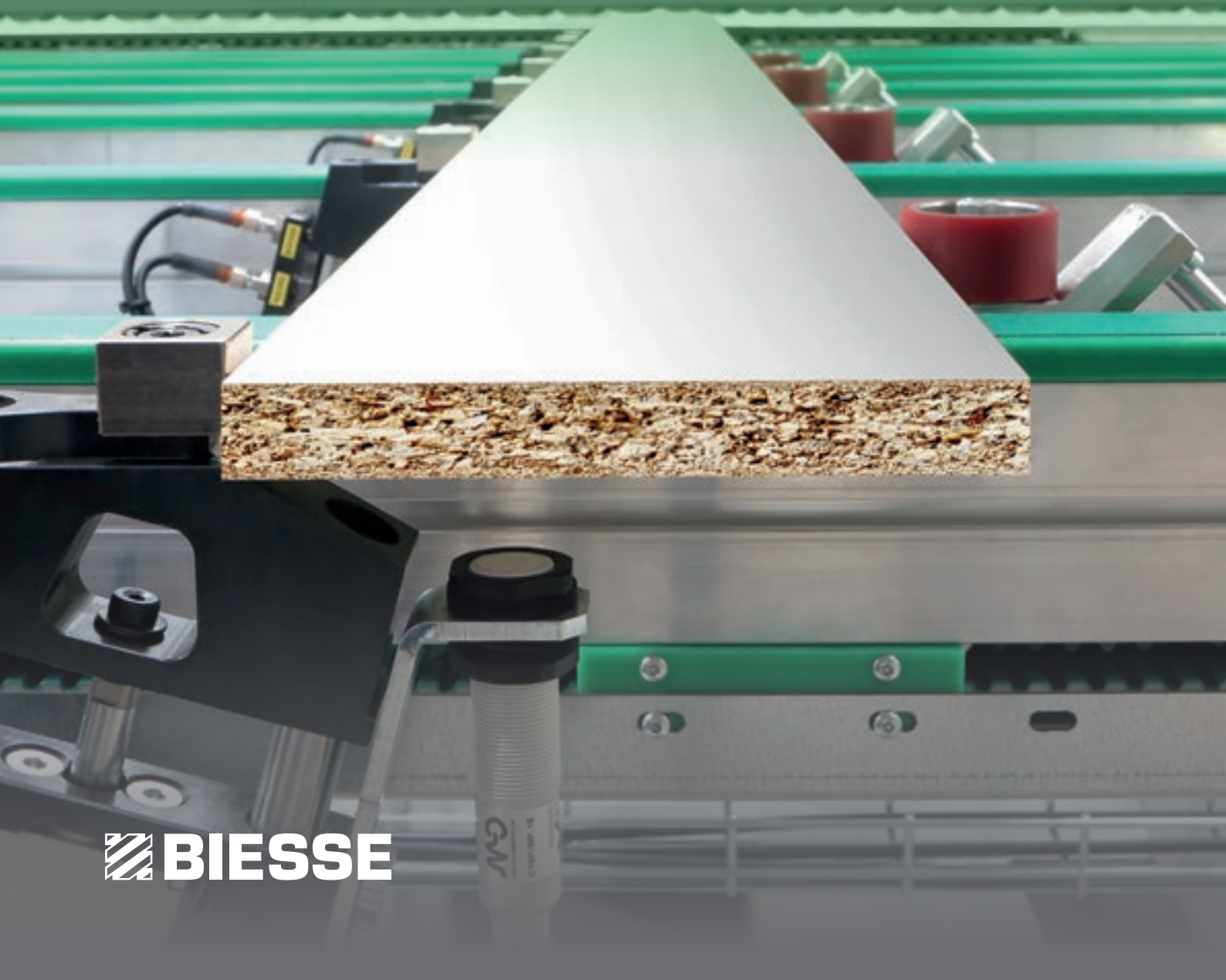


STREAM EAM B MDS

FLEXIBLE SINGLE-SIDED
SQUARING AND EDGEBANDING
MACHINES



 **BIESSE**

THE PERFECT COMBINATION OF FLEXIBILITY AND PRODUCTIVITY



THE MARKET EXPECTS

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 while offering product **customisation** with quick and defined delivery times, as well as responding to the needs of the most highly automated enterprises.

BIESSE MEETS

these requirements with **technologically advanced solutions** that enhance and support technical expertise as well as a knowledge of processes and materials. **Stream B MDS** is the ideal flexible single-sided squaring and edgebanding machine for small batches that meets the need for total flexibility of medium to large companies. It can be integrated into automatic production lines, guaranteeing increased productivity, squareness and finished panels of different shapes and sizes. Designed to minimize factory floor footprint, costs and impact, it allows users to perform Batch-one operations both simply and effectively.



STREAM B MDS

- ✓ EXCELLENT SQUARING QUALITY AND PERFECT MEASURING
- ✓ HIGH LEVEL OF FLEXIBILITY DUE TO PERFECT MANAGEMENT BY LINE SUPERVISOR AND BARCODE SYSTEMS
- ✓ MAXIMUM CUSTOMISATION WITH ENDLESS LINE SOLUTIONS
- ✓ PRODUCTION EFFICIENCY DUE TO AUTOMATIC PANEL LOADING AND UNLOADING SYSTEMS

EXCELLENT SQUARING QUALITY AND PERFECT MEASURING

Designed for the company that needs to diversify the production of small batches of panels according to market trends, the MDS (Measuring Dimensioning System) squaring module guarantees the same squaring quality as a squaring and edgbanding machine and is capable of continually processing both mixed batches of panels with different formats and mini-batches of panels with the same format.

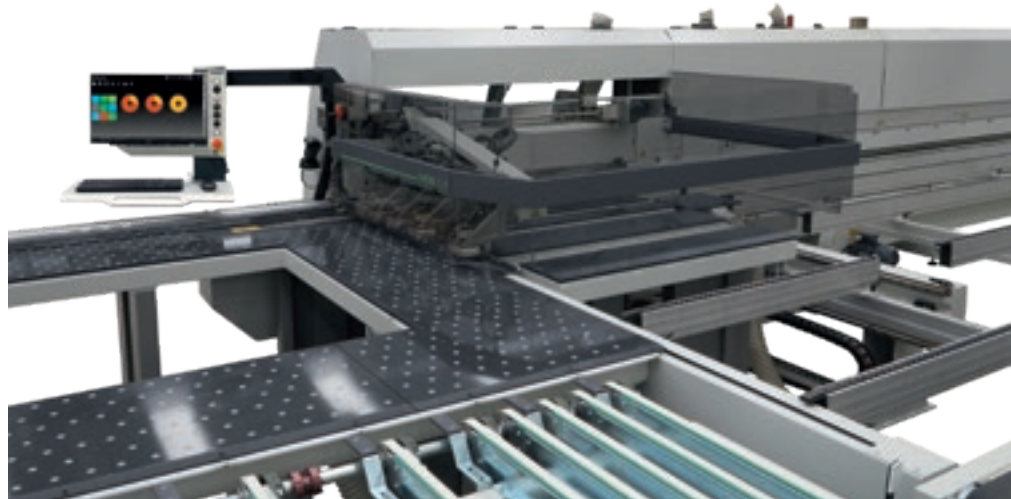


The external milling machine guarantees that the two longitudinal sides are perfectly parallel. The linear guides and brushless motor guarantee precise, real time positioning between one piece and another.



JUST ONE OPERATOR CAN CONTROL THE ENTIRE LINE BOTH IN THE MANUAL 1.1 AND AUTOMATIC 2.0 VERSIONS.

Stream B MDS 1.1 squaring module



Stream B MDS 2.0 squaring module

HIGH LEVELS OF FLEXIBILITY

Perfect management by line supervisor and barcode management.



The **line supervisor** controls the flow of material in the Stream B MDS and can see the state of the machine, the position and number of panels and the working processes in REAL TIME.

Quick control of work lists and possibility of selecting two different working operations:

- ✔ Batch-one
- ✔ Batches



With block control, the type of machine can also be changed for each panel in real time without reducing operating speed.



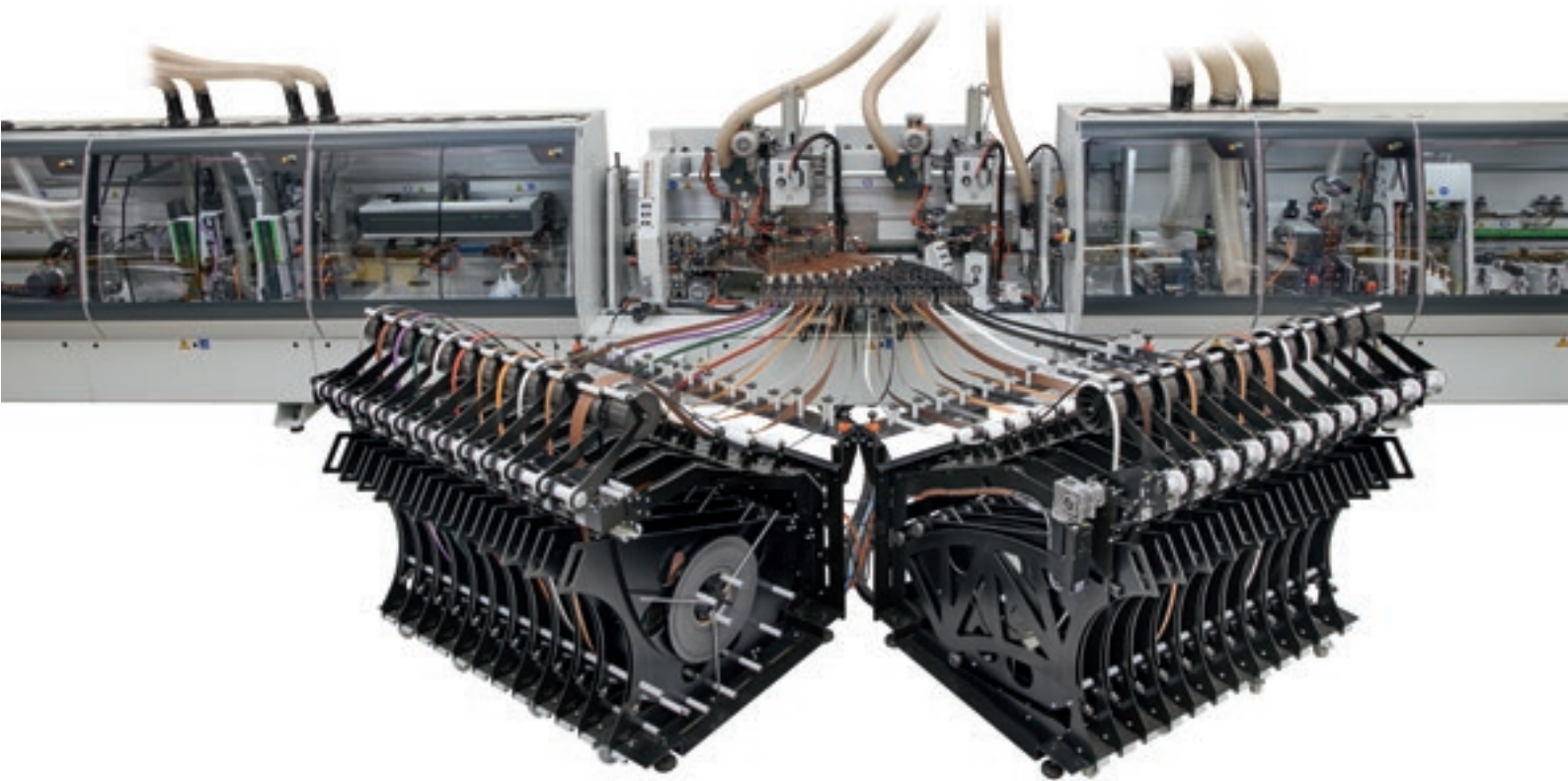
BAR-CODE management

Stream B MDS has a suite of programs and manual or fixed BARCODE (QR code or linear code) scanning systems that leave no room for error since they are able, in one scan, to provide all the information required for panel machining.



FLEXIBILITY AND PRODUCTIVITY

The Stream B MDS solution, both version 1.1 and version 2.0, is able to continuously produce sequences of panels of different sizes, materials and finishes.



The **gluing unit** guarantees outstanding flexibility thanks to its new Ergochange coil magazine designed to manage a considerable combination of edgeworking strips in an ergonomic manner. In addition, integration with the AFS system ensures unprecedented aesthetic results.



Minimal set-up times

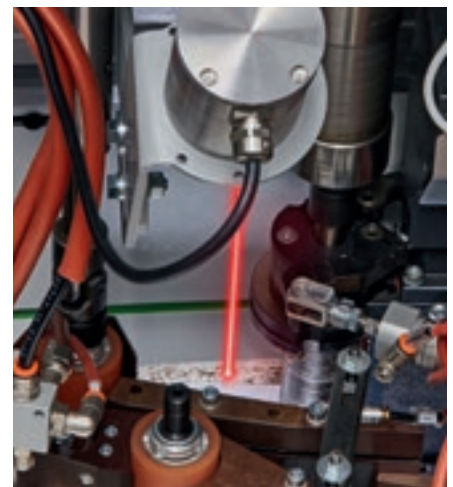
Thanks to the EMS device, the coil magazine can be managed with minimum set-up times and coil consumption can be monitored in real time.

APPLICATION OF EDGEBANDING STRIPS OF ANY SIZE

Biesse gluing units are designed to ensure optimum adhesion of the edgelanding strip. They provide top quality results with every type of glue available on the market. Maintenance is simple and can be carried out by anyone, to ensure maximum reliability over time.



To obtain the maximum flexibility and productivity, the machine can be configured with two chucks and two pre-melters.



Technology for gluing quality and reliability:

- ✔ Adjustment of the amount of glue via the NC
- ✔ Heat Control: system for measuring the temperature of the glue applied to the panel



New integrated glue melting system: **TM30 pre-melter for PUR glue with EVO15 glue head.**

- ✔ Technology and reliability
- ✔ Easy use and maintenance
- ✔ Flexibility of use
- ✔ High performance and productivity rates

FIRST CLASS TECHNOLOGY TO MEET THE NEEDS OF FLEXIBILITY AND 24/7 PRODUCTIVITY.



AR90 electronic rounding device

Completes the head and tail of the panel. Designed to work in Batch One conditions:

- ✔ Linear motors to manage extreme speeds and trajectories and to minimize maintenance
- ✔ Sliding contacts to avoid having to rewind the chuck and to guarantee top productivity
- ✔ Real time radius change
- ✔ Unprecedented finishing quality with all the edges available on the market



Dynamic control of copying on the panel, to ensure excellent machining repeatability.

UNBEATABLE FINISHING QUALITY

The corner cutting unit and edge scraper are finishing units that guarantee excellent machining repeatability thanks to the real-time management of the panel thickness.



New RF50 corner cutting unit

Top quality thanks to the high-frequency motors (up to 24,000 rpm) and the braze-welded diamond mills with HSK coupling. The 7 axes are managed via the NC and allow the tools and copiers to be adapted to even minimum size variations in the panel and edgbanding strip.



New RB50 edge scraper

Maximum flexibility thanks to the tool with five different profiles, able to work any edgbanding strip thickness from 0.5 to 3mm.

The "chip detacher" system integrated in the suction hoods guarantees optimum reliability during scraping operations.

The 7 axes are managed via the NC and allow the tools and copiers to be adapted to even minimum size variations in the panel and edgbanding strip.

New RC40 glue scraper

The removal of excess glue is managed via the NC, allowing the tool to be adapted to every panel surface and guaranteeing an optimum finish even with the most difficult materials such as High Gloss, and with structured panels.

**FE 60 external milling unit**

The external milling unit offers great flexibility, producing grooves on the lower surface of the panel at differing distances from the edge.



AIR FORCE SYSTEM

INVISIBLE EDGEBANDING

No joints and no glue line, in perfect harmony with the panel.

AirForce System, available on Biesse edgebanding machines, is based on the physical principle of convection. By using a compressed hot air system, the edge bonds perfectly with the panel guaranteeing resistance to water and heat and an excellent long lasting quality finish.



HIGH PRODUCTIVITY OF UP TO 600 PIECES PER SHIFT



STREAM B MDS 1.1

In version 1.1, designed to meet average production requirements 600 pieces per shift, the operator has all the necessary supports for carrying out the sequences without excessive workloads. The multi-belt systems and air cushion surfaces allow the pieces to be moved, loaded and unloaded without any physical strain.



PERFECT SQUARE-EDGING IN 4 STEPS



Step 1

In Step 1 the panel is milled on the two longitudinal sides to guarantee that they are perfectly parallel. The inner side is edgebanded.



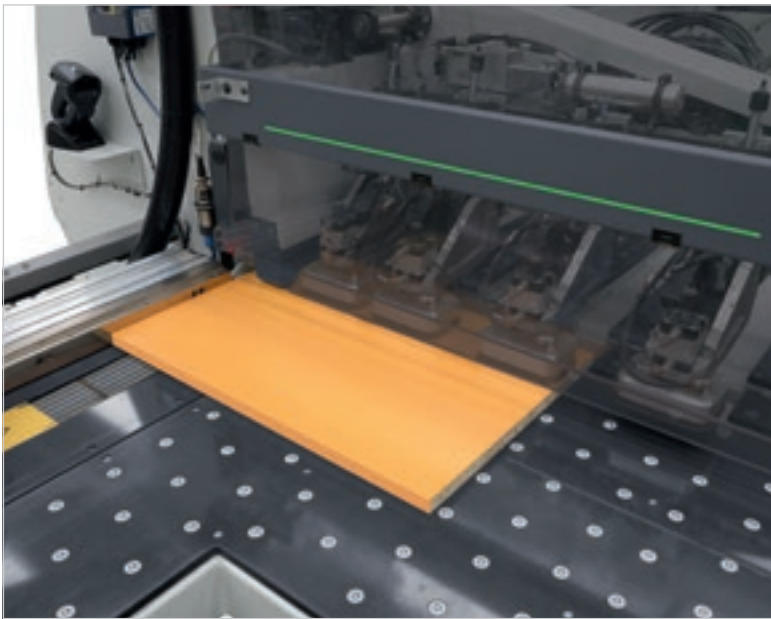
Step 2

In Step 2 the panel is edgebanded on the second longitudinal side. The external milling machine is lowered so that the panel can rest on it.



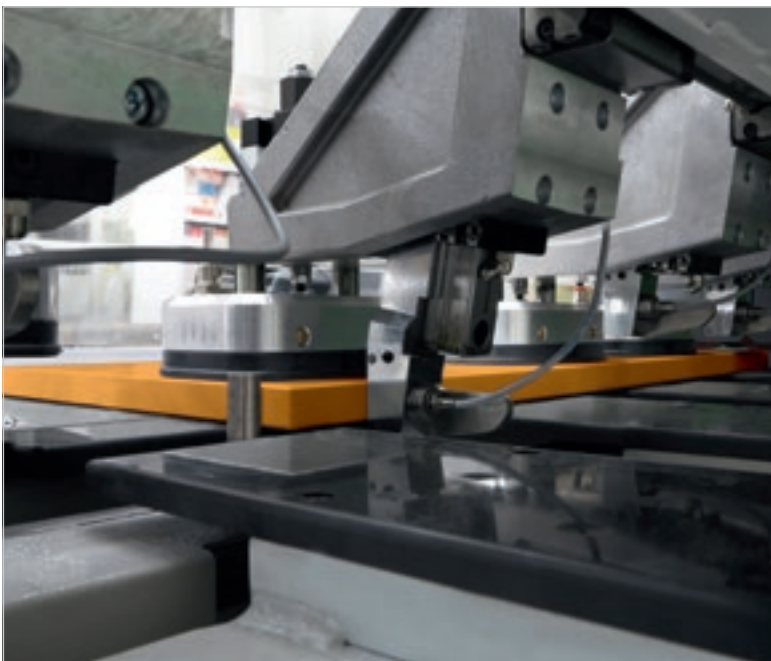
Step 3

In Step 3 the mechanical arm guides the panel using stops and suction cups to guarantee perfect 90° squaring of the first transversal side.



Step 4

In Step 4 the mechanical arm guides the panel using stops and suction cups to guarantee perfect 90°deg squaring of the last transversal side. Patented thickness tracer system for measuring and positioning the piece so that the final size of the panel can be machined.

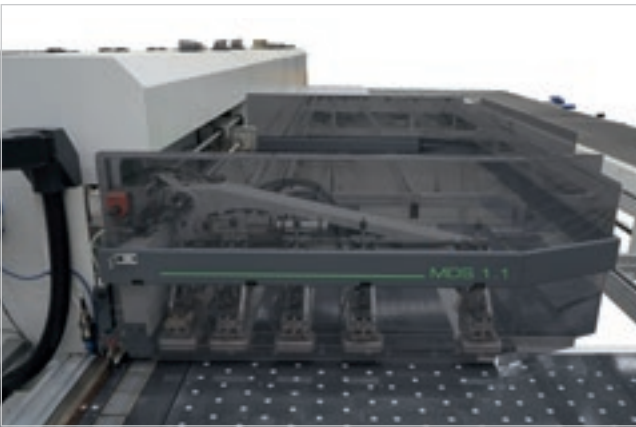


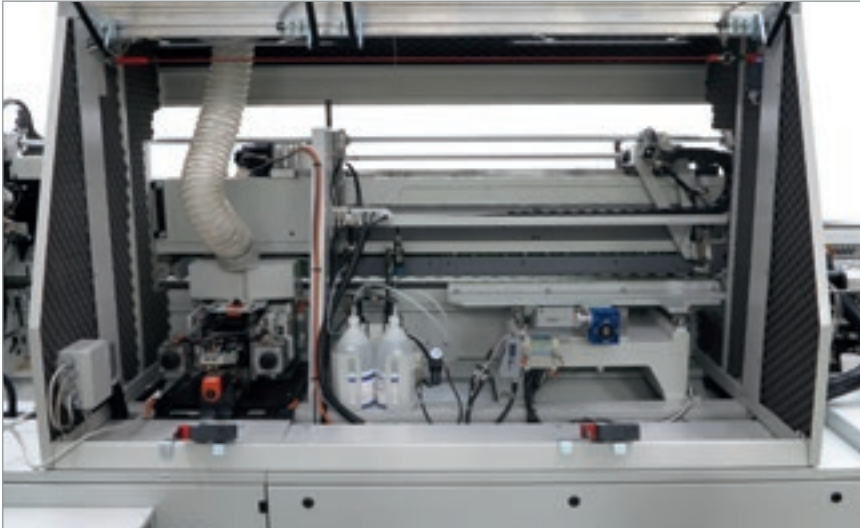
RAPID, PRECISE INSERTION OF PANELS

The manual loading Stream B MDS 1.1 is a perfect combination of streamlined control and production efficiency. Its air cushion surfaces and mechanical arm make the loading of panels, even large ones, quick and precise.



The mechanical arm ensures that the panel is easily inserted and squared.

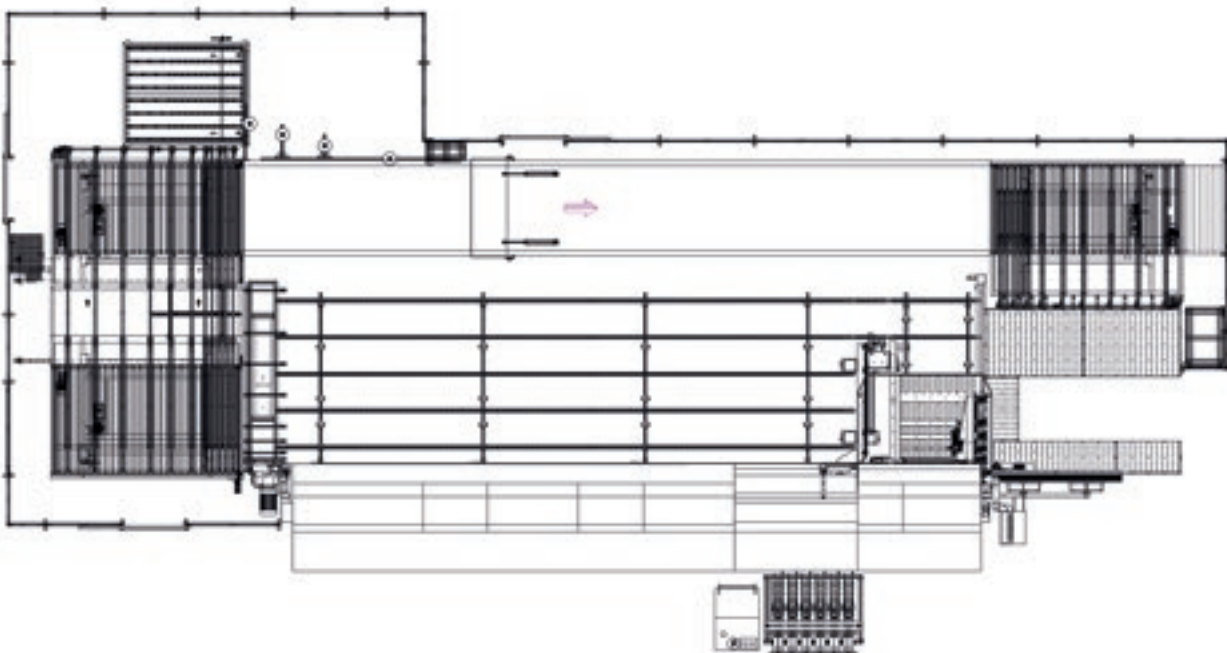




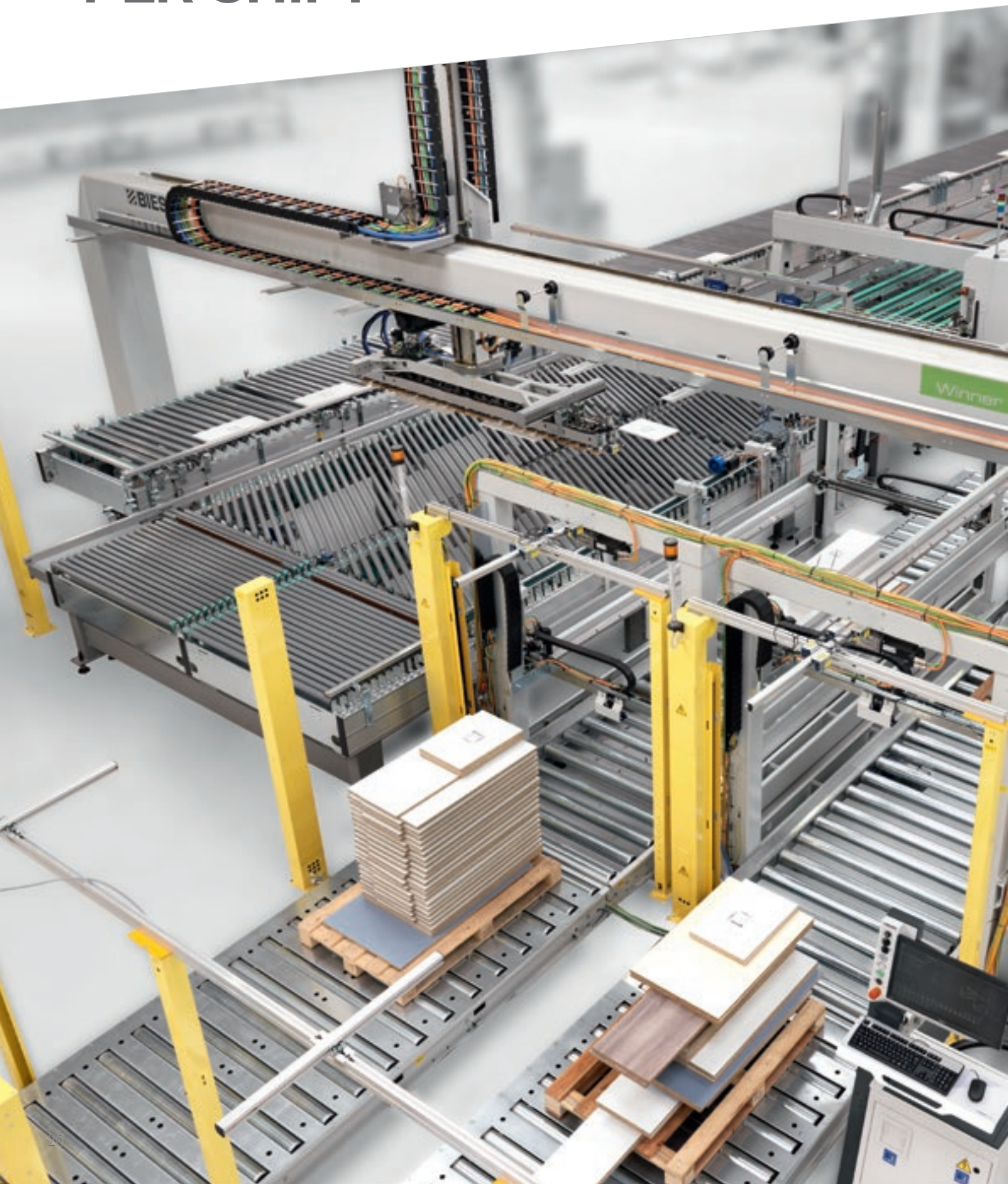
The squaring module consists of an insertion area that ensures that the panel enters the machine perfectly.

The high precision brushless motor system and the pressure wheels guide the panel towards the squaring area.

Stream B MDS 1.1 with PRS EVO panel return system



MAXIMUM PRODUCTIVITY OF UP TO 1200 PIECES PER SHIFT





Stream B MDS 2.0 is designed to be operated both automatically and manually. Robots, loaders or any other interlock system can be easily integrated in this version of the machine.

Depending on the type of movement used, Stream B MDS 2.0 can produce up to 1200 pieces per shift.

STREAM B MDS 2.0

PERFECT SQUARE-EDGING IN 4 STEPS



Step 1

In Step 1 the panel is milled on the two longitudinal sides to guarantee that they are perfectly parallel. The inner side is edgebanded.



Step 2

In Step 2 the panel is edgebanded on the second longitudinal side. The external milling machine is lowered so that the panel can rest on it.



Step 3

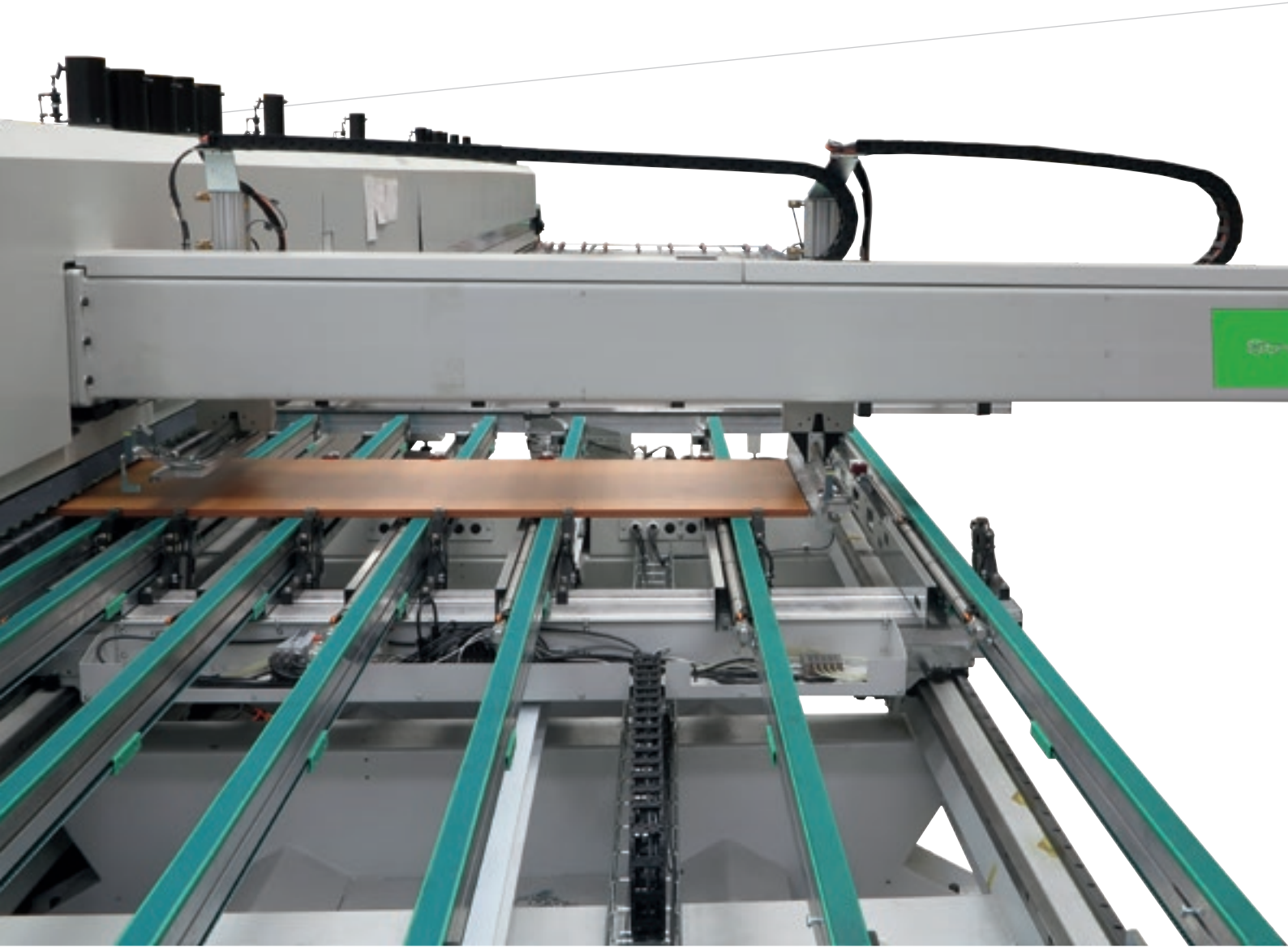
During the third movement, the pushing device with the bolts and contrast wheels, plus the side guide, guarantees perfect 90° squaring of the first transversal side.



Step 4

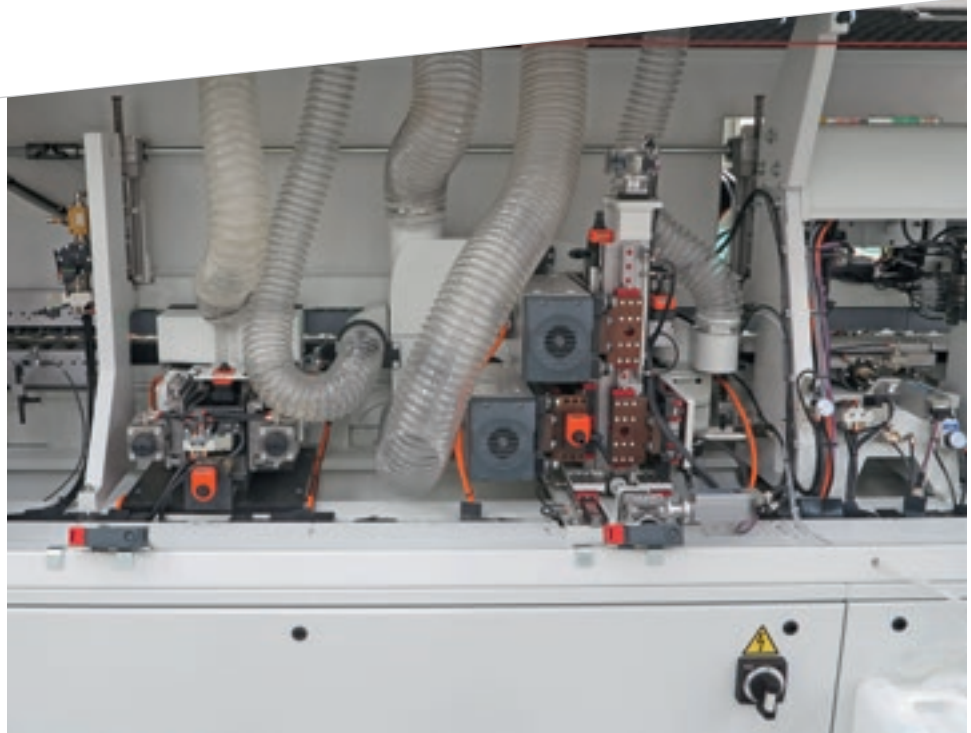
During the fourth movement, the pushing device with the bolts and contrast wheels, plus the side guide, guarantees perfect 90° squaring of the second transversal side and brings the panel to the right size.

CAN BE FULLY CUSTOMISED TO MEET REQUIREMENTS



The Stream B MDS 2.0 edgebander with automatic insertion system represents the maximum concept of flexibility and automation. It can be integrated with a semi-automatic or fully automatic loading.

The squaring module consists of an insertion area that ensures the panel enters the machine perfectly.



The multi-zone guide system, high precision brushless motor and multiple pressure system drastically reduce the space between panels and increase productivity.



Batch-one Line with flexible Stream B MDS 2.0 squaring and edgeworking machine integrated with Nextstep cell, Robot and Insulating machine.


ENDLESS LINE SOLUTIONS

Stream B MDS 2.0 with automatic unloading system with Winner W1.



Stream B MDS 2.0 with automatic loading and unloading system with Winner W1.





Stream B MDS 2.0 with automated unloading system with Winner W1.

FLEXIBILITY FOR SMALL BATCHES

A single project based on various machines and processes, with one important production target. A wide range of Biesse solutions ranging from cutting to flexible boring, with special attention paid to the piece squaring quality.

The batch-1 process on Stream B MDS 2.0 allows the user to process small groups of different panels in sequence according to the specific production requirements, with zero set-up time and maximum production optimisation (for up to 1200 pieces per shift).

AUTOMATED SOLUTIONS

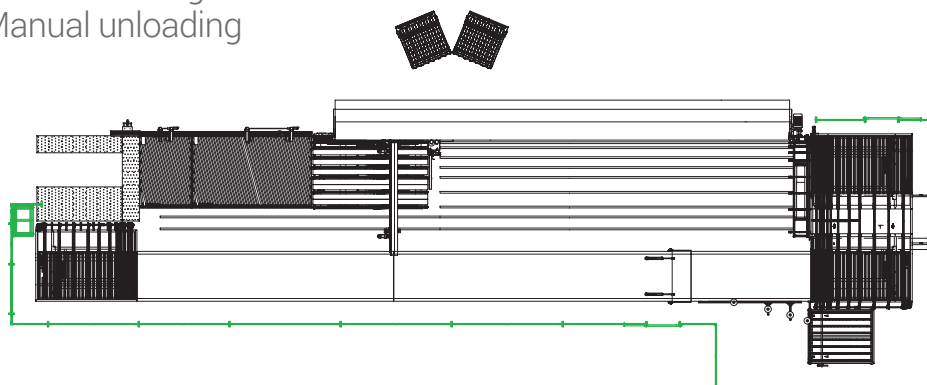
For customised loading and unloading that meets the customer's needs



VARIOUS LAYOUTS
AVAILABLE:

LAYOUT 1

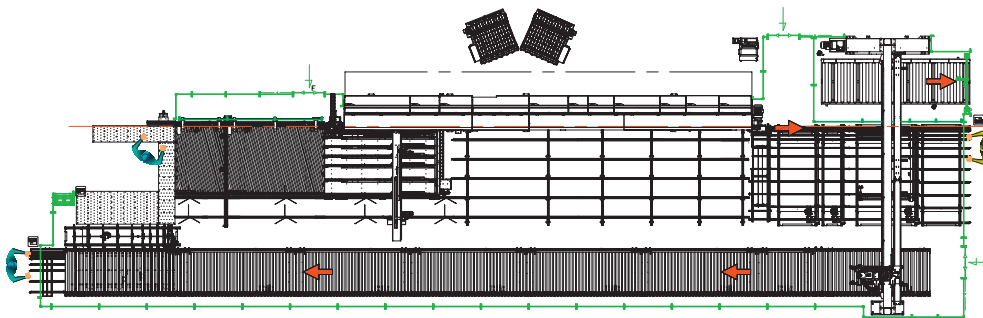
Manual loading
Manual unloading



BIESSE SQUARING AND EDGEBANDING MACHINES ARE DESIGNED AND BUILT TO WORK IN FULLY-AUTOMATED, INTEGRATED LINES, FOR 24/7 WORKLOADS.

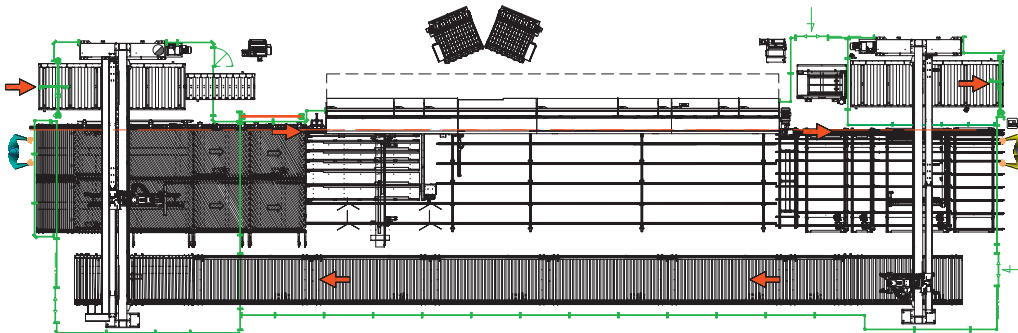
LAYOUT 2

Manual loading
Automatic unloading Winner W1



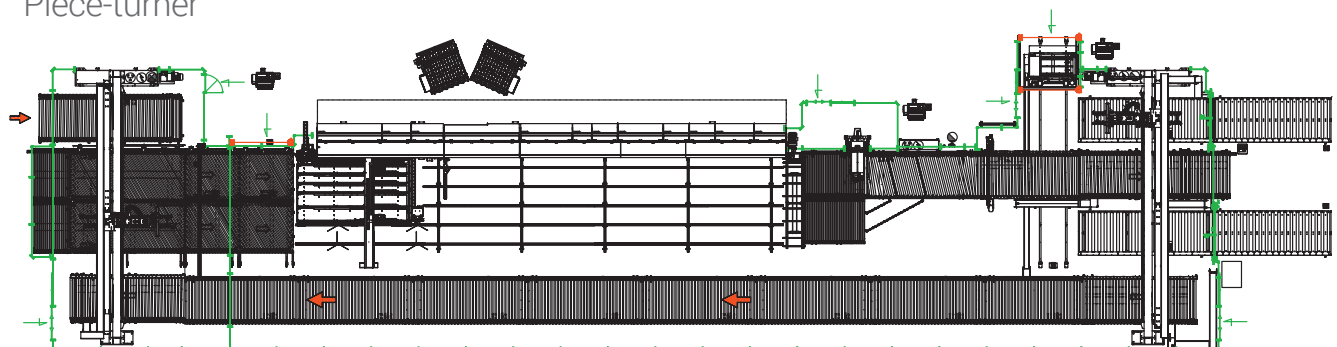
LAYOUT 3

Automatic loading W1
Automatic unloading W1



LAYOUT 4

Automatic loading W1
Automatic unloading W1
Piece-turner



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**

CUSTOMER CARE IS WHO WE ARE

SERVICES is a new experience for our customers, to offer not just excellent technology but the added value of an increasingly direct connection with the company, the professionals who work there and the experience they embody.



ADVANCED DIAGNOSTICS

Digital channels for remote interaction online 24/7. Always ready to intervene on-site seven days a week.



A WORLDWIDE NETWORK

39 branch offices, over 300 certified agents, retailers in 120 countries, and spare parts warehouses in America, Europe and the Far East.



SPARE PARTS AVAILABLE IMMEDIATELY

Identification, shipping and delivery of spare parts for every need.



EVOLVED TRAINING OPPORTUNITIES

Lots of on-site, online and classroom training modules for personalised growth.



VALUABLE SERVICES

A wide range of services and software packages to help our customers achieve continuous improvements in performance.

AN EXCELLENT LEVEL OF SERVICE

+550

HIGHLY SPECIALISED
TECHNICIANS AROUND
THE WORLD, READY TO HELP
CUSTOMERS WITH EVERY
NEED

90%

OF MACHINE DOWN CASES
WITH RESPONSE TIME
UNDER 1 HOUR

+100

EXPERTS IN DIRECT
CONTACT THROUGH
REMOTE CONNECTIONS
AND TELESERVICE

92%

OF SPARE PARTS ORDERS
FOR MACHINE DOWNTIME
PROCESSED WITHIN 24
HOURS

+50.000

ITEMS IN STOCK IN THE
SPARE PARTS WAREHOUSES

+5.000

PREVENTIVE MAINTENANCE
VISITS

80%

OF SUPPORT REQUESTS
SOLVED ONLINE

96%

OF SPARE PARTS ORDERS
DELIVERED IN FULL ON TIME

88%

OF CASES SOLVED WITH
THE FIRST ON-SITE VISIT

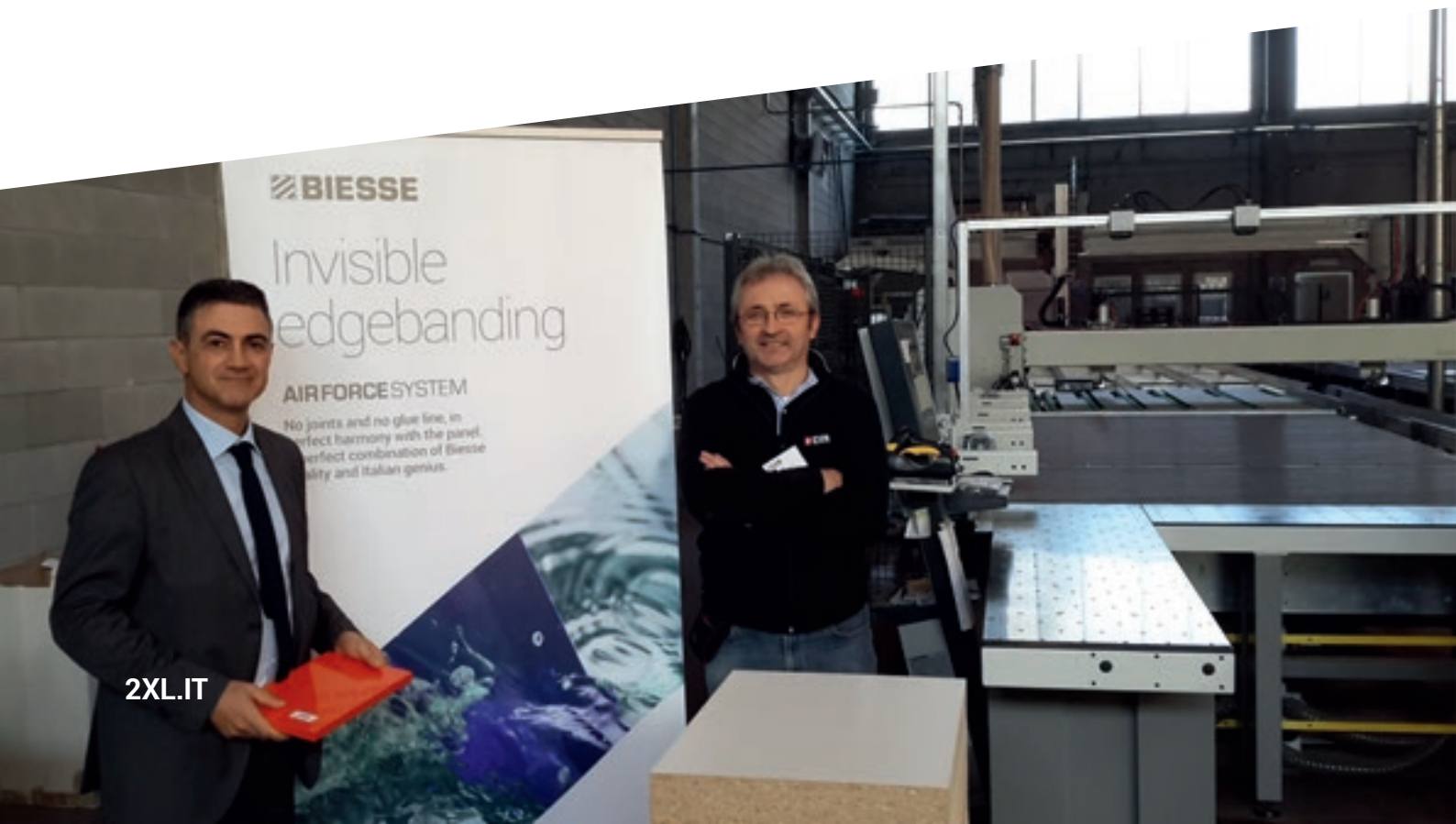
MADE WITH BIESSE

2XL, PRACTICAL EVOLUTION

Numerous companies have begun their evolution path towards the 4.0 factory by adopting MDS Biesse solutions. One particularly significant example is 2XL. This Brescia-based company started out as a distributor of panels, glues, accessories and other materials for producing furniture items that were supplied as semi-finished. Over time, customers' requests and the constructive approach of 2XL management, aiming to serve the market in the best possible way, ensured that

the company's supplies evolved in the direction of semi-finished items already edgebanded and bored; in other words, components ready to be assembled as part of modern furnishings. Clientèle segmentation and requests for one-to-one solutions, with extremely fast delivery times, guided the set-up of new production departments, in particular for the edgebanding phase. With this in mind, Biesse has designed and built an MDS 2.0 cell interlocked by an automatic system with BAR-CODE identifica-

tion of the piece. In this way, production can include very different mixes and can be completed in a very short time-span, ensuring quick, prompt delivery - a real plus factor that makes 2XL stand out on the market. The evolution of its range has also raised quality standards at the same time. In fact, Stream B MDS guarantees geometries that are highly precise in terms of format and it uses the Air Force System (a technology that joins the edgebanding strips to the panel with an invisible glue line).



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

