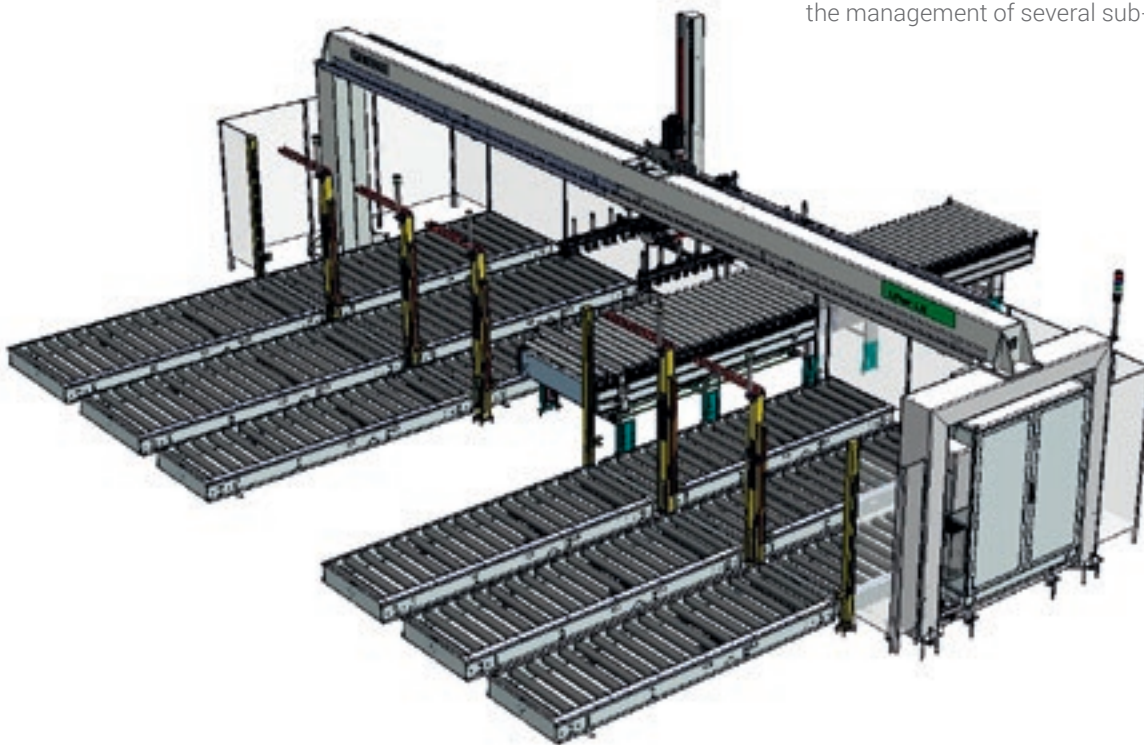


Customising the machine with a suction cup frame enables processing bars for sectioning.

Lifter L2



Suitable for angular and mono-line cutting processes, for panel saws with blade protrusion up to 135 mm. Extremely quick and flexible, guarantees the management of several sub-formats.



Unloading operation assisted by technical and visual information that supports correct flow in line with customer's logistics.



FACTORY OPTIMISATION



Winstore is an automated magazine for the optimised management of panels for large contract manufacturers, which guarantees production with reduced times and costs. Winstore can be integrated into nesting and sizing cells with a significant increase in productivity.

Integrated software management of the entire system between customer's management system and manufacturing process.



WINSTORE K1

Magazine for high productivity and flexibility. Suitable for uploading and unloading several operating machines integrated into the same line. Seamless integration with panels saws and nesting CNCs. It ensures precise detachment also for breathable and thin panels.



Winstore K2

Integrated magazine for machining cells with panel saws or nesting CNCs.



Winstore X3

Integrated magazines for mono-line panel saws and nesting CNCs. Its reduced footprint makes it particularly suited to cells where space is at a premium. Increase of machine efficiency thanks to the reduction in manual loading operations.



Winstore can also be integrated with a flexible panel saw for batch-one machining processes.

RETURN ON INVESTMENT WITHIN 1 YEAR

Production line performance increase of up to 25%
when working in real time processing.



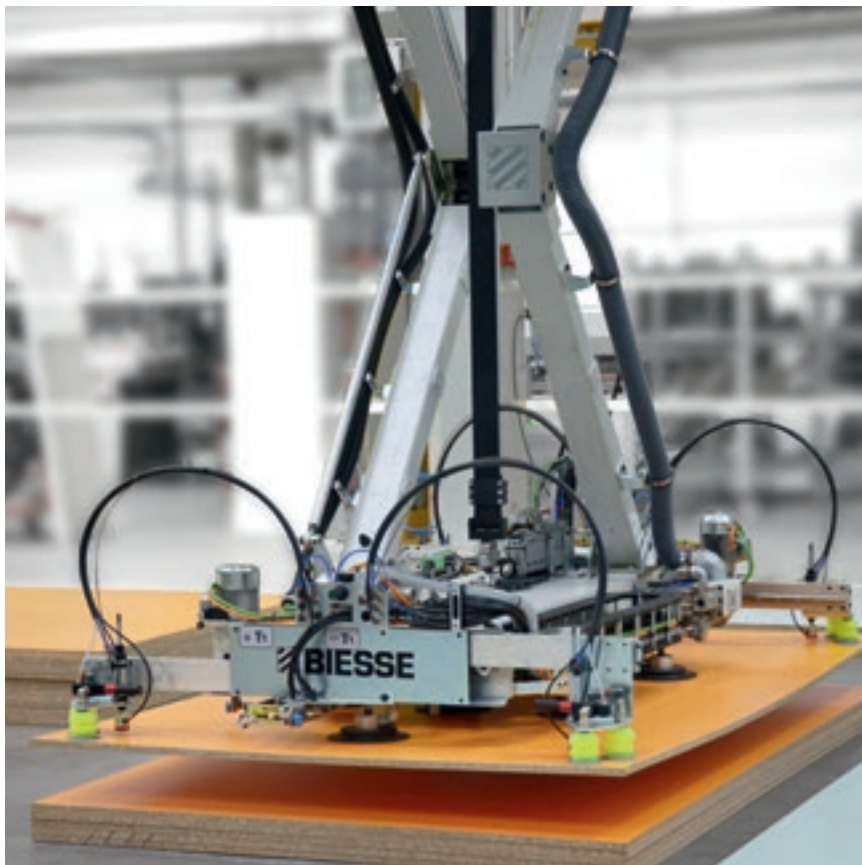
The Winstore automated magazine **stacks panels of different sizes and materials**, including mixed ones, with no need for operator intervention. The reorganisation of panel magazine and stacking can be carried out automatically, out of working hours.



35% reduction of product delivery time compared to conventional solutions.



Magazine mapping is fully optimised thanks to the panel automatic handling managed by the system supervision software. The panel scissor pick-up mechanism enables installation in low-height areas, as well as supporting high system performance and guaranteeing optimal panel stability.



10% REDUCTION IN RAW MATERIALS COMPARED TO CONVENTIONAL PRODUCTION HANDLING METHODS.



The rotating panel pick-up system and squaring laser photocells optimise the magazine internal area, enabling the perfect alignment of the stack as well as correcting manual loading errors.

Waste reduction.



Greater efficiency of floor and storage space due to the management of multi-sized and multi-coloured stacks.

30% LABOUR REDUCTION.

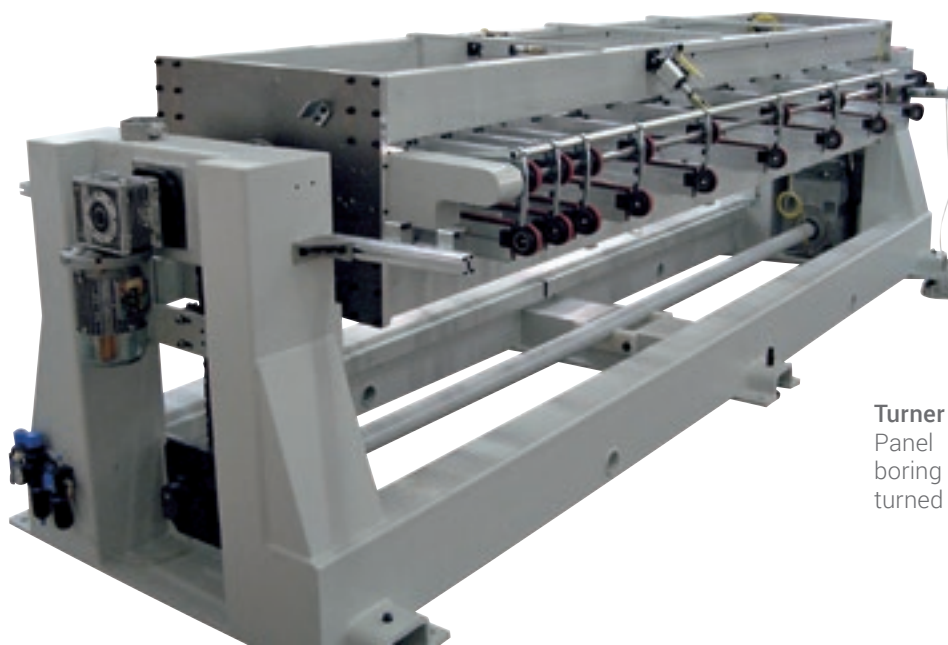
HIGH, CONSTANT PERFORMANCE



Turner PT

Turner PT panel turners are ideal for high-productivity square-edging lines. 90° rotation achieved using two padded, motorised inverter-controlled cones.

THEY ALLOW PROCESSING AND SYNCHRONISATION TIME BETWEEN THE FIRST AND THE SECOND RUN OF THE TWO SQUARING AND EDGEBANDING MACHINES ON THE LINE.



Turner OT

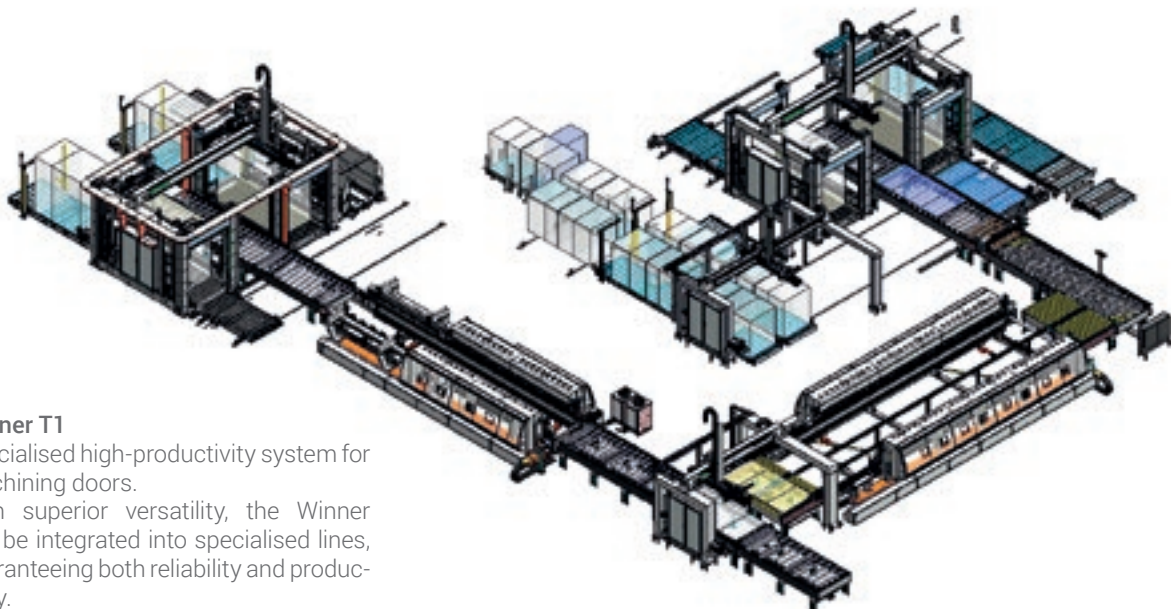
Panel transportation system for the boring process. It allows panels to be turned by 180°.

SPECIAL SOLUTIONS



Robot

High customisation of loading and unloading cells. Ideal for rail boring-insertion lines. Seamlessly integrated with CNC for the machining of doors with waste and strip management.



Winner T1

Specialised high-productivity system for machining doors.

With superior versatility, the Winner can be integrated into specialised lines, guaranteeing both reliability and productivity.

PRODUCTION LINES

COMPETITIVE CUSTOMISATION

Biesse Systems is a team of highly trained engineers for large scale production processes. Biesse Systems offers integrated cells and systems that are capable of maximising customer competitiveness by combining mass production techniques with a high degree of customisation to meet customers' exact requirements.

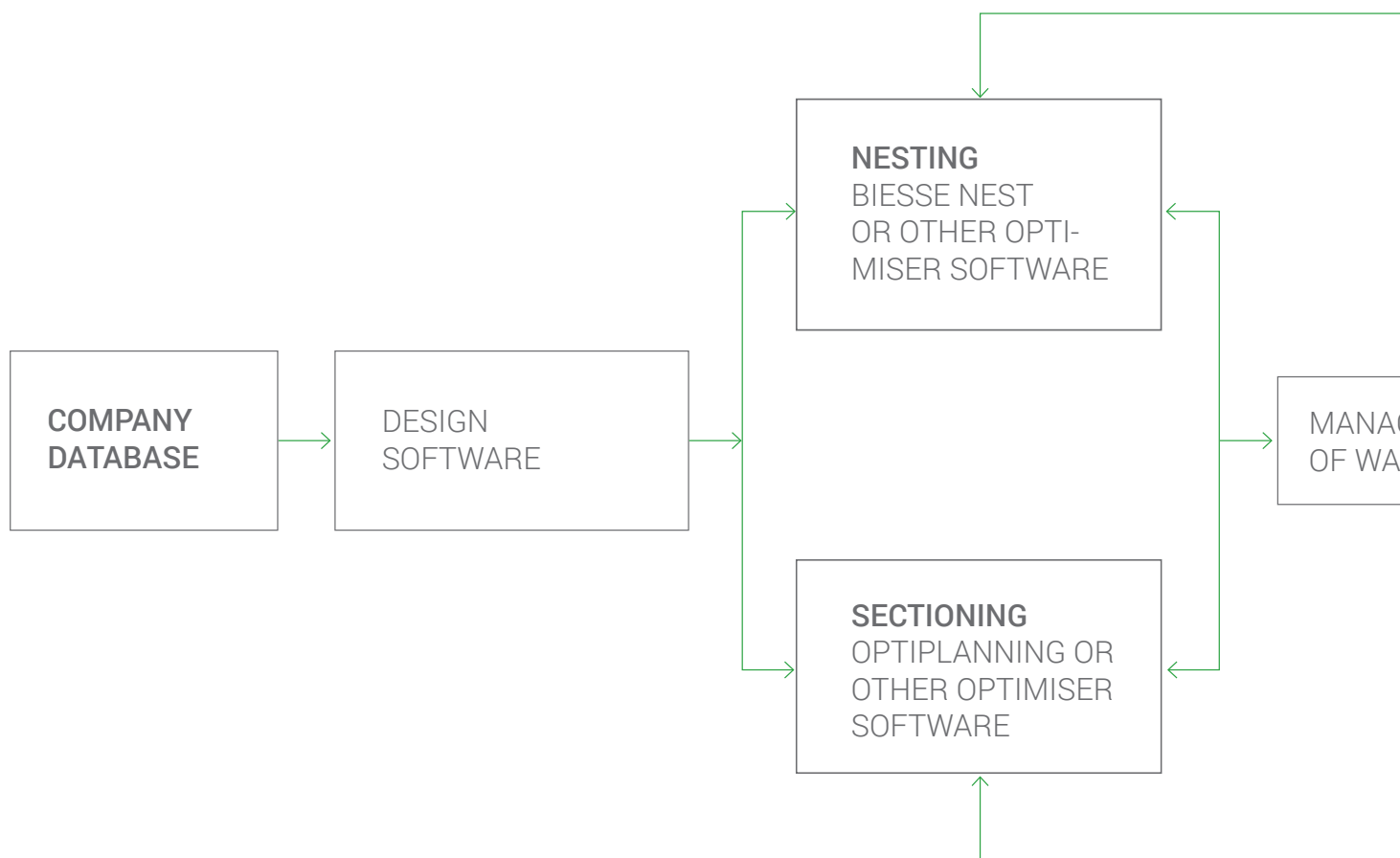
Made-to-measure turnkey factories, plus the integration of Biesse Group solutions with complementary software and machinery, with over 1000 systems installed worldwide.



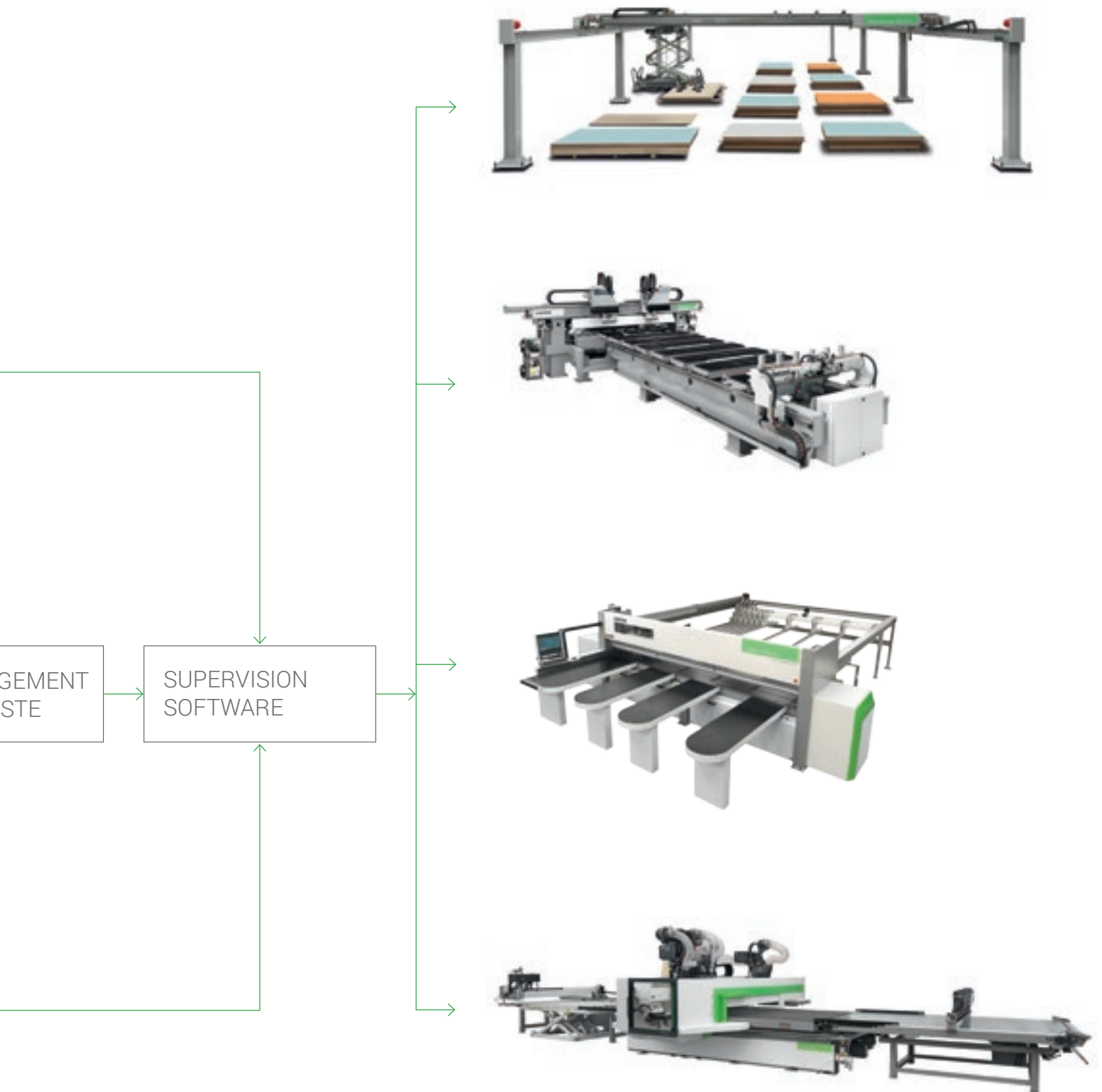
INFORMATION FLOW INTEGRATION

SUPERVISION SOFTWARE.

Biesse supplies an integrated software program for the management (handling, identification and labelling) of panels to be processed, as well as waste material and off-cuts which can be recycled for new products.



FULL INTEGRATION OF CELL SOFTWARE WITH PLANT ENTERPRISE MANAGEMENT SYSTEM.



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.



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

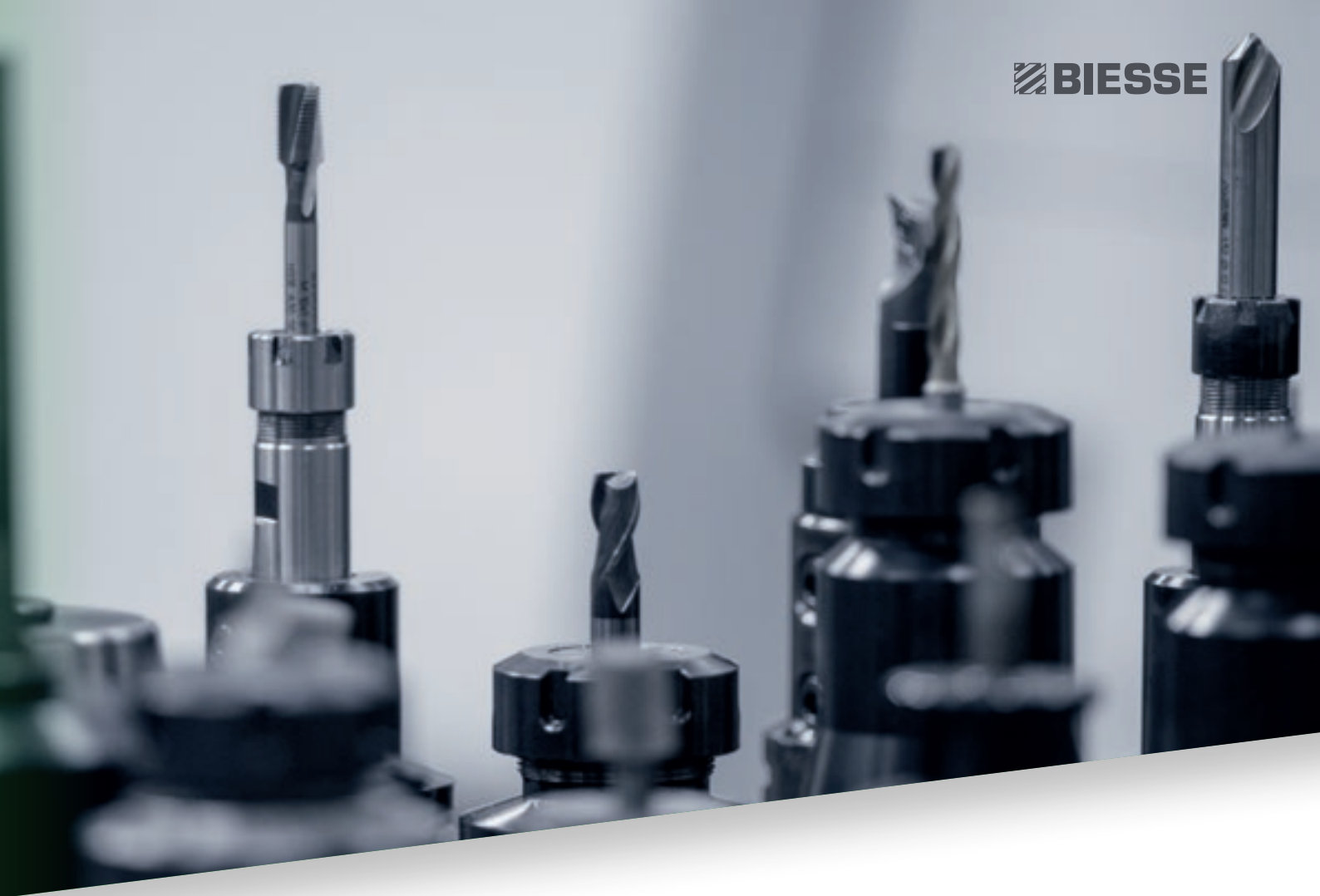
Biesse engineers manning a Teleservice Centre.

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 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 TECHNOLOGY SUPPORTS THE MANUFACTURING EFFICIENCY OF THE WORLD'S LARGEST FURNITURE MANUFACTURERS

"We were looking for a solution that would be so innovative that it would satisfy all our needs at the same time," states the manufacturing manager of one of the world's largest furniture manufacturers. "Most of our production was already made using numerical control tools, but now everything that we produce is made with these technologies. This is why it was necessary to increase our pro-

duction capacity. Biesse offered a solution that we liked very much, an authentic line of processing centres and automatic magazines. Innovative, fascinating and decidedly powerful. With Biesse we defined a "turnkey" solution to be planned, built, tested, installed, inspected and commissioned within a precisely defined schedule.

Source: excerpt from an interview with the manufacturing manager of one of the world's largest furniture manufacturers.

A photograph of a modern bedroom interior. The room features a bed with a patterned blanket, a desk with a chair, and a bookshelf. The walls are painted in warm tones, and there are large windows with red curtains. A green semi-transparent overlay covers the left side of the image.

BIESSE.COM

LIVE THE EXPERIENCE

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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.**



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