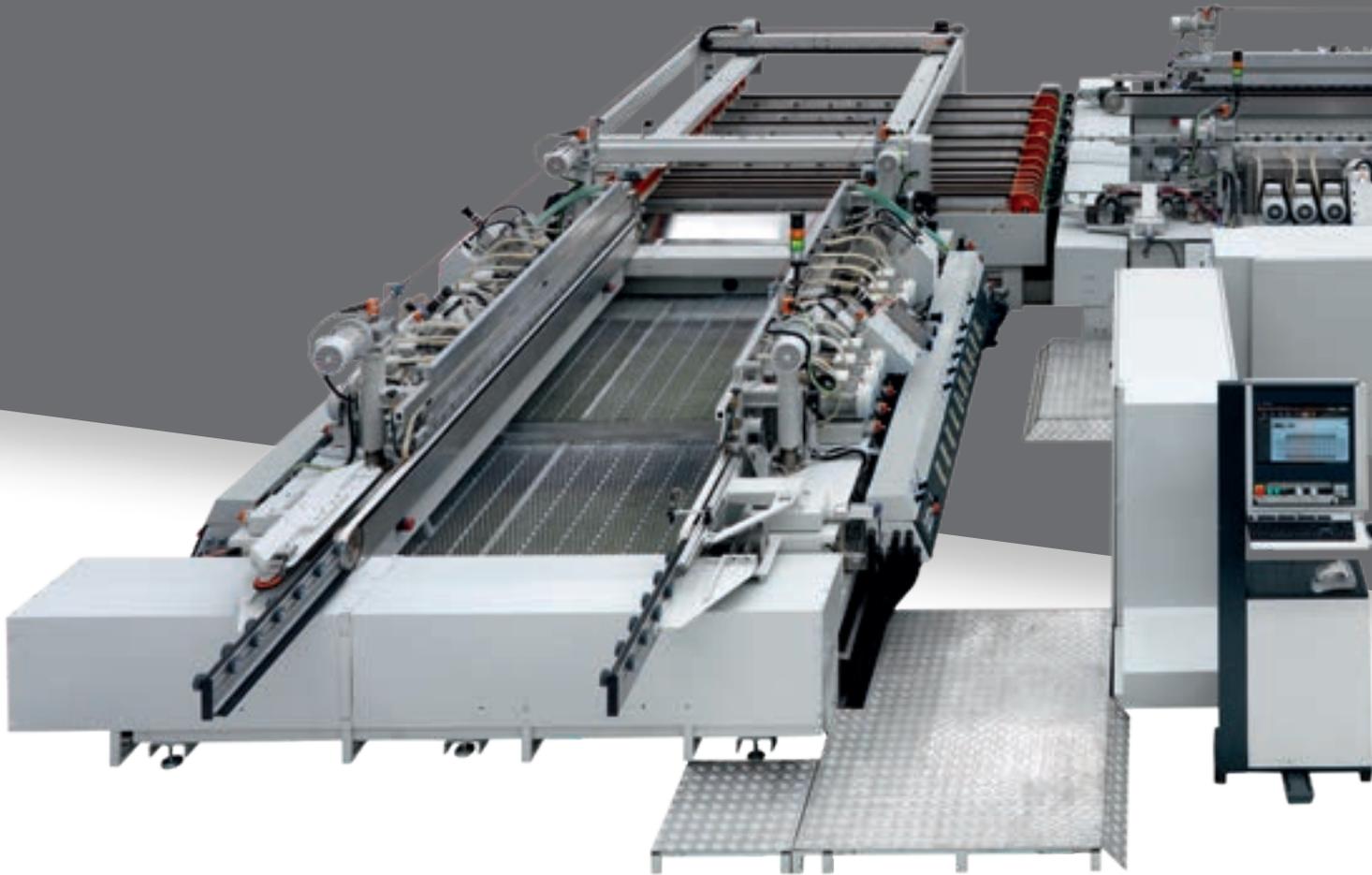


# BUSSE TTI F SERIES

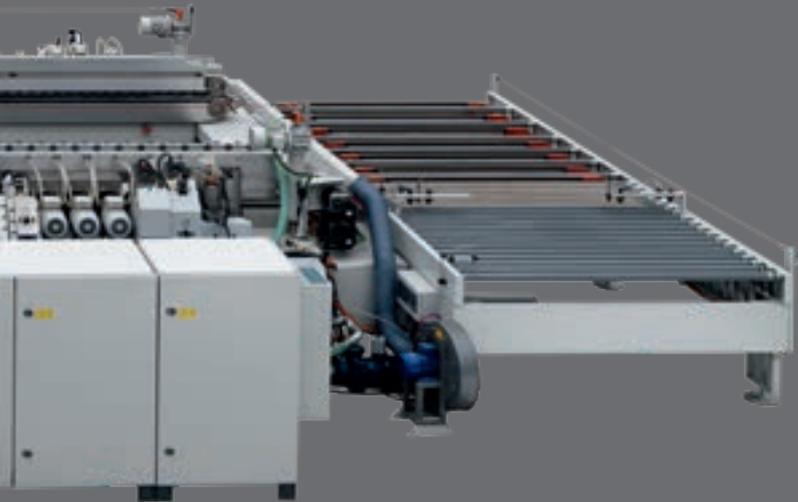
CNC MACHINES AND SYSTEMS  
FOR THE DOUBLE-EDGE GRINDING  
OF SINTERED AND NATURAL MATERIALS

# TECHNOLOGICAL EXPERIENCE



**Busetti F** is a range of double-edger grinding machines for perfectly processing natural, sintered and synthetic materials with a thickness of 3-40mm. It produces a rough or polished finish on the edges of rectangular sheets, processing two sides of the sheet simultaneously.

The Busetti range guarantees reliable, personalised solutions that offer the highest quality and precision along with total flexibility, with minimum operator intervention.



## **BUSETTI** F SERIES

- ✓ RESULTS OF THE MAXIMUM QUALITY AND PRECISION
- ✓ HIGH LEVELS OF FLEXIBILITY FOR "JUST IN TIME" MANUFACTURING, AND MAXIMUM PRODUCTIVITY IN PLANTS
- ✓ LONG-TERM RELIABILITY
- ✓ MECHANICAL AND ELECTRONIC TECHNOLOGIES THAT ARE UNIQUE IN THEIR FIELD
- ✓ WIDE RANGE OF BUILD CONFIGURATIONS AND CUSTOMISATION OPTIONS
- ✓ PERFECT SQUARING OF THE SHEET, THANKS TO THE POSSIBILITY TO PROCESS ALL 4 SIDES.

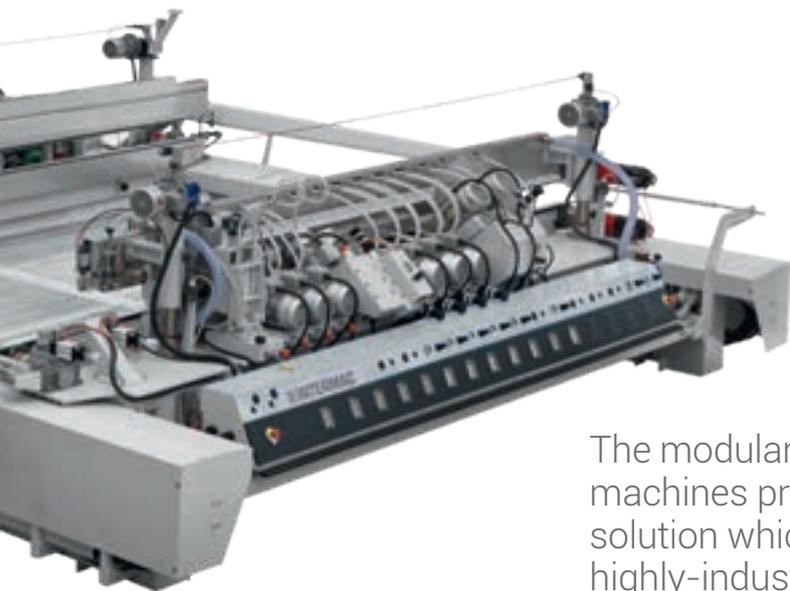
# BUSETTI F SERIES: MAXIMUM FLEXIBILITY AND PRODUCTIVITY

The Busetti F range is the ideal solution for indoor features (facing), kitchen tops, construction (ventilated façades, staircases, door/window sills). By processing the two sides of the sheet simultaneously in one single step, performance and productivity are greatly enhanced compared with the traditional single-side method.



Thanks to 30 years of experience in the cutting, machining and transformation of marble, granite, quartz and other stone materials, Biesse has skilfully used its know-how and experience, adapting cutting-edge technology developed in the glass sector to the world of glazed stoneware and the latest sintered materials.

The recent production of glazed stoneware sheets, even of very large sizes, has given Biesse the chance to offer specific, high-performance solutions for the finishing of edgebanding strips and/or sheets, thanks to double-edging grinding lines that guarantee extremely high productivity and a secure return on investment.



The modular design of this range of double-edging machines provides customers with a bespoke solution which boasts all the advantages of a highly-industrialised product.



Flat edge with inserts.



Flat edge with increased 45° chamfer.

# MAXIMUM PERFORMANCE FOR CUSTOMISED SOLUTIONS

Innovative solutions, even in terms of automation, make the production line flexible and highly productive, for small batches (batch-one production) and different thicknesses.

The F series of double-edging machines can also be used in stand-alone configuration.

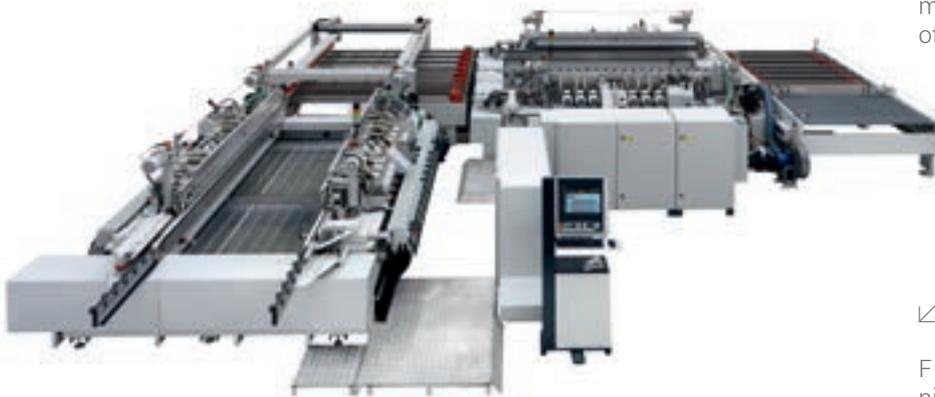


Stand-alone F range, with loading and unloading pallets.

Thanks to the possibility to personalise the line with loading and unloading solutions, Busetti F ensures optimum piece machining automation with the minimum operator intervention.



U line which can be equipped with both manual and automatic loading and off-loading systems.

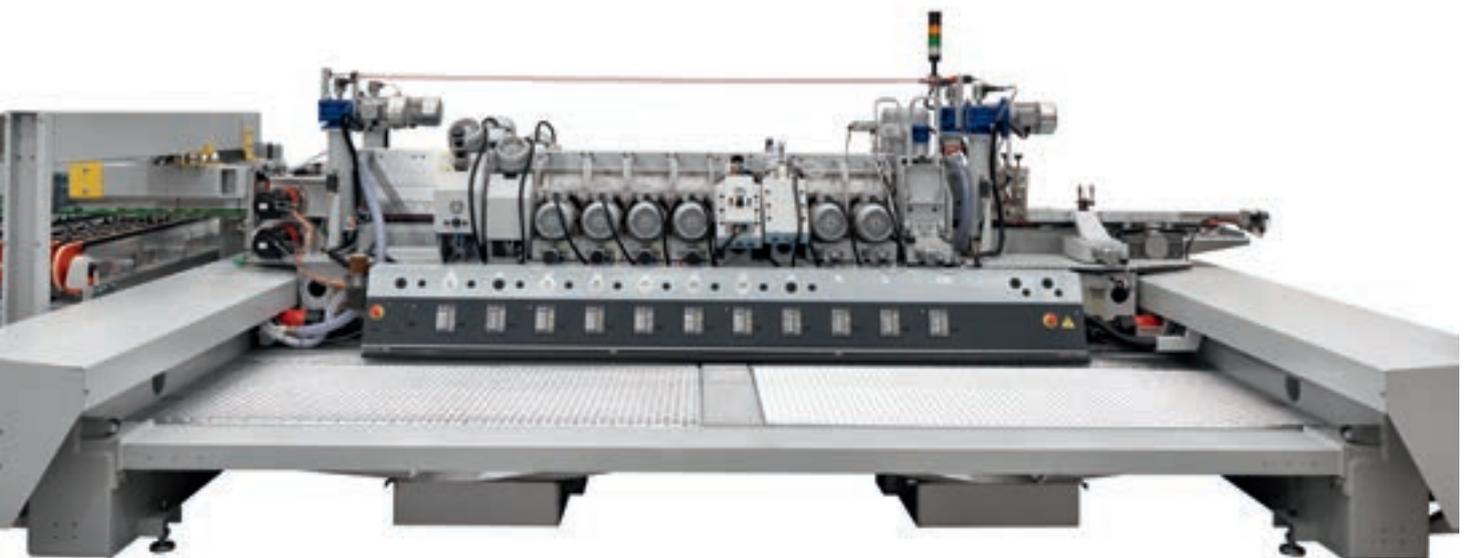


F series reverse line, ideal for companies with limited space.



# MAXIMUM QUALITY AND PRECISION OF RESULTS

The highest precision of machining is guaranteed through the use of highly technological materials and technical solutions that ensure reliability and sturdiness over time.



Basement with external guides to keep the guides away from the water, and to improve stability when moving the movable crosspiece, an essential element for ensuring maximum squaring precision on both small and large sheets.



The inlet glass aligning units help the operator to position the glass correctly in the machine, thanks to a proper length of the glass inlet area.



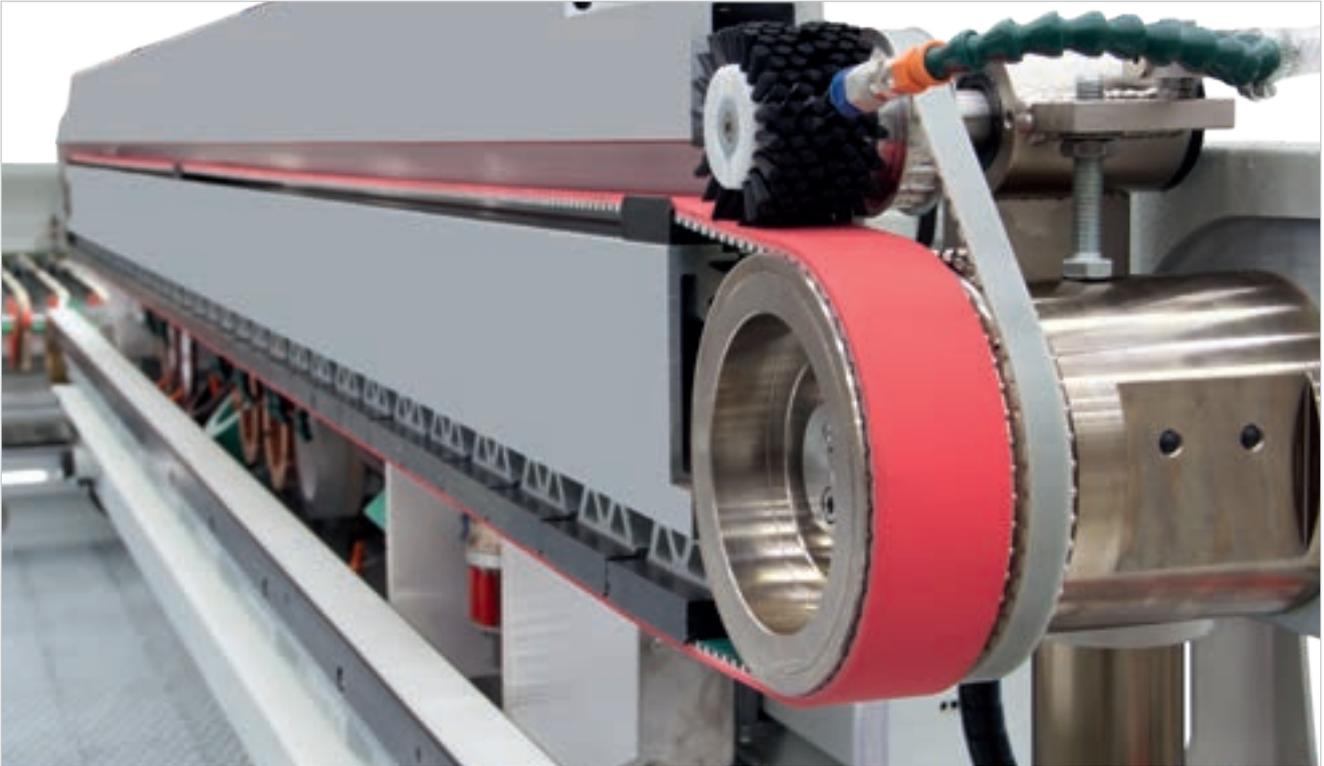
The crosspieces are designed to keep the water away from the spindle movement slides, while their robustness guarantees the utmost reliability and vibration-free grinding.

**Fluidity and high speed in the cross-bridge movements ensure minimal set-up times. Absolute absence of vibration even in the most demanding workings thanks to the solidity of the basement structure.**



High-stability, super-low maintenance sheet clamping system, with a transport belt that slides on plastic runners and rubber pressers.

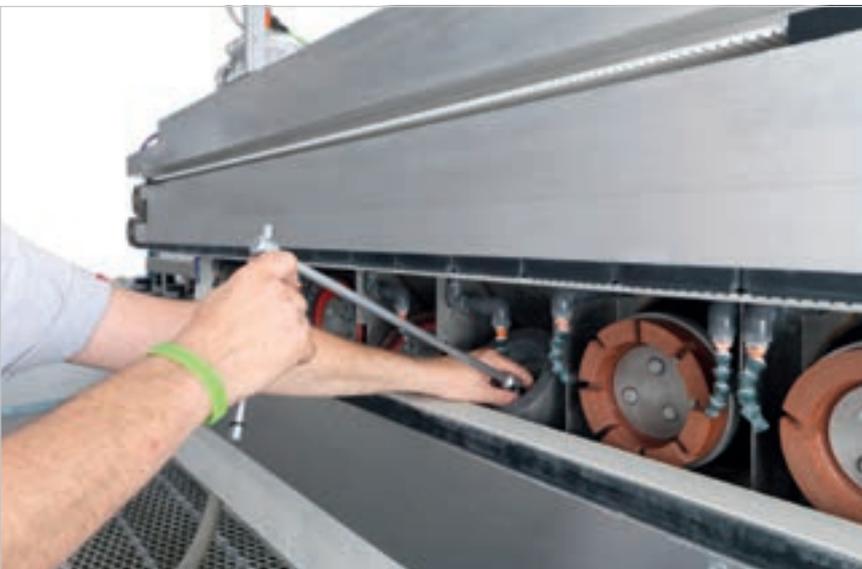
This system provides an excellent clamping of the glass thanks to its large contact surface and it allows the replacement of worn parts only.



## MINIMAL SET-UP TIMES



The simplicity and accessibility when changing the grinding wheels has been optimised, thanks to the possibility to raise the upper presser.

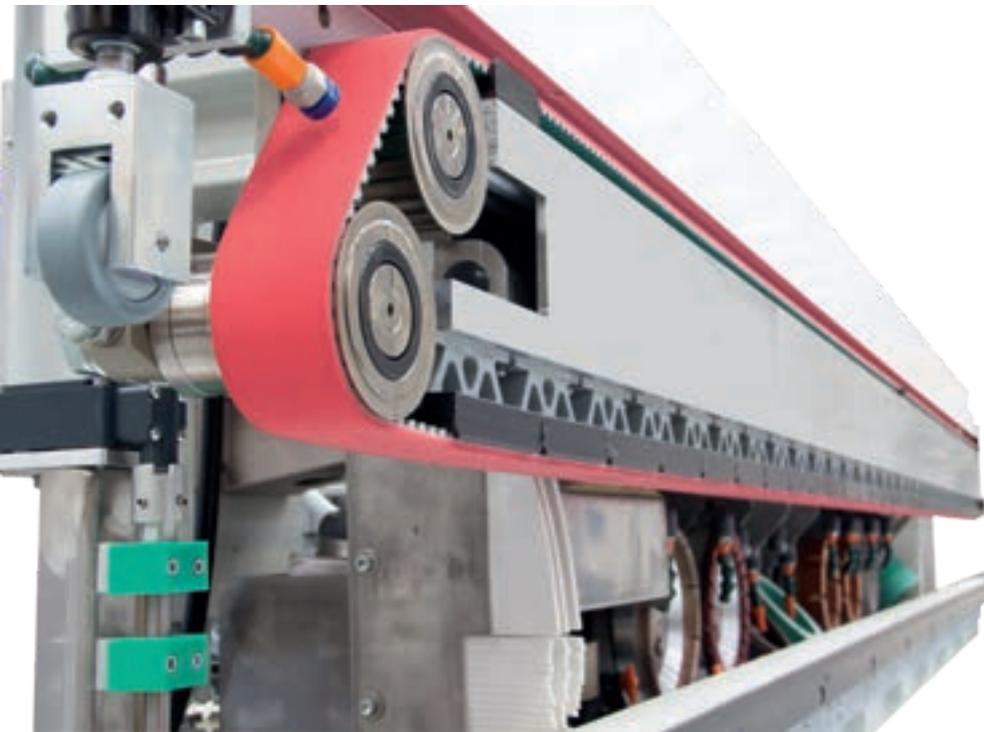


# LONG-TERM RELIABILITY

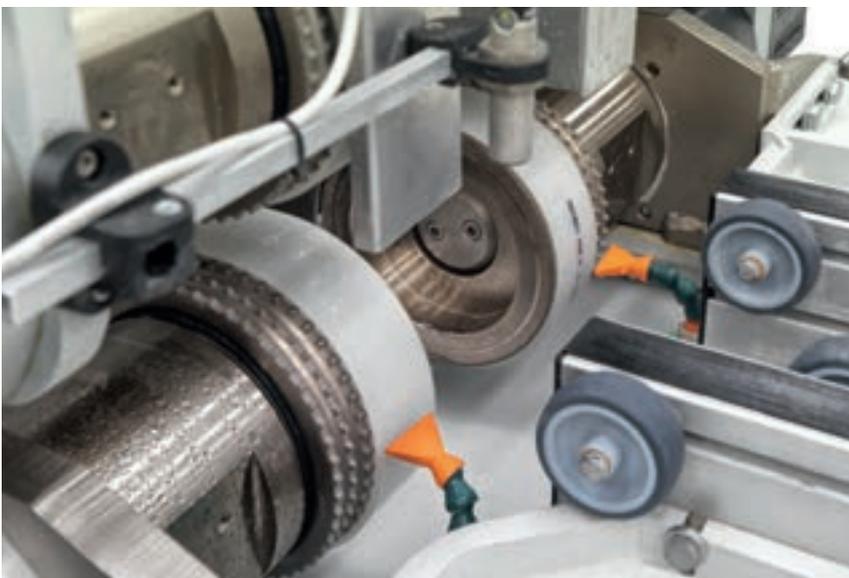
Busetti machines are guaranteed to last over time, enabling operators to work up to 3 shifts a day, with minimal machine maintenance required from the operator.



Maximum reliability is guaranteed, thanks to the quality of the materials and components selected.

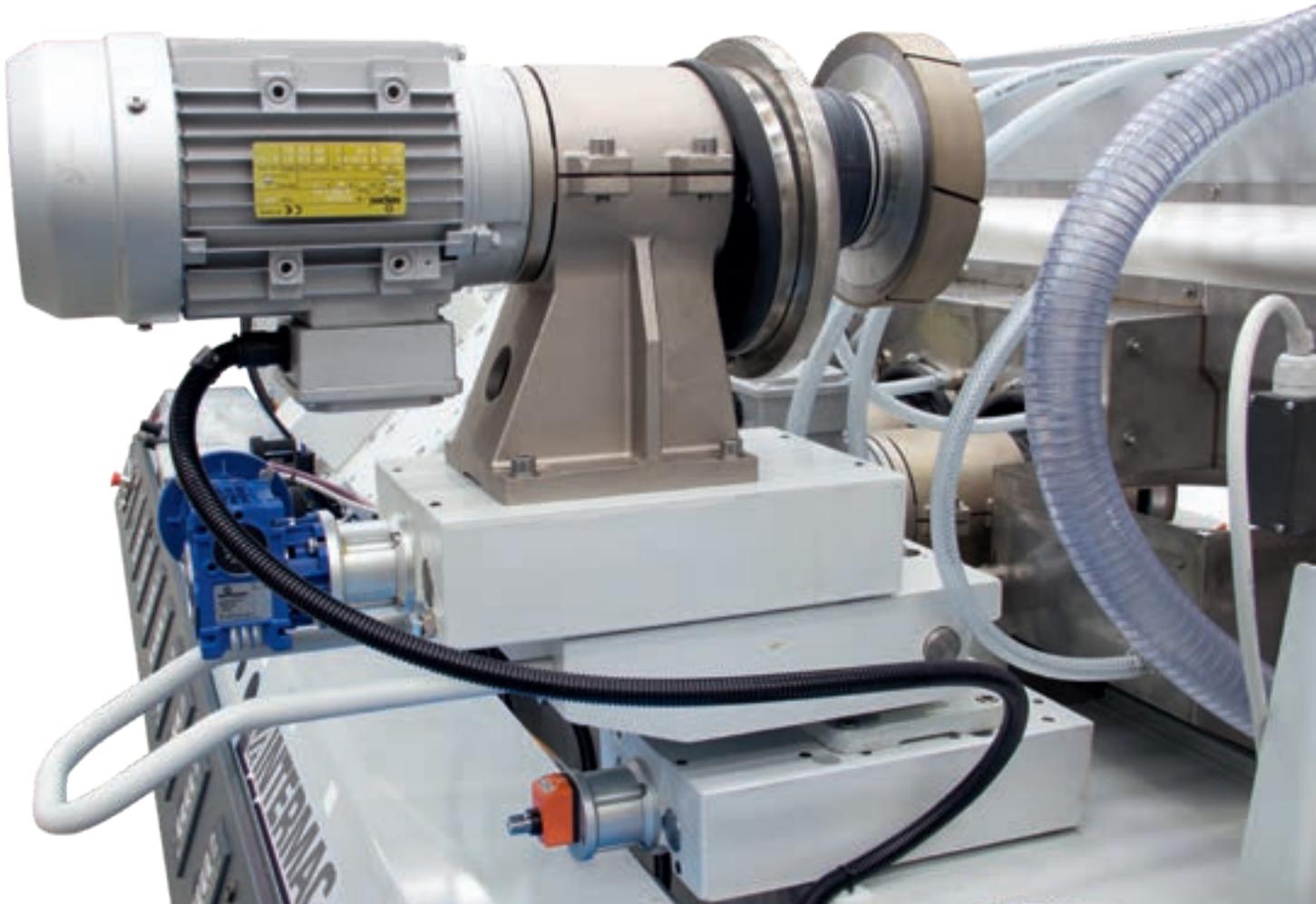


Sheet conveyor belt washing system. The conveyor belt washing system prevents the risk of scratches on the sheet surface.





Slides and spindles with large, high-quality sliding bearings: a solution which guarantees excellent durability and optimal stability.



Possibility to pre-set the tools for quick, simple grinding wheel setting operations.

# OPTIMISED RADIUS EXECUTION AND CHAMFERING

The radiusing units are patented Biesse devices for making rounded or chamfered corners, both matt diamond-edge and polished, from 1 to 5mm (for radii) and 1 to 7mm (chamfers). With this innovative system, it's not necessary to stop the sheet in the machine; the rounding or chamfering operation can be performed while the sheet is being machined, with no need for additional equipment.



Thanks to this revolutionary solution, the Busetto range offers the opportunity to redesign the production process by opening new application horizons to the traditional double-edging lines.





Easy access for the replacement of the grinding wheels, simply by tilting the spindle.



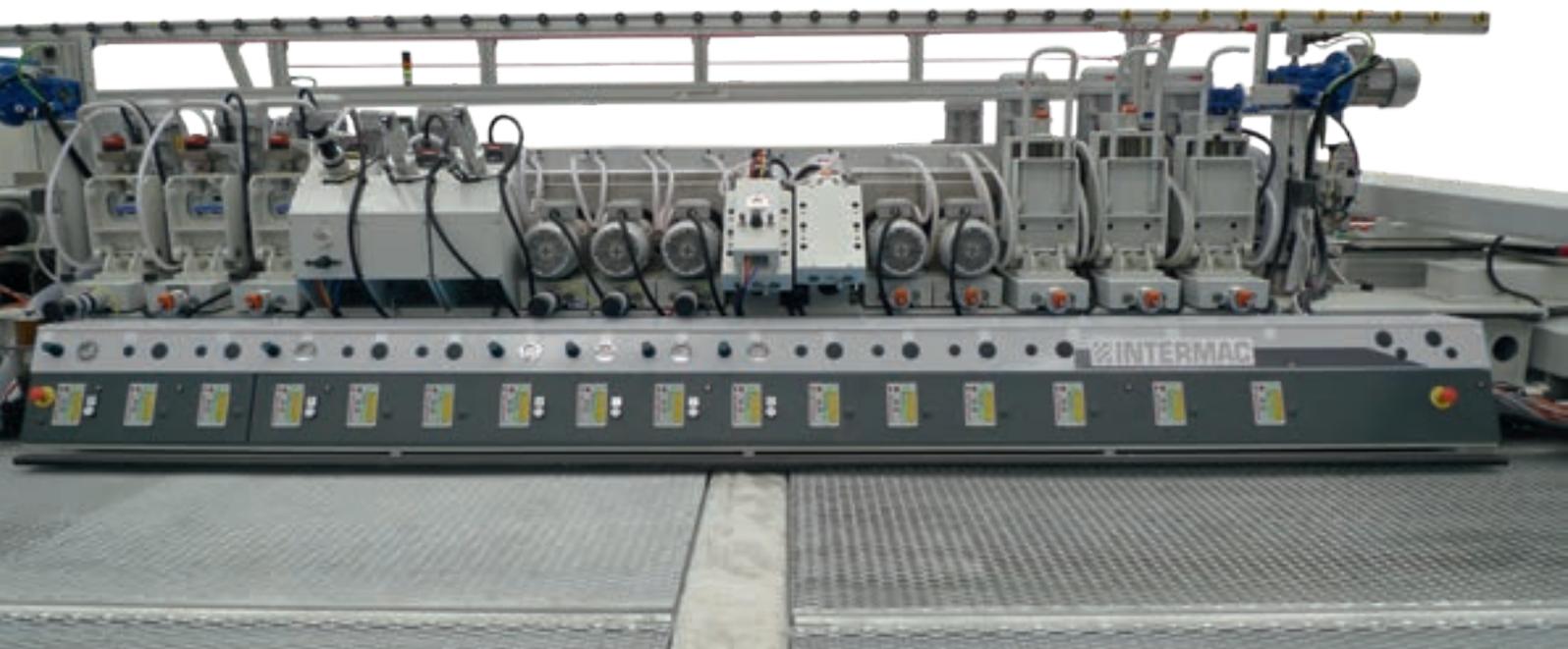
Interpolated axes actioned by brushless motors.

**The corner-rounding system is fully integrated in the crosspiece structure.**



# WIDE RANGE OF CONFIGURATIONS

The wide configurability of the machine - completely customizable with up to 17 spindles on each side - allows for special operations on the edgeworking strip, to meet the requirements of various furnishing sectors.



The machine opening dimensions vary in accordance with the specific requirements of the customer, and may range from 1000 to 8000 mm.



Intermediate bars with automatic positioning function. The positioning of the bar or intermediate bars can be automated; this is recommended when producing small batches.



Machine setting times are notably reduced by the proportional valves for automatically managing the pressure on the polishing tools according to the thickness.



The automatic adjustment of the reference line to remove the glass according to the thickness prevents the operator from intervening manually.



The drainage of waste waters is carried out in a simple and effective way.

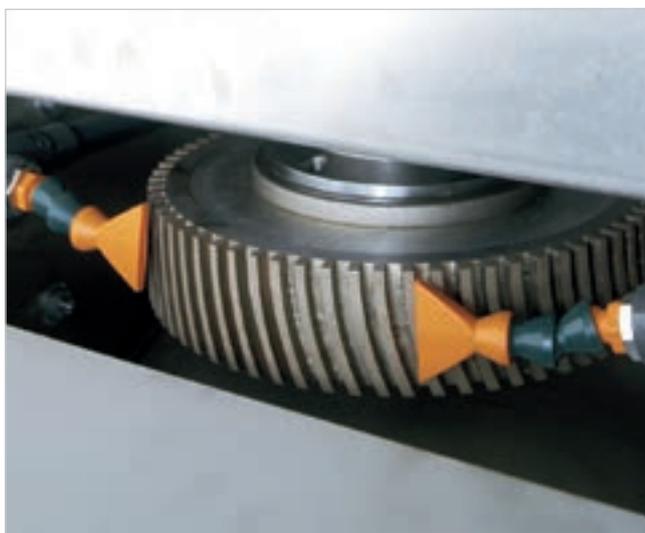
# CUSTOMISATION IN ACCORDANCE WITH THE CUSTOMER'S PRODUCTION NEEDS

Innovative systems such as the diamond grinding wheel pre-setter, the automatic polishing pressure management system, the motorised reference lines and various other options allow to reduce the setting times of the lines simplifying their use.



Diamond grinding wheel pre-setter.

Possibility to equip the machine with the automatic motorisation of all diamond spindles, including the upper and lower inserts, in order to ensure maximum control over the amount of material removed, as well as over tool wear.



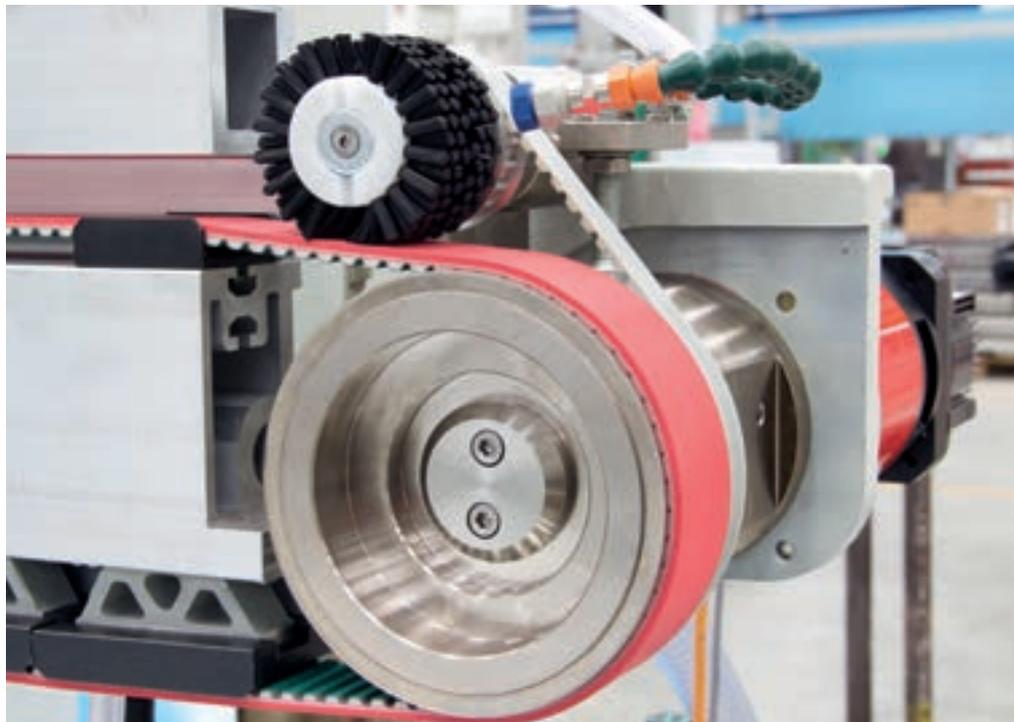
Oscillating peripheral grinding wheel.

The oscillating peripheral grinding wheel allows the optimal execution of all those operations requiring substantial removal of material, as in the case of thick glass sheets. Vertical oscillation is controlled by the NC on the basis of the glass thickness, and guarantees the even consumption of the grinding wheel.

Partialised spraying unit, placed before the blower at the outlet of the line machine,



Belt cleaning brush for preventing scratches on the surface of the sheet.



The outfeed sheet width measuring system makes it easier to accurately measure large sheets.

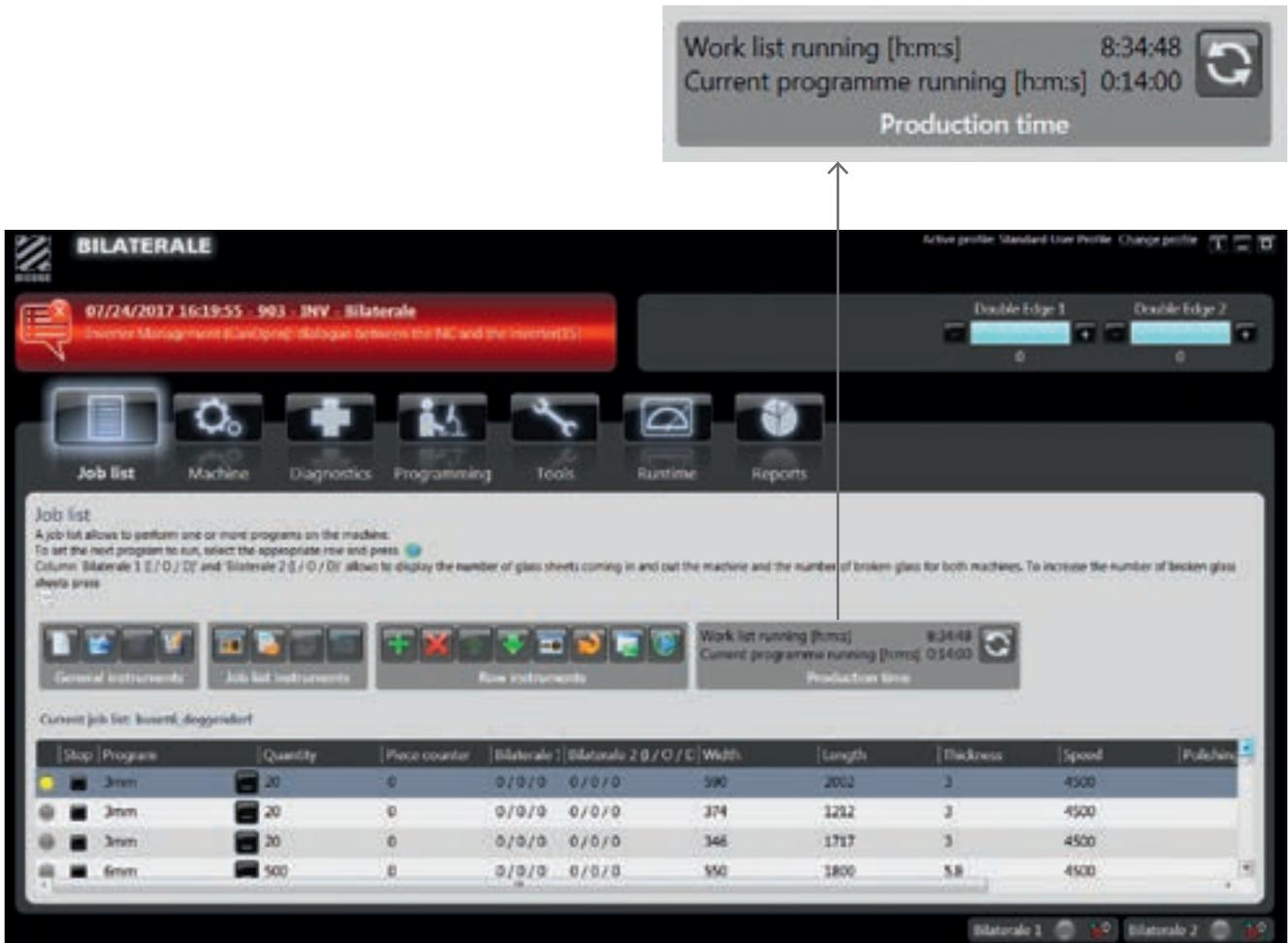


# INTEGRATED SOFTWARE THAT IS BOTH INTUITIVE AND EASY TO USE

When integrated with smart software, Biesse solutions serve to minimise operator intervention, ensuring a clearer overview of the entire process, as well as greater levels of safety.



The Buseti range has evolved over time, transforming itself into a smart solution, which, thanks to the software integration, is able to control itself autonomously.

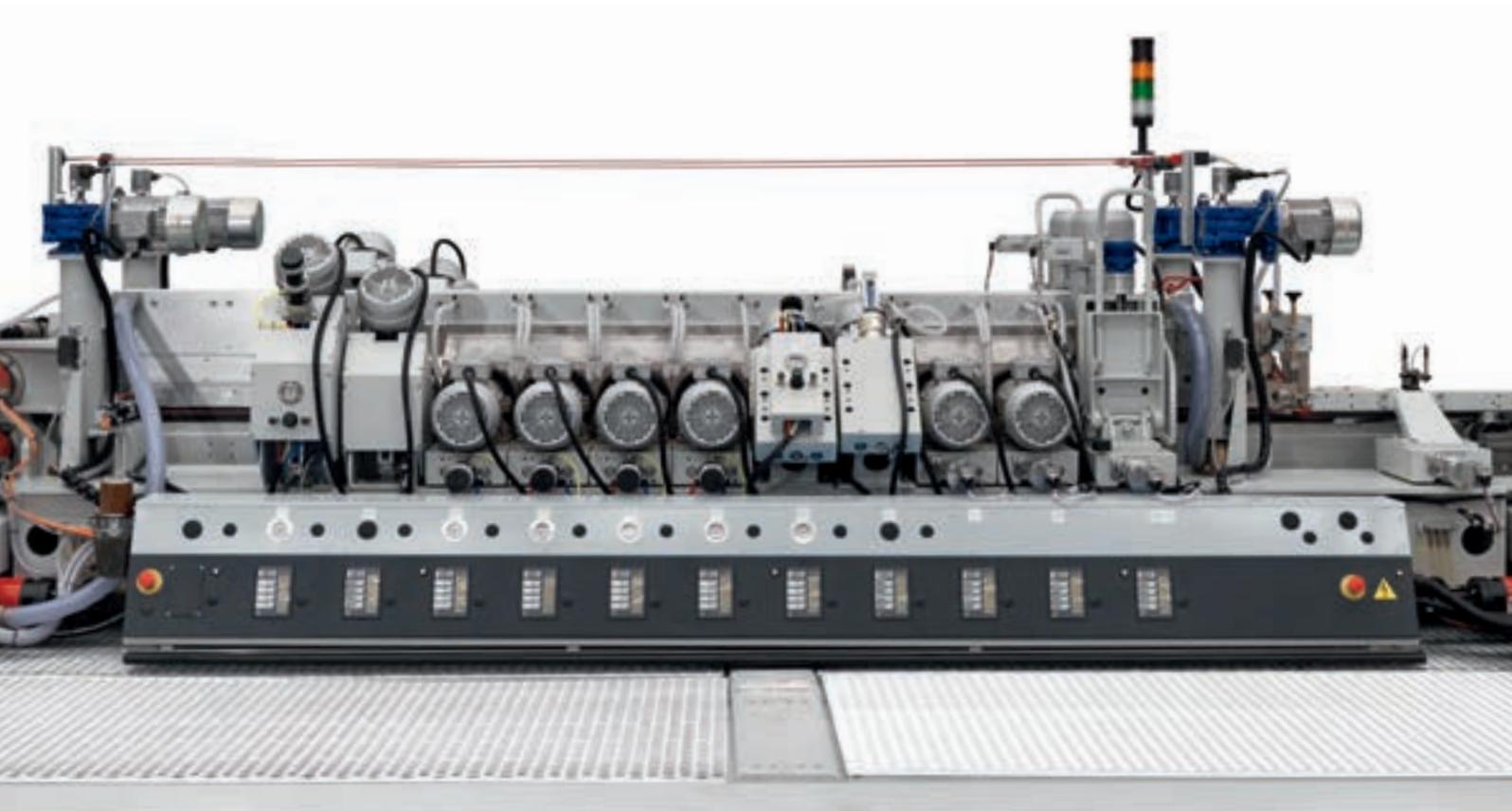


- It allows to calculate in advance the production times of a working list required by the Customer.
- It optimizes programme and machining operation change-over time.
- Possibility to apply bar-code reading systems that can be interfaced with management systems.
- Fundamental in low-serial production to estimate cost and time of a production batch.



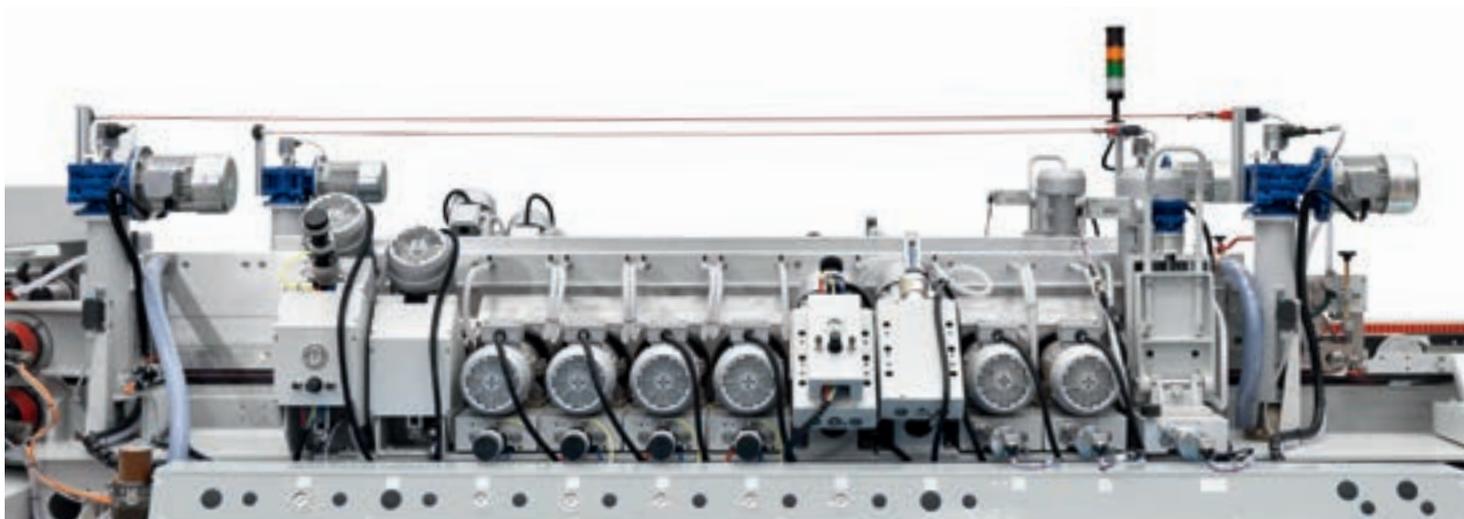
# PROTECTION AND SAFETY FOR ALL MACHINING OPERATIONS

Biesse has always paid the utmost attention to the health and safety of its customers. The protection of every operator during the use of the machine is of vital importance, preventing any possible distraction or error that could lead to inconvenience or even accidents.



The movement of the crosspiece is protected by an external anti-collision bumper.

One indispensable condition for obtaining any sort of financing is the respect of the machinery directives and workplace health and safety regulations.



Internal anti-crush cables during the movement of the crosspiece.

All dangerous moving parts are protected by safety grid barriers, and ensure maximum operator safety.



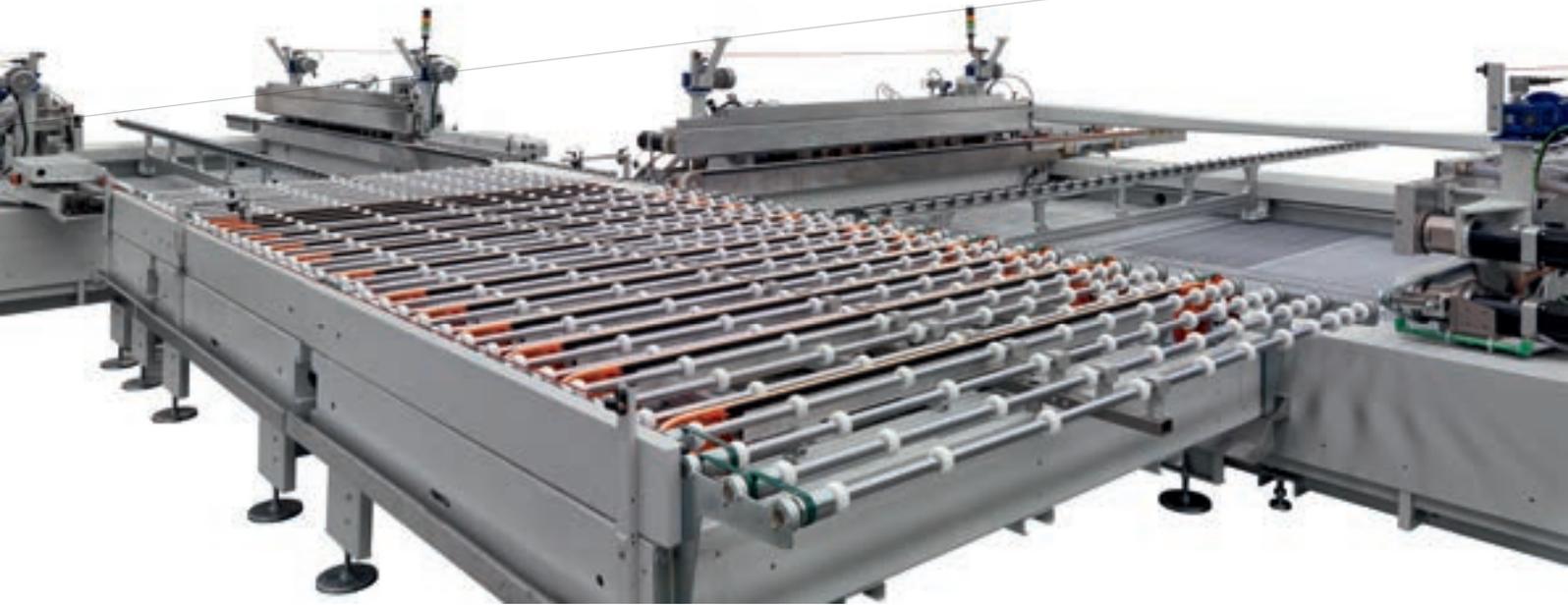
# AUTOMATED LOADING AND OFF-LOADING SOLUTIONS



The loader automates the process of loading the glass into the machine, and represents the ideal solution for companies that need a high rate of production. A range of loading and unloading devices is available, to meet the various performance requirements. Rotating platforms which minimise pallet change times are also available.

The tilting table allows sheets of larger dimensions to be loaded and off-loaded.





Transfer systems.  
Extensive experience in the development  
of dedicated sheet handling solutions.



Output transfer.  
It allows the pieces that have just been  
processed to be deviated towards the  
machine downstream.



# 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%**

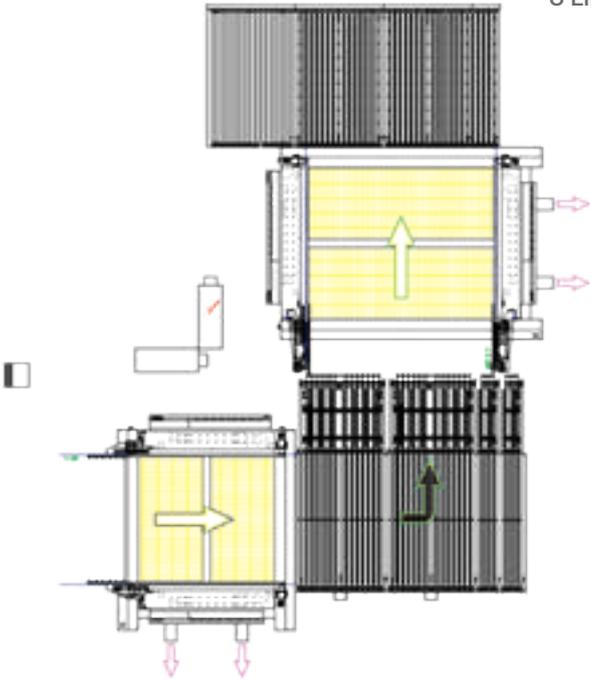
OF SPARE PARTS ORDERS  
DELIVERED IN FULL ON TIME

**88%**

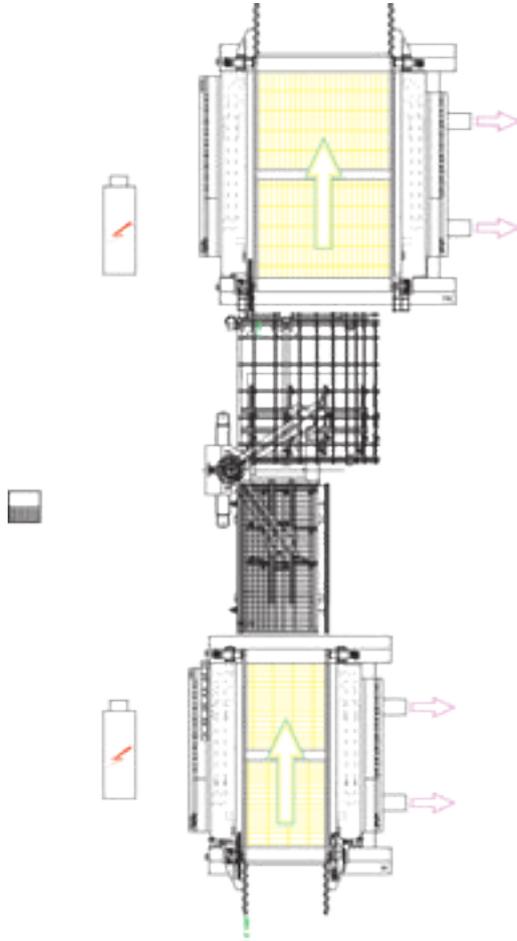
OF CASES SOLVED WITH  
THE FIRST ON-SITE VISIT

# IN-LINE INTEGRATION

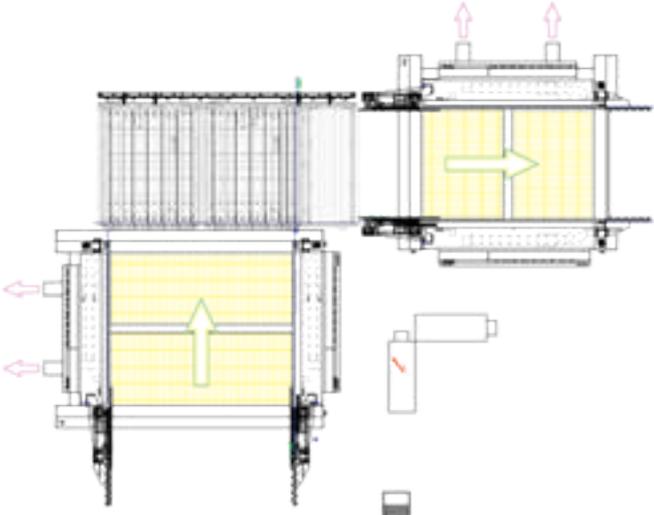
↙  
U LINE



↙  
Straight Line

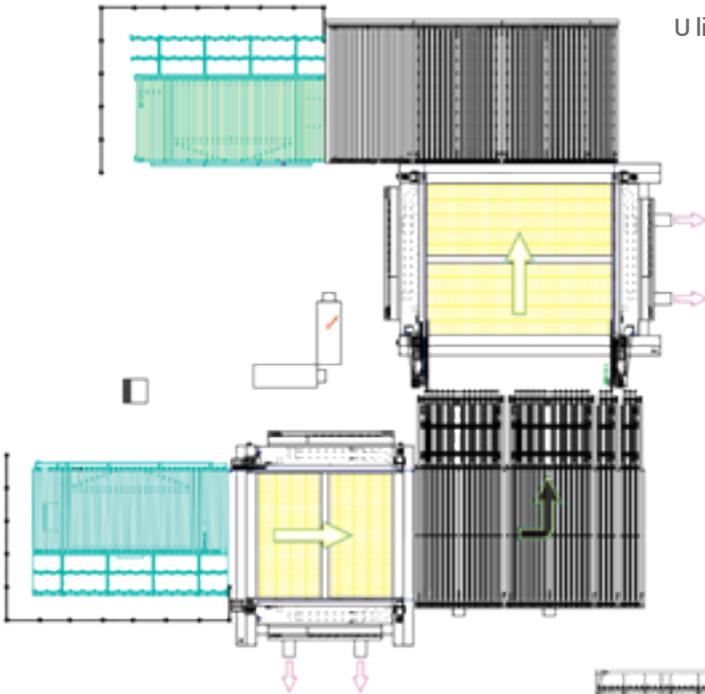


↙  
FLip-up line





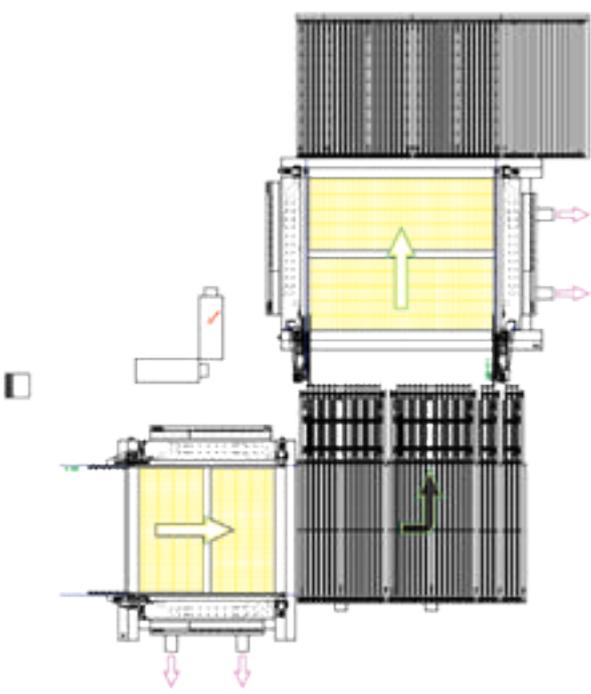
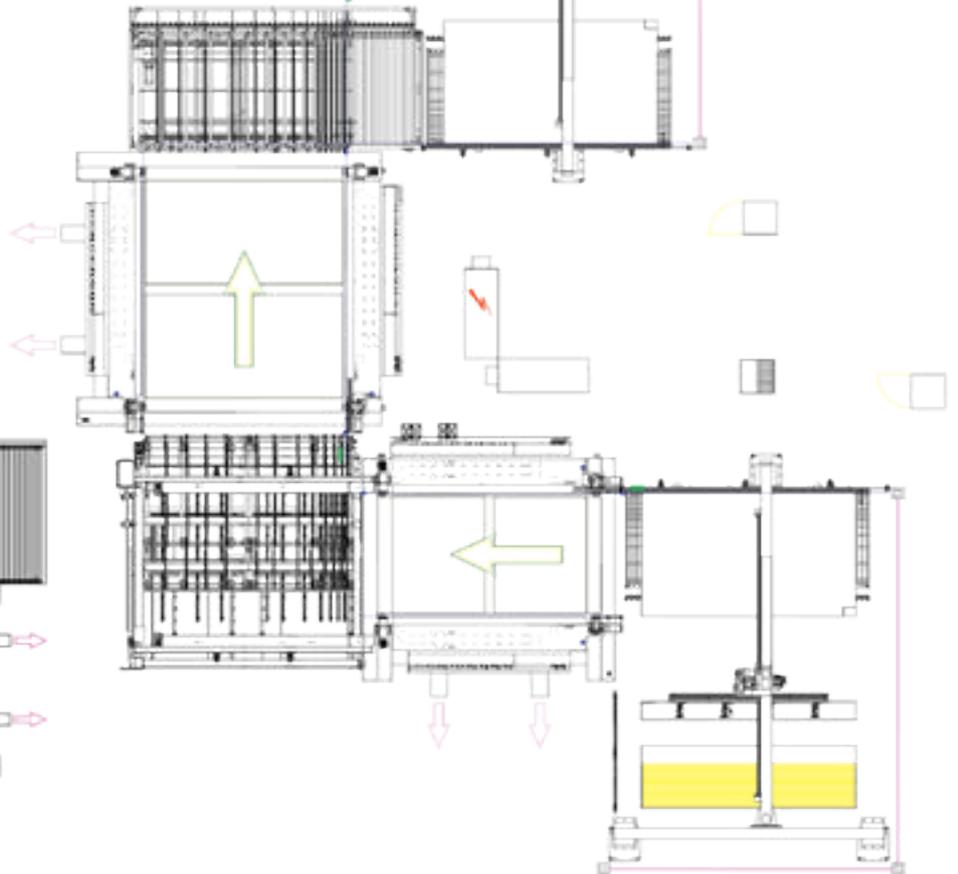
U line with tilting tables



U line with loader and unloader

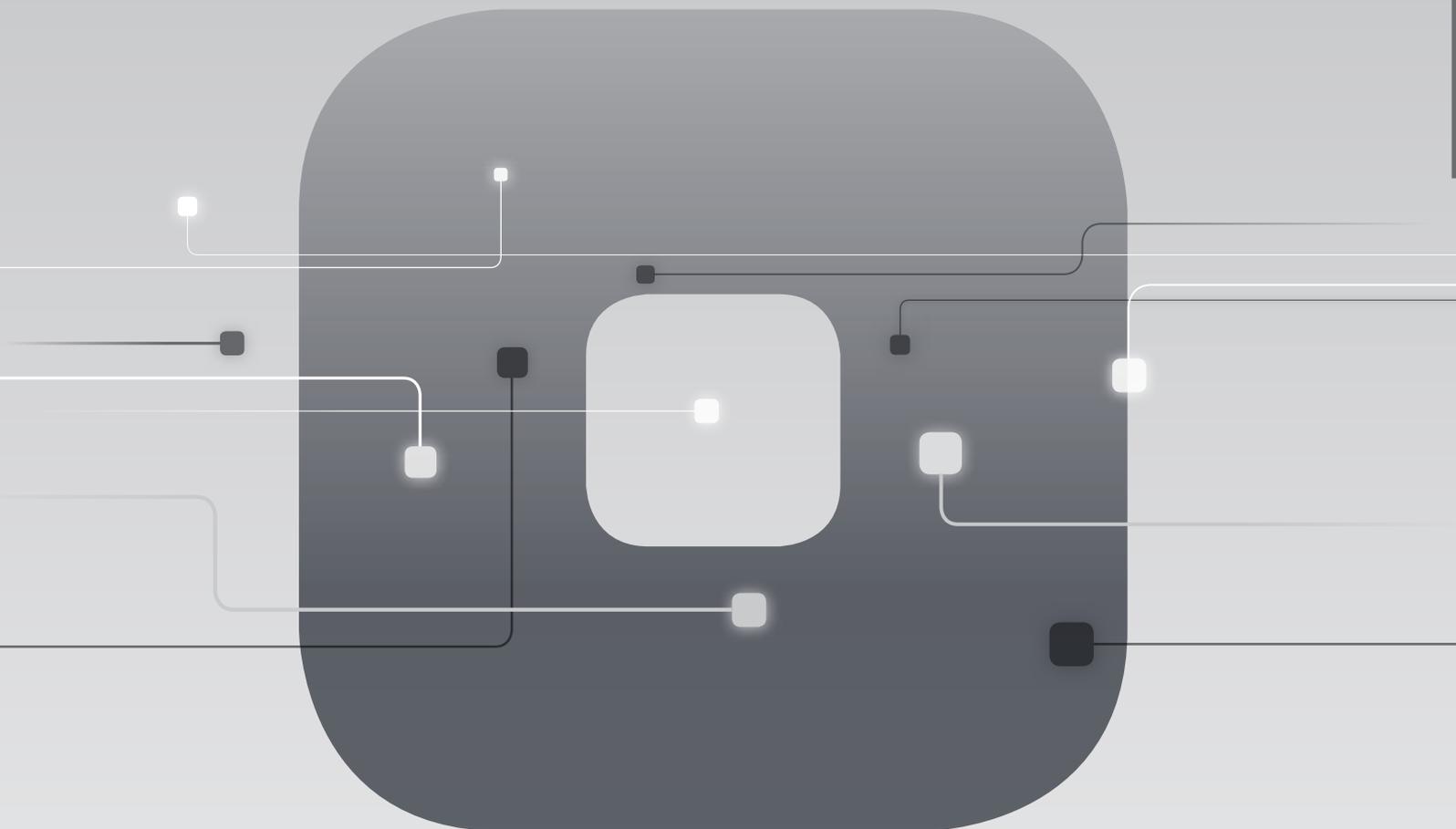


Z LINE



# SOPHIA

**GREATER VALUE FROM MACHINES**



The Biesse IoT platform which enables customers to access an extensive range of services to streamline and rationalise their work management processes.

SERVICES

PROACTIVITY

ANALYSIS

# MADE WITH BIESSÉ

## FROM NATURAL STONE TO THE BEST MANUFACTURED PRODUCTS

**Generelli SA**, a company from Ticino with headquarters in Rivera, Switzerland, has been converting natural stone into superb manufactured products for over forty years. At Generelli the most advanced stone processing techniques are constantly paired with the skilful artisan craftsmanship fostered in Ticino. With this mission the Swiss company, which was founded in **1974** and directed by founder **Generelli Guido** before his son **Moreno** took the helm, has now reached the third generation with **Matteo**. Natural stone, quartz compounds, plastic materials and ceramic are the daily bread of creativity and are converted into art, "from a simple granite windowsill to more complex 3D machining," says Moreno as he explains how slabs of stone become "everyday" objects: not just surfaces for kitchens and bathrooms, but also stairs, floors,

fireplaces and swimming pools, destined to enrich and highlight living spaces all over the world.

"Thanks to Intermac technology we can achieve complex shapes, and increase productivity and autonomous work." Nothing is outsourced: Generelli carries out every single step internally, to guarantee the highest quality. "Today technology is an integral and irreplaceable part of our company: we wouldn't be where we are today without it" Matteo confirmed. If that technology comes from Italy, which is where Moreno believes the best companies are still to be found, all the better. For production, in fact, the crown goes to the **Master 33** and the **Primus** 5-axis waterjet by Intermac, a company whose history of collaboration with Generelli dates all the way back to 1996. And it's the Primus, one of the newest additions in

production, that has helped the company surpass previous limits, as Matteo explains: "With it we are capable of producing shapes of various sizes, with very precise cuts, and can create double-curved 3D inlays, increasing productivity and autonomous work". Equipped with the latest generation of tools, "with technical features that are more evolved compared to the past", these mechanical powerhouses were designed for power and precision and anticipate a time in the future when, as envisioned by Matteo, "technology will increasingly be present throughout production and will play a greater role in designing and programming thanks to increasing levels of intelligence and autonomy. But all this can only be achieved if the companies that use these machines are able to evolve with the machines".



Founded in Italy,  
international native.

We simplify your  
manufacturing  
to make the process  
of any material



ur  
g process  
potential  
I shine.

We are an international company that manufactures integrated lines and machines to process wood, glass, stone, plastic and composite materials and what will come next.

Thanks to our rooted competence nurtured by an ever-growing worldwide network, we support your business evolution – empowering your imagination.

**Master of materials, since 1969.**

Join the  
Biesse world.

[biesse.com](https://www.biesse.com)



