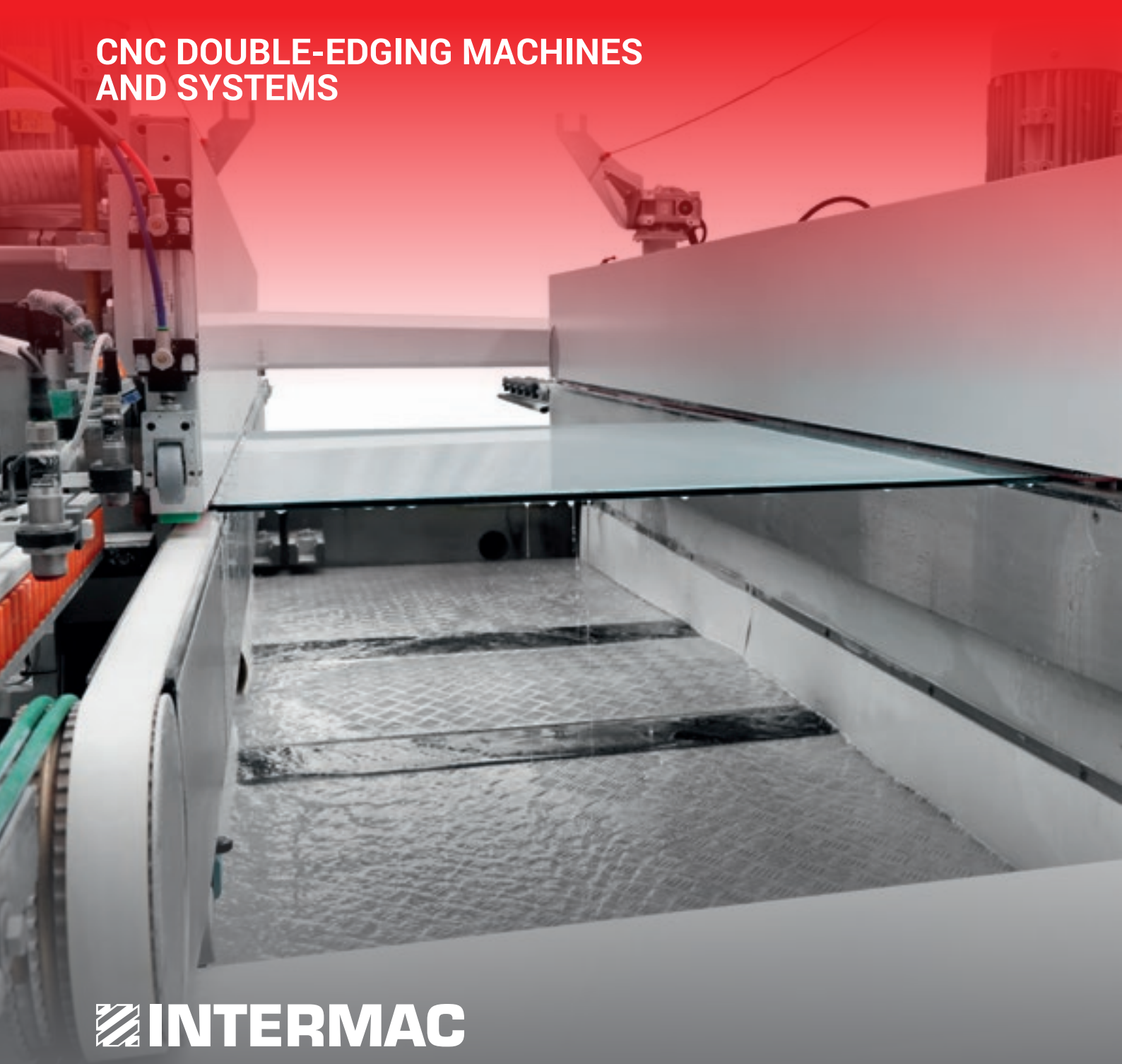


# BUSE TTI FK SERIES

CNC DOUBLE-EDGING MACHINES  
AND SYSTEMS



 **INTERMAC**

# MINIMUM FOOTPRINT, MAXIMUM PERFORMANCE



## 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 while offering product customisation with quick and defined delivery times, as well as satisfying the requirements of even the most highly-automated industries.

## INTERMAC RESPONDS

with **technological solutions** that guarantee high-quality, reliable performance over time. The **Busetti FK Series** is the range of compact double-edgers, designed for the manufacture of doors, furnishings and double glazing, up to a maximum weight of 600 kg. High-quality components, the product of many years of experience in lines and systems, guarantee reliability, maximum performance and precise results, with a limited investment.



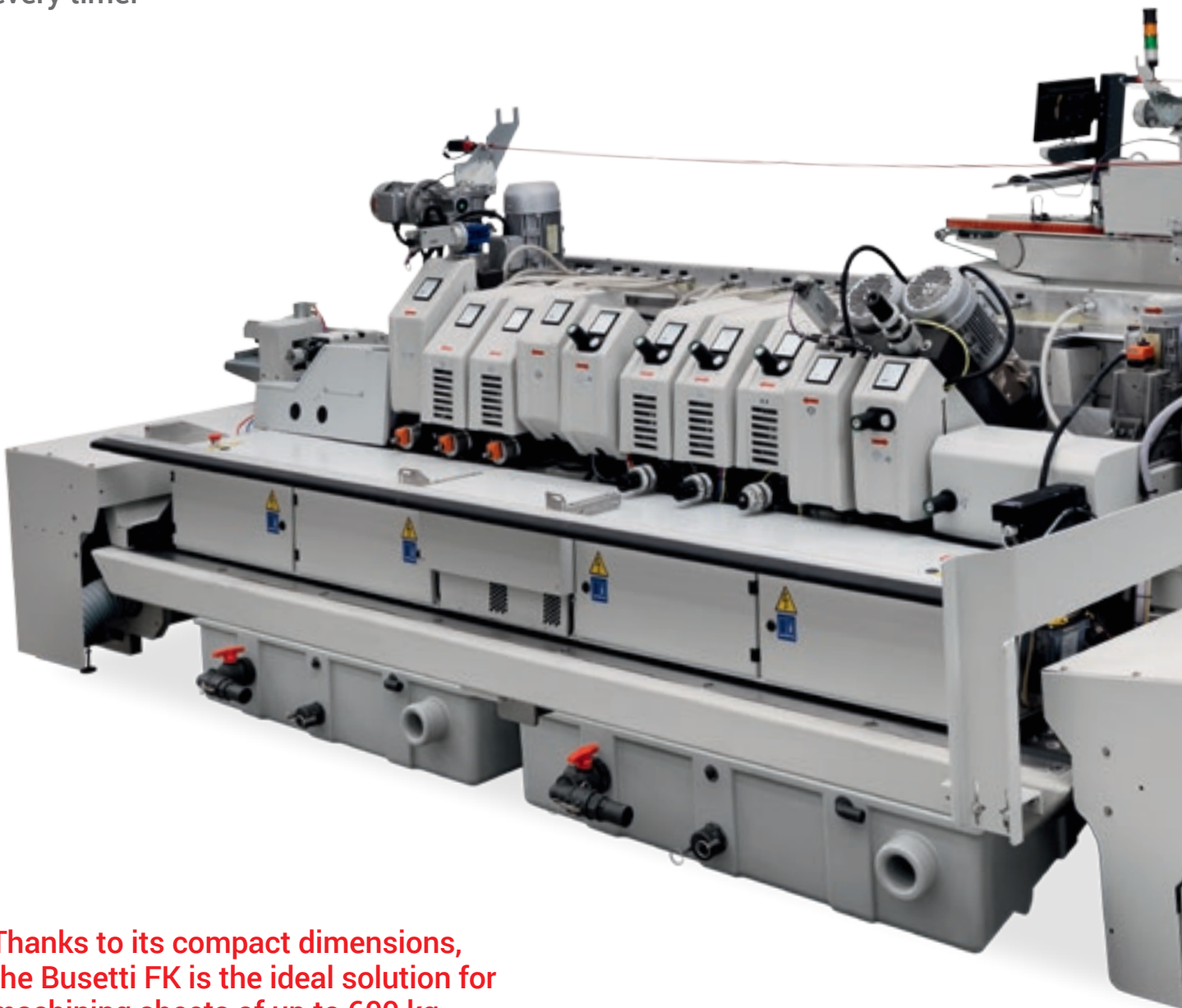
## **BUSETTI** FK SERIES

- A COMPACT SOLUTION THAT IS IDEAL FOR COMPANIES WITH LIMITED SPACE
- MAXIMUM PERFORMANCE AND PRECISION OF RESULTS
- HIGH QUALITY AND RELIABILITY GUARANTEED OVER TIME
- MECHANICAL AND ELECTRONIC TECHNOLOGIES THAT ARE UNIQUE IN THEIR FIELD

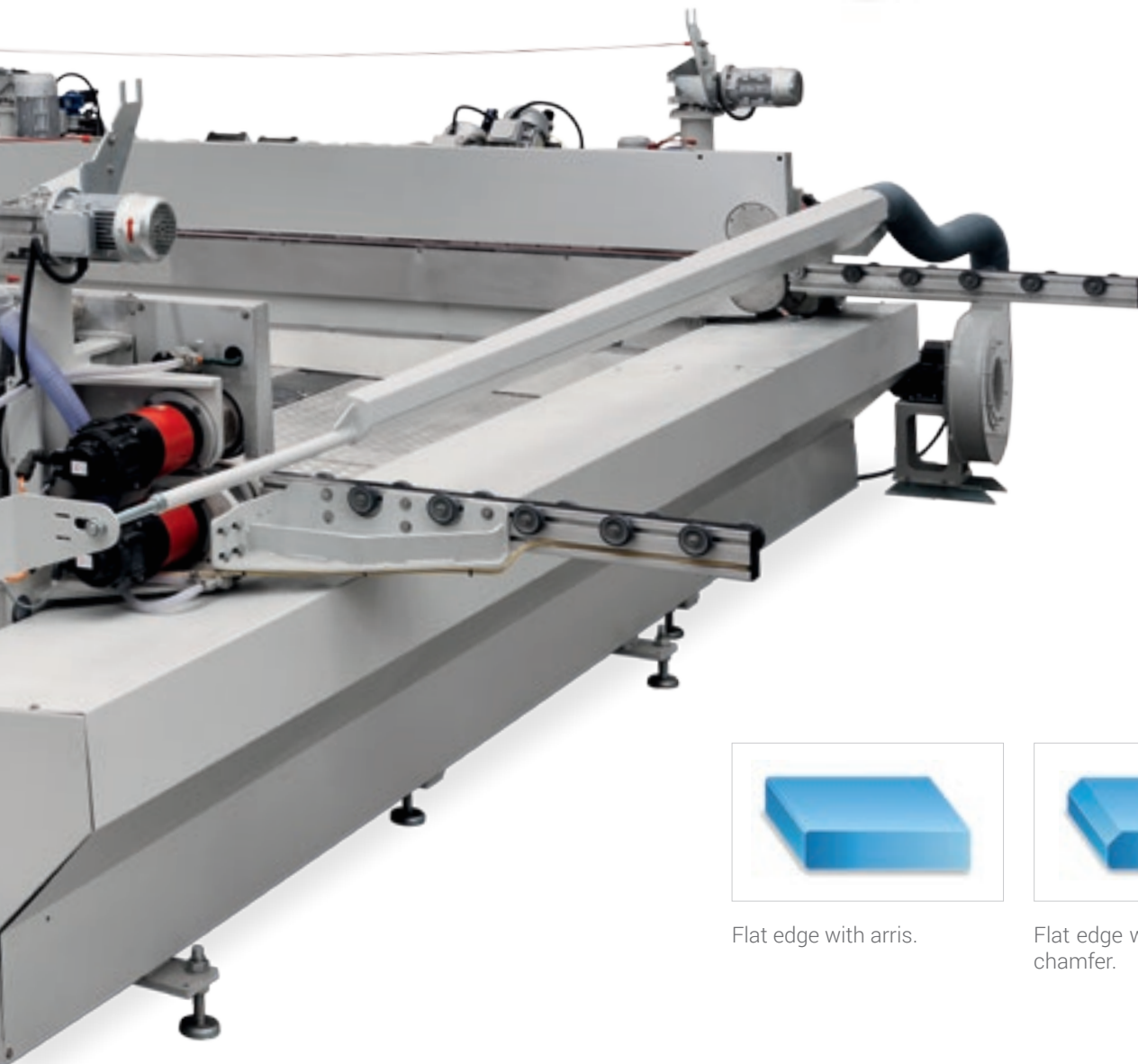
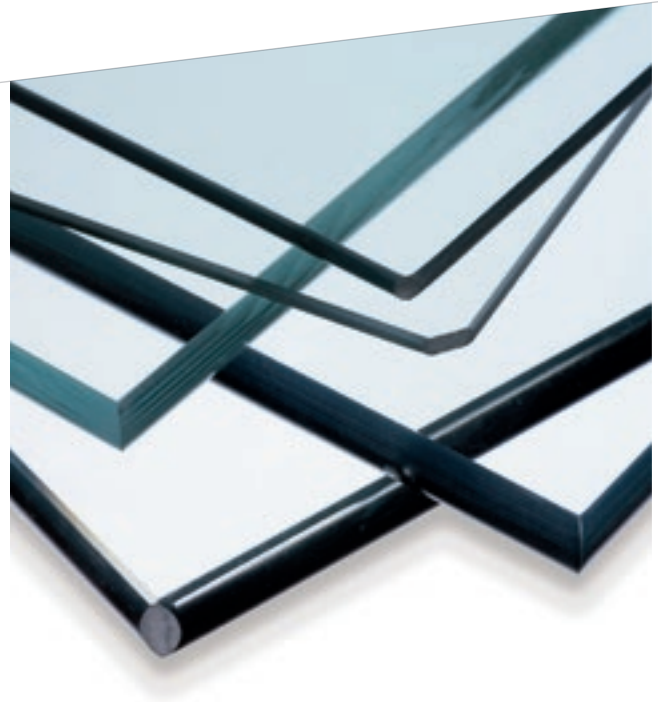


# COMPACT SOLUTION

Busetti FK is the range of double-edgers designed especially for companies with limited space who don't want to sacrifice productivity, enabling them to achieve high performance and optimal results every time.



**Thanks to its compact dimensions, the Busetti FK is the ideal solution for machining sheets of up to 600 kg.**



Flat edge with arris.



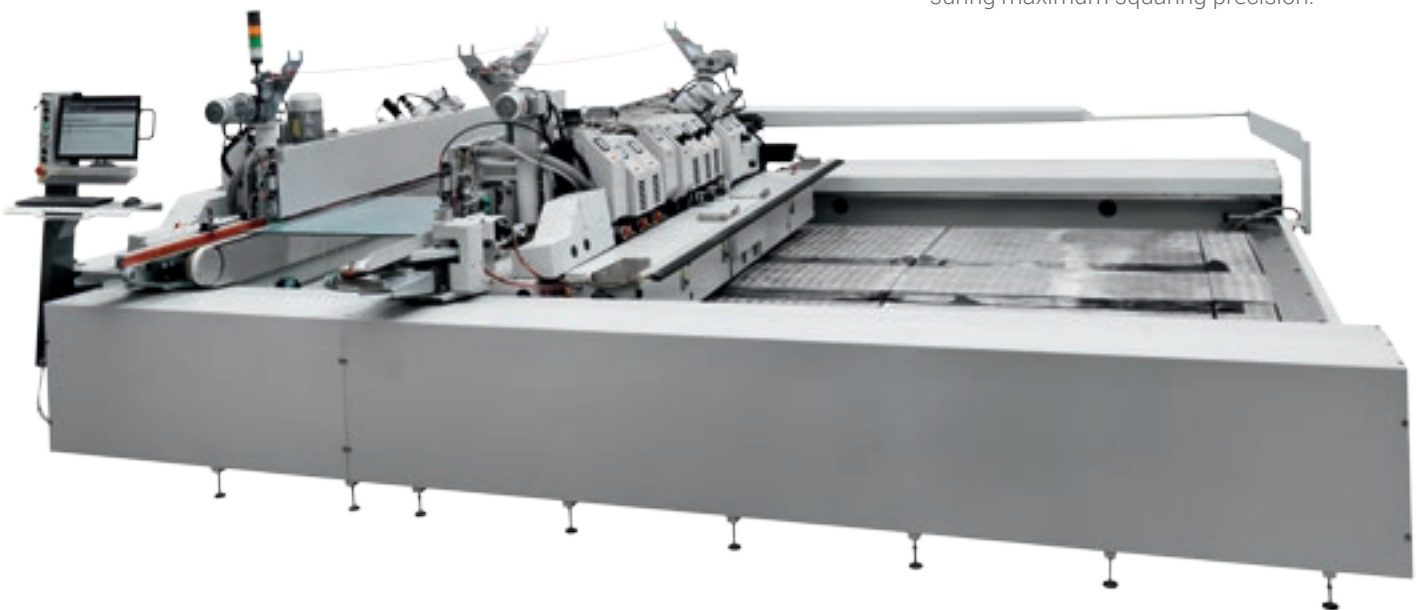
Flat edge with increased 45° chamfer.

# 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.



Base 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.

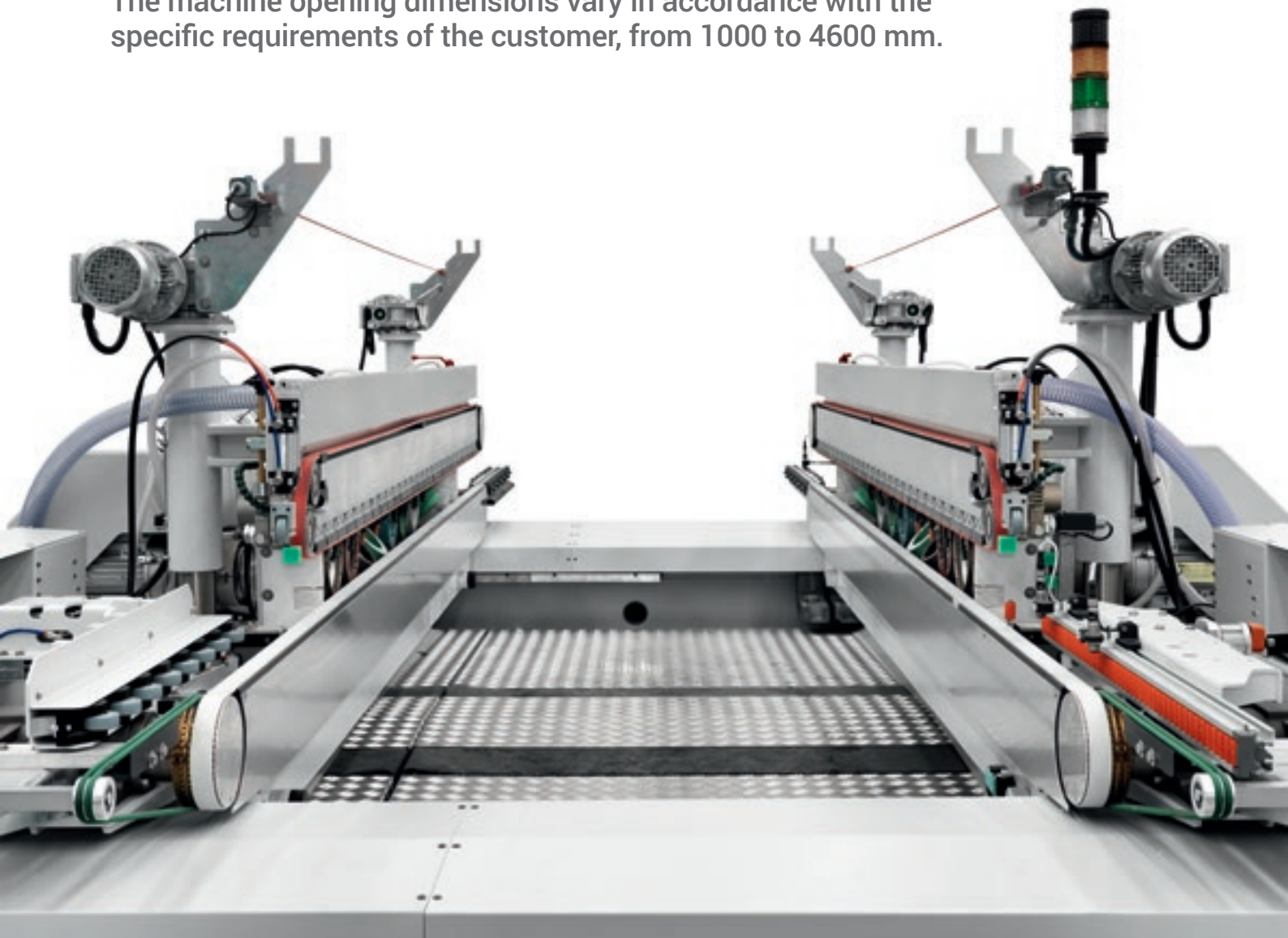


The inlet glass aligning units help the operator to position the glass correctly in the machine, thanks to a proper length of the glass inlet area.





The machine opening dimensions vary in accordance with the specific requirements of the customer, from 1000 to 4600 mm.



**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.**

# 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.



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



**Glass transport belt washing system**  
The transport belt washing system prevents scratches on the surface of the glass.

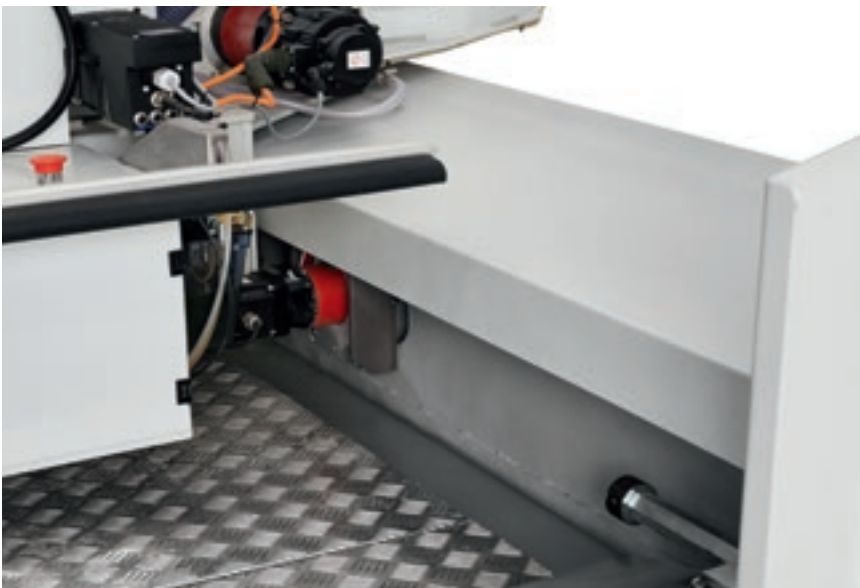


**HIGH-QUALITY COMPONENTS****Rack crosspiece transmission handling system**

Guarantees greater handling precision and reliability over time.

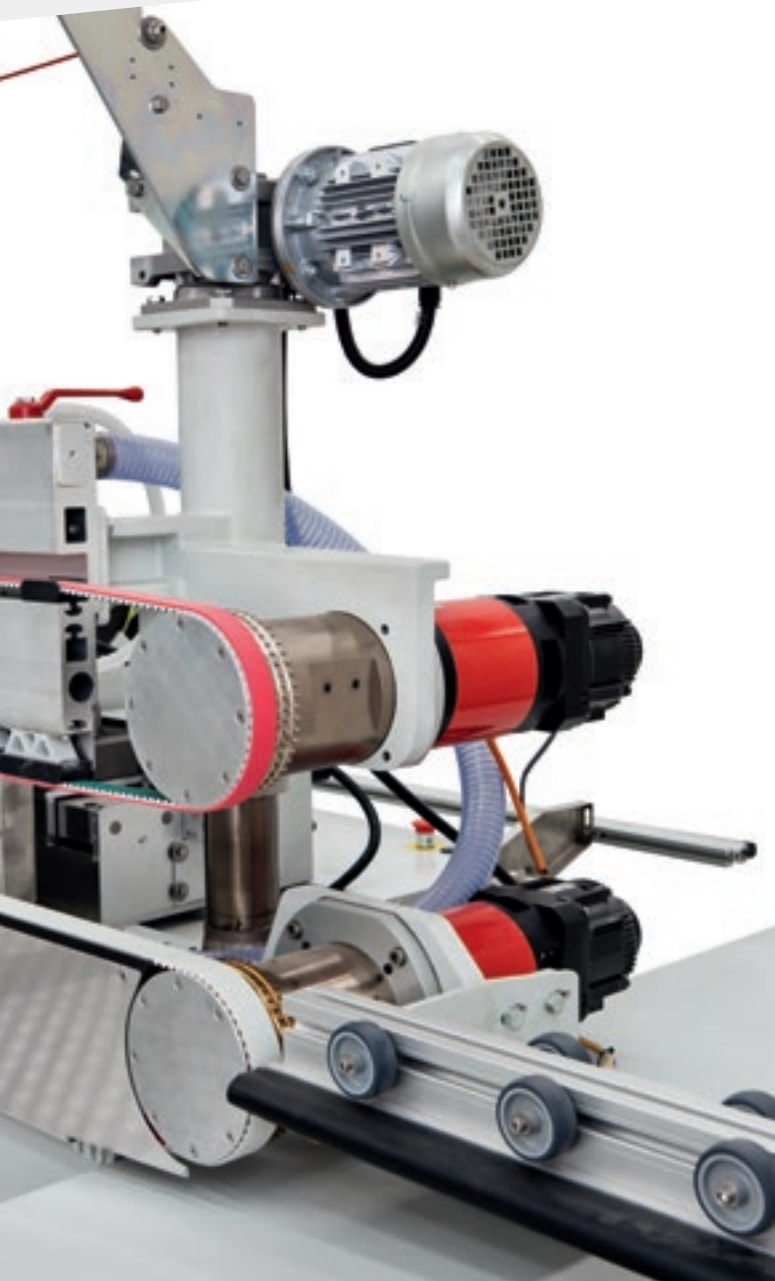
**Automatic lubrication system**

The entire Double-edger range is equipped with an integrated system for the automatic greasing of the main movement axes, ensuring constant and precise maintenance every day.



The drainage of waste waters is carried out in a simple and effective way. Maximum ease of use, even in tank cleaning operations.

# REDUCED SET-UP TIMES



## Transportation system

High-stability, super-low maintenance glass clamping system, with transport belt that runs 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.



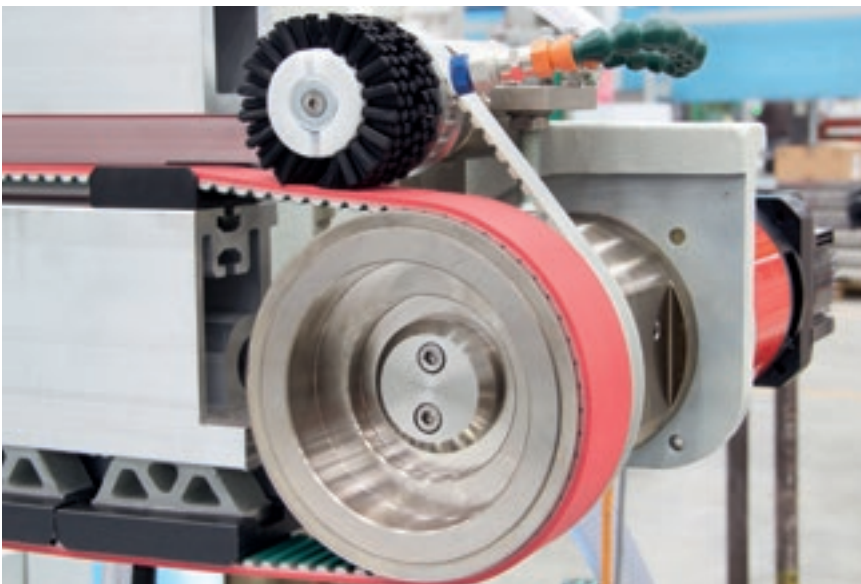
The simplicity and accessibility when changing the grinding wheels has been optimised, thanks to the possibility to raise the upper presser.

**Oscillating peripheral grinding wheel**

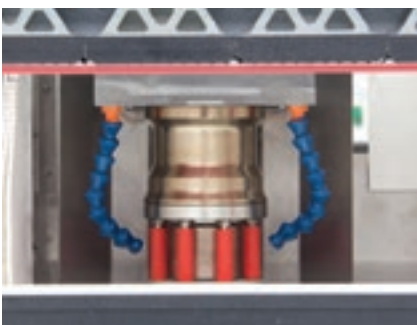
The oscillating peripheral grinding wheel allows the optimal execution of all those operations that require big removals of material like in case of thick glass sheets and laminated or stratified glass. Vertical oscillation is controlled by NC according to the glass thickness and guarantees homogeneous consumption of the grinding wheel.



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



The corner cutting unit removes sharp corners from the sheets, and is available in pneumatic and exclusive **patented** electronic versions.



**Innovative systems enable reductions in line setting times, making them easier to use.**

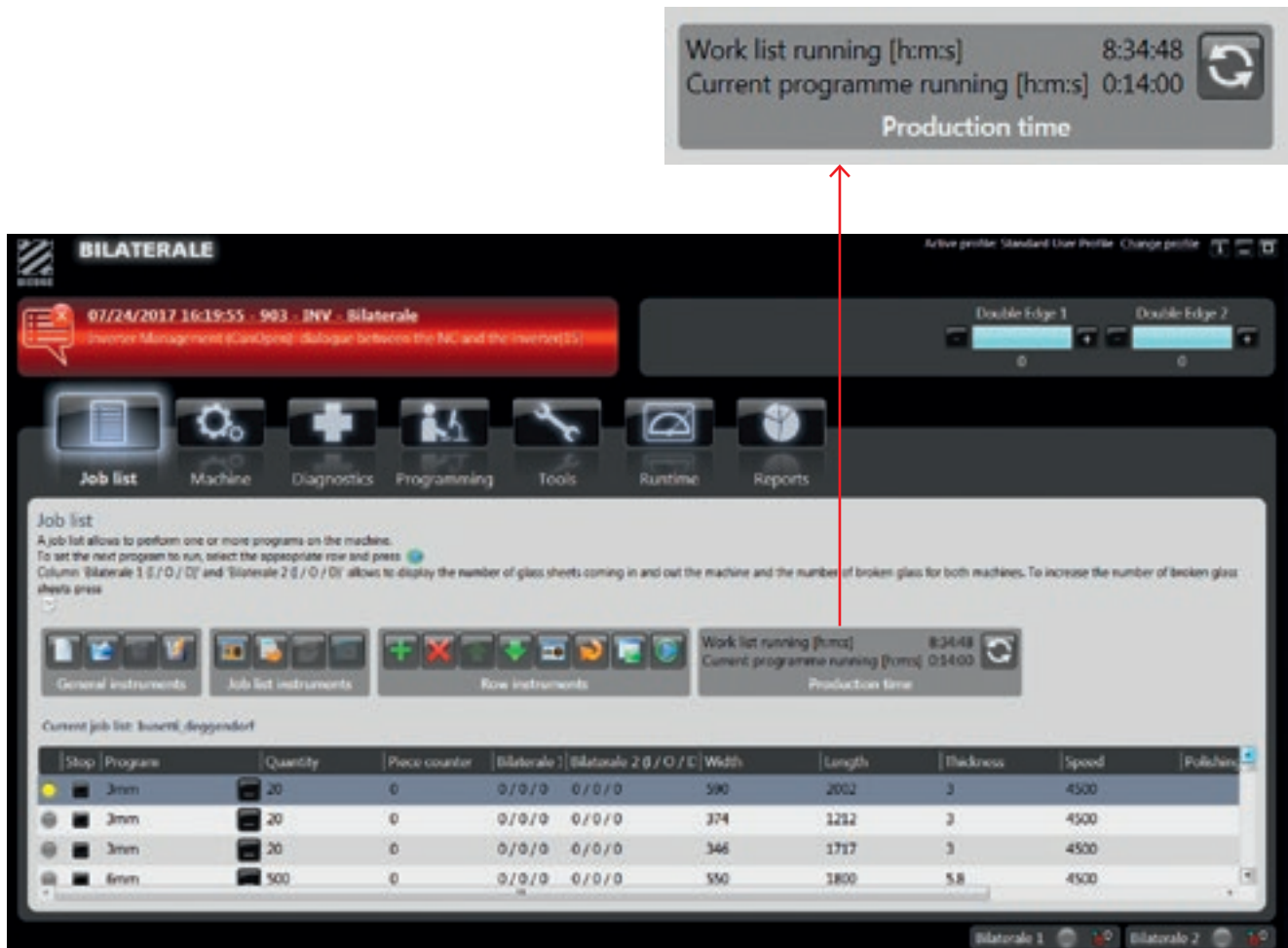


# INTEGRATED SOFTWARE THAT IS BOTH INTUITIVE AND EASY TO USE

When integrated with smart software, Intermac solutions serve to minimise operator intervention, ensuring a clearer overview of the entire process, as well as greater levels of safety. A product which leading glassworks facilities would struggle to do without.



**The innovative, high-tech control panel is ergonomic, and fully integrated on board the machine: it reduces the production area occupied, taking up none of the space used by traditional electrical cabinets. In addition, it enables close supervision of the machine or line.**



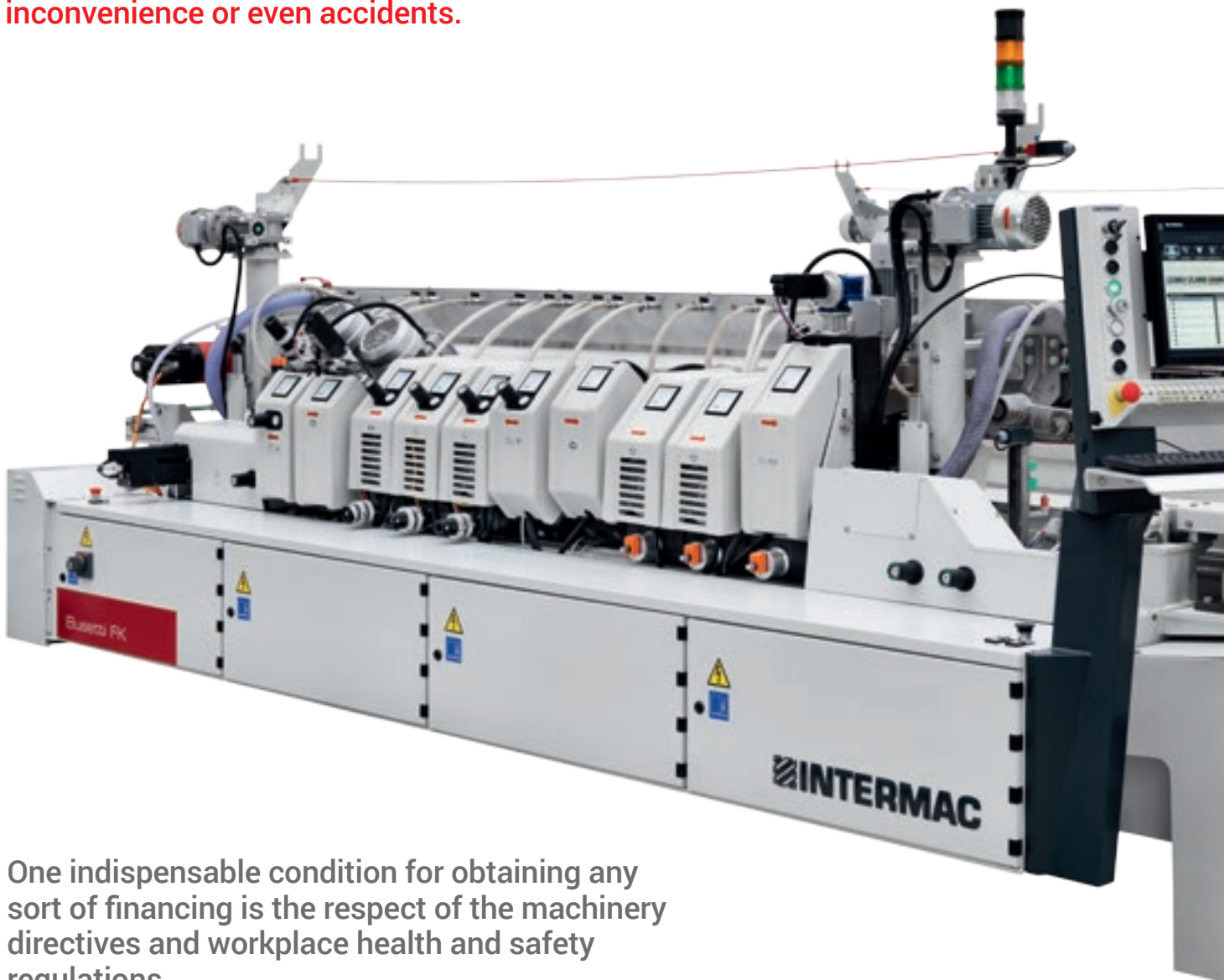
- Allows the level of productivity requested by a customer to be calculated in advance.
- Optimises programme and machining operation change-over times.
- Possibility to apply bar-code reading systems that can be interfaced with management systems.
- Essential in low-serial production for estimating the costs and timings of a production batch.

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



# PROTECTION AND SAFETY FOR ALL MACHINING OPERATIONS

Intermac 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.



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





Internal cables and sensitive external edges prevent crushing while the cross-piece is moving.



Dangerous moving parts are protected with grille barriers, and ensure maximum working safety for the operator.

# AUTOMATED LOADING AND OFF-LOADING SOLUTIONS

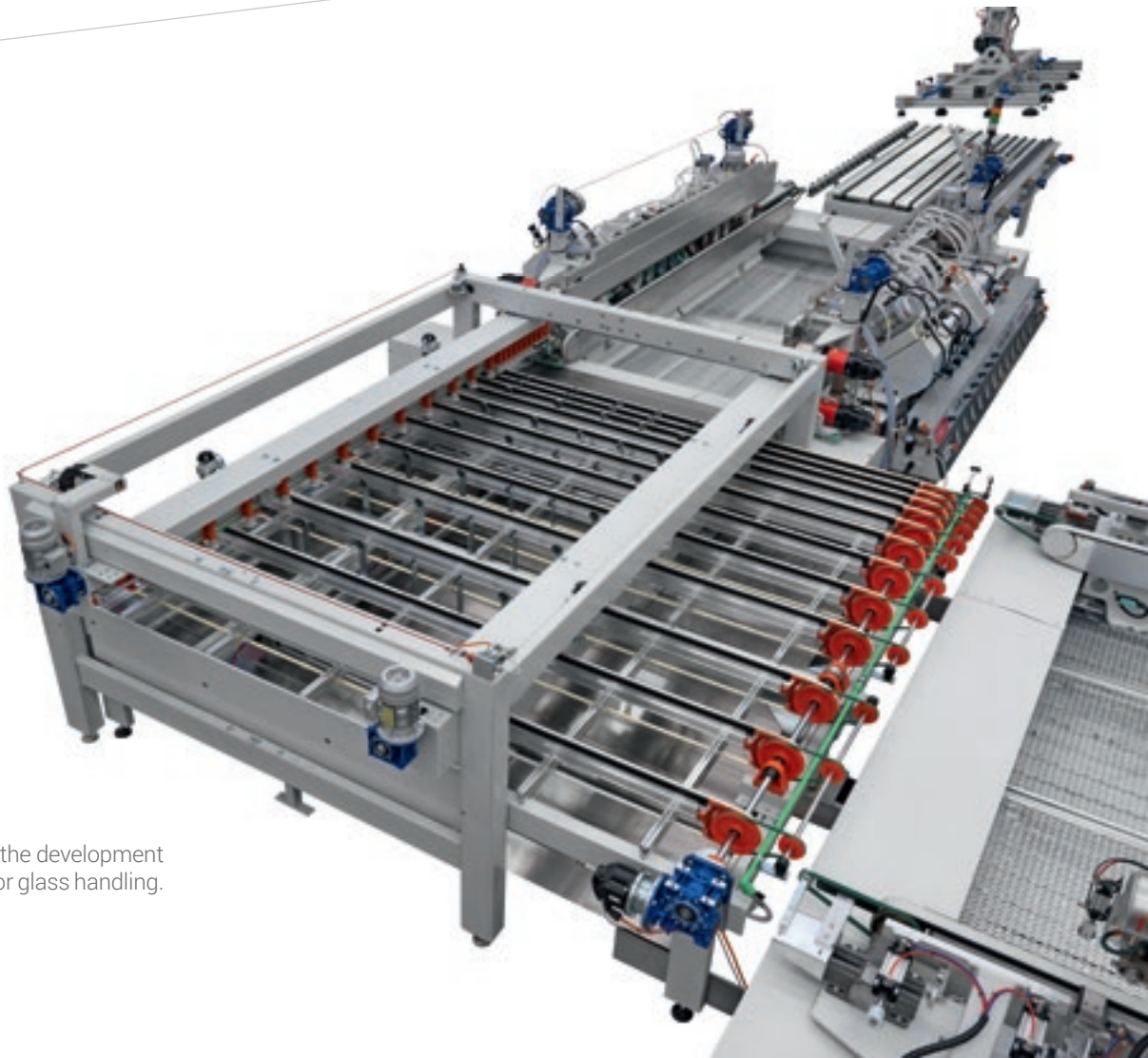


The loader automates the process of loading the glass into the machine, and represents the ideal solution for companies that need a high rate of production. A range of loading and unloading devices is available, to meet the various performance requirements. Rotating platforms which minimise pallet change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

The tilting table allows sheets of larger dimensions (up to 4600 mm) to be loaded and off-loaded.

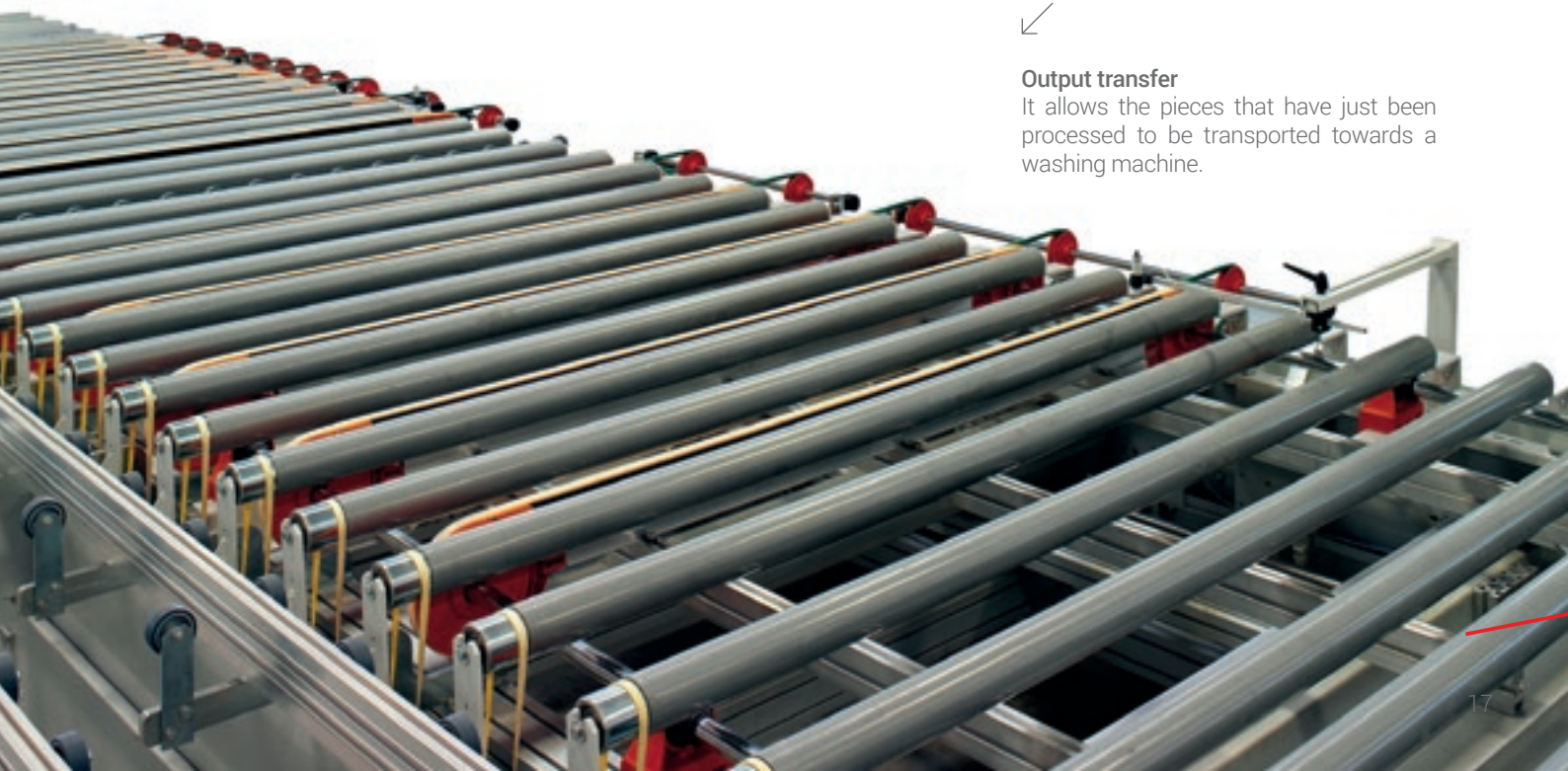






**Transfer systems**

Extensive experience in the development of dedicated solutions for glass handling.



**Output transfer**

It allows the pieces that have just been processed to be transported towards a washing machine.



# SERV ICE & PARTS

Direct, immediate coordination of service requests between Service and Parts. Support for key customers from specific Intermac personnel, in-house and/or at the customer's site.

## INTERMAC SERVICE

- ▣ Machine and line installation and start-up.
- ▣ Training centre for Intermac field technicians and subsidiary/dealer personnel; customer training directly at the customer's site.
- ▣ Overhaul, upgrade, repairs and maintenance.
- ▣ Remote diagnostics and troubleshooting.
- ▣ Software upgrade.

**85**

Intermac field technicians in Italy and worldwide.

**20**

Intermac technicians working in Teleservice Centre.

**35**

certified dealer technicians.

**50**

training courses in a variety of languages every year.



**SERVICE TEAM**

The Biesse Group promotes, cares and develops direct and constructive relationships with the customers to meet their needs, improve after-sales products and services through two dedicated areas: Intermac Service and Intermac Parts. With its global network and highly specialised team, the company offers on-site and on-line assistance and spare parts for machines and components anywhere in the world, 24/7.

## INTERMAC PARTS

- Original Intermac spare parts and spare parts kits customised to suit the machine model.
- Spare part identification support.
- Offices of DHL, UPS and GLS couriers located within the Intermac spare parts warehouse, with multiple daily pick-ups.
- Optimised order dispatch time, thanks to a global distribution network with de-localised, automated warehouses.

**95%**  
of machine downtime orders dispatched within 24 hours.

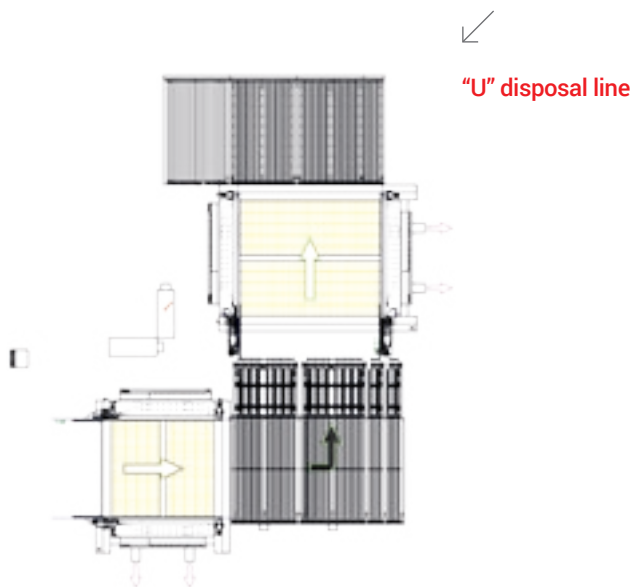
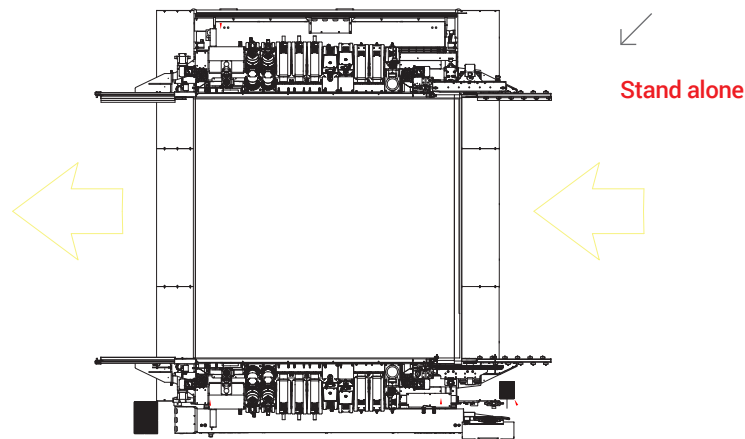
**95%**  
of orders dispatched on time.

**30**  
spare parts staff in Italy and worldwide.

**150**  
orders processed every day.

# MAXIMUM PERFORMANCE

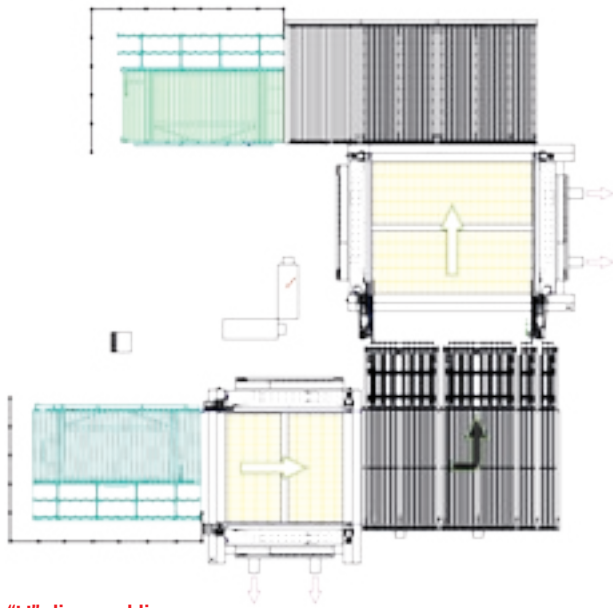
Innovative solutions, even in terms of automation, make the production line flexible and highly productive, for small batches (batch-one production) and different thicknesses.



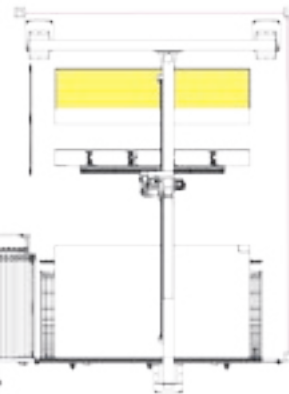
The FK Series double-edgers can also be used in a stand-alone configuration, or coupled with loading and unloading pallets.



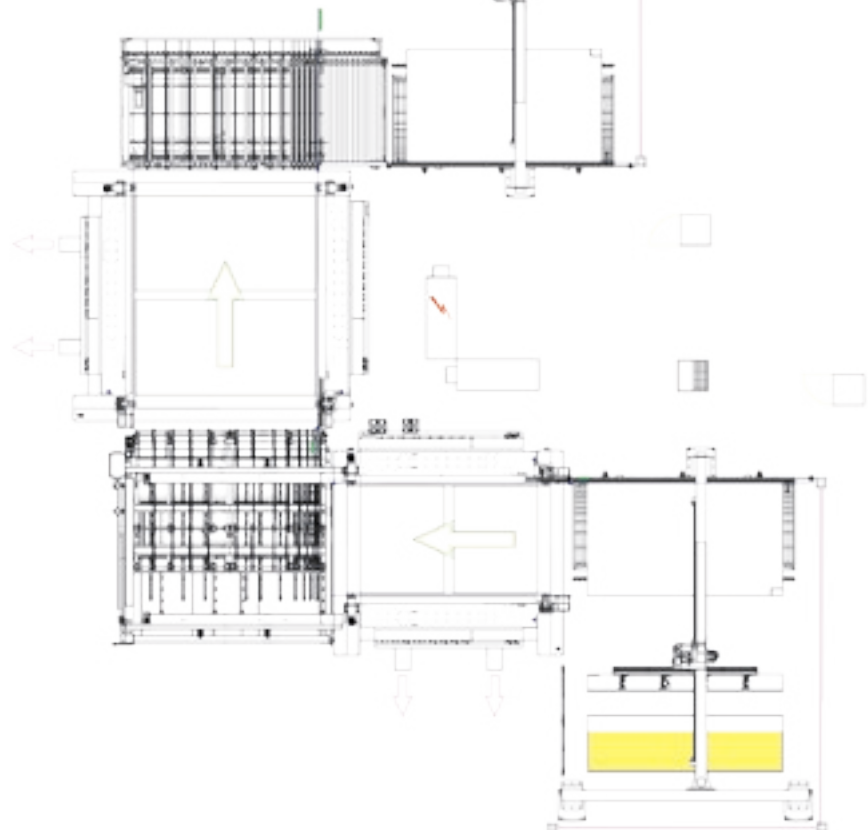
**U line which can be equipped with both manual and automatic loading and off-loading systems.**



**"U" disposal line with tilting tables**

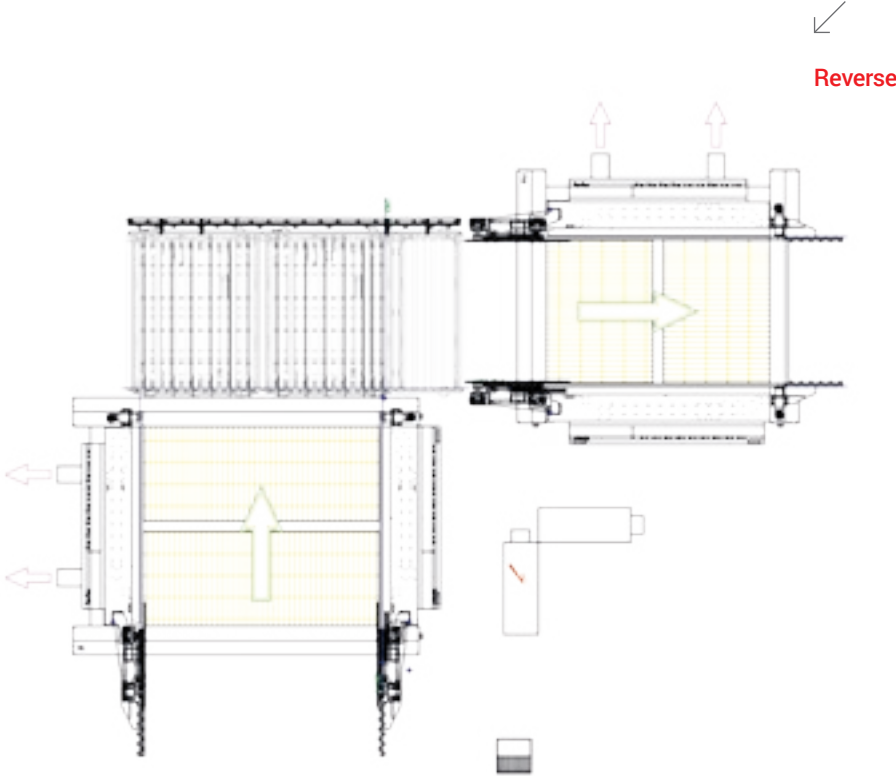


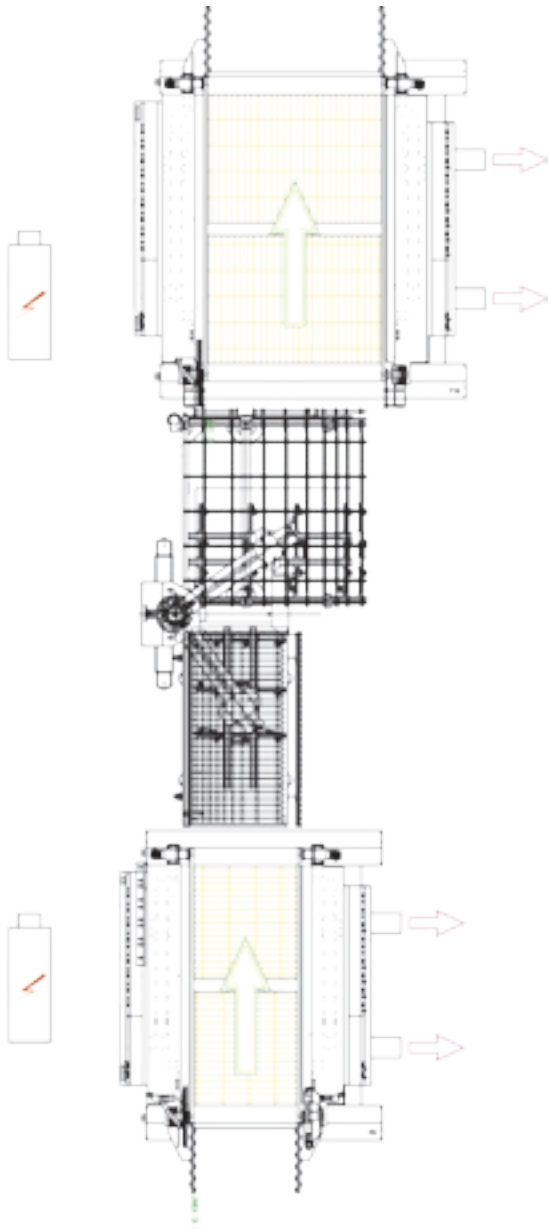
**U" disposal line with loader and off-loader**



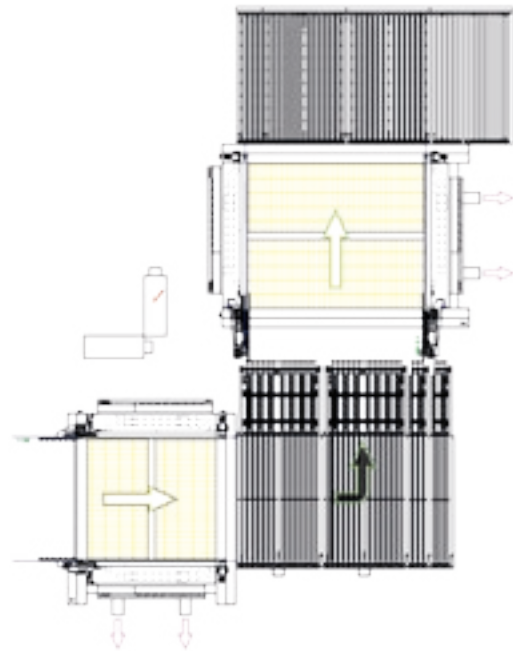
# IN-LINE INTEGRATION

The FK series flip-up line,  
ideal for companies with limited space.





↙  
**Straight Line**



↙  
**"Z" disposal line**



# INDUSTRY 4.0 READY

Industry 4.0 is the latest industry frontier, based on digital technologies and machines that speak to the companies. The products can be interconnected with the production processes via smart networks.



Intermac's commitment is to transform our customers' factories with real-time technology, ready to guarantee digital manufacturing opportunities, with smart machines and software packages becoming vital tools that facilitate the daily tasks of people all over the world processing glass, stone, metal and more. Our philosophy is a practical one: to supply entrepreneurs with solid data that can help them to lower their costs, optimise their processes and improve their results.

AND THAT MEANS BEING 4.0 READY.

# COMPLETE RANGE OF SOLUTIONS FOR GLASS

## INTERMAC

### TABLES FOR FLOAT GLASS CUTTING



Genius RS-A

Genius CT-A series

Genius CT-RED series

### TABLES FOR LAMINATED GLASS CUTTING



Genius LM series

Genius LM-A series

### MACHINES FOR CUTTING LAMINATED AND FLOAT GLASS



Genius Comby Lines

### LINES FOR CUTTING FLOAT OR LAMINATED GLASS



Genius Lines & Systems

### WATER JET CUTTING SYSTEMS



Primus series

### MACHINES AND SYSTEMS FOR DOUBLE-EDGING GRINDING



Busetti F series

Busetti P series

Made-to-measure solutions

### MACHINING CENTRES



Master 23

Master 30

Master 33.3-38.3-45.3

Master 33.5-38.5-45.5- 45.5Plus

### SPECIAL PROCESSING CENTRES AND AUTOMATIC CELLS



Master 63-65

Master 95

Master 185

Master with belts

### SPECIAL PROCESSING CENTRES AND AUTOMATIC CELLS



Master work cells

### PROCESSING CENTRE FOR GROOVING OPERATIONS



Master 34

### VERTICAL MACHINING CENTRES



Vertmax series

V-Loader

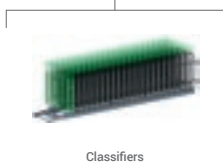
### TOOLS FOR GLASS



Diamut tools

## MOVETRO

### STORAGE SYSTEMS



Classifiers

### HANDLING



Loaders

Arpa

Telescopic loaders

### HANDLING



Shuttles

Lite shuttles

# MADE WITH INTERMAC

## MORNAGO GLASS - CUSTOMISED TECHNOLOGY

With the innovative grinding, vertical boring and in-line milling system designed by Intermac specifically for Mornaglass, the Varese-based company is able to produce glazing solutions for a wide range of applications, via an extremely flexible and reliable production process.

"Normally, double-edging machines work horizontally, and so glassworks companies tend to buy horizontal drilling machines, leaving them with two separate solutions that have usually been supplied by different manufacturers: we, however, decided to place our trust in the inspired idea that Intermac

offered us - a complete and fully-integrated island for grinding, vertical boring and milling, specially designed for our applications."



# 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**

