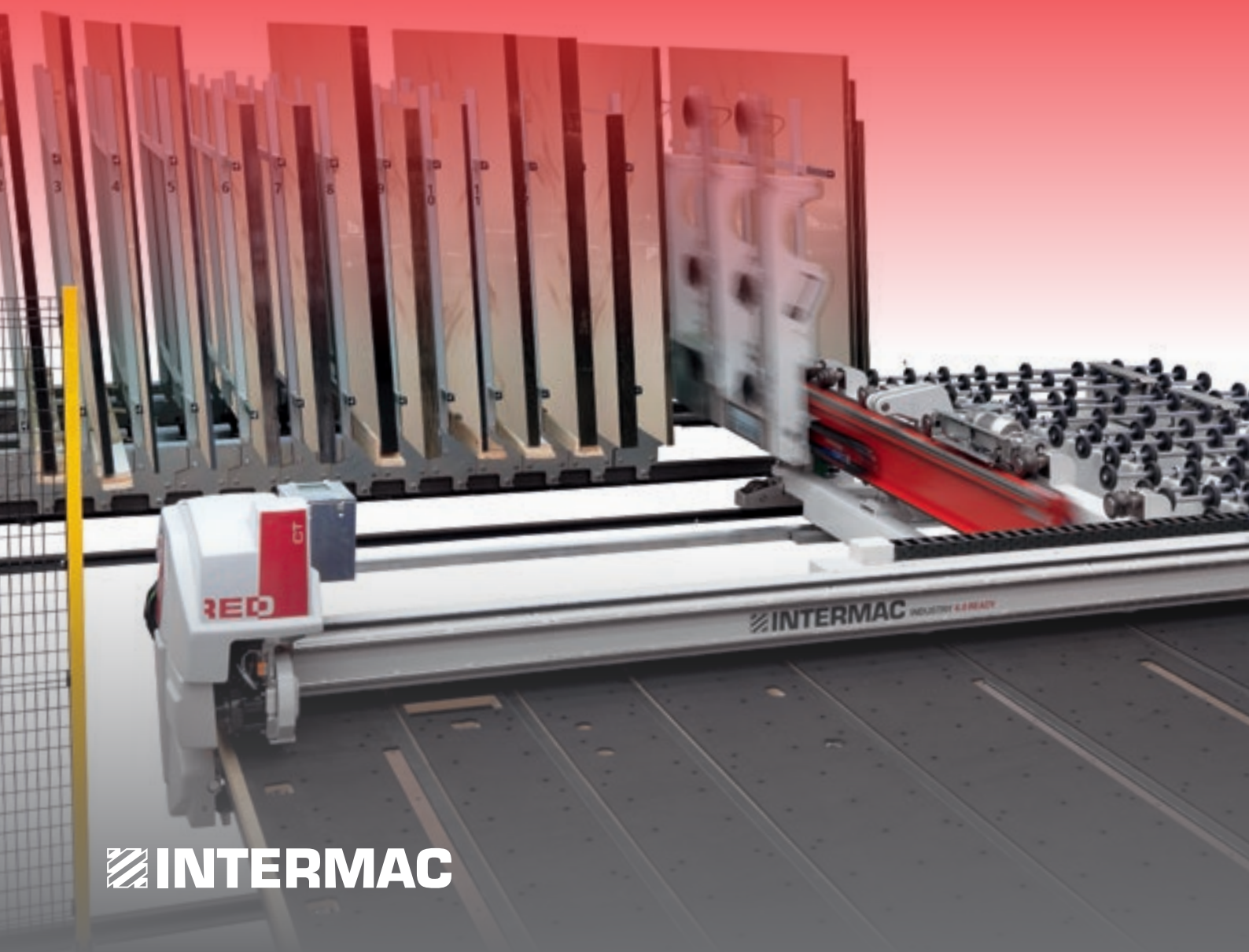


MISTRAL

SERIES

SYSTEMS FOR STORING AND HANDLING
SHEETS OF NATURAL STONE,
QUARTZ AND CERAMIC



 **INTERMAC**

PRODUCTIVITY AND FLEXIBILITY IN SMALL SPACES

THE MARKET REQUIRES

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 satisfying the requirements of even the most demanding customers.

INTERMAC RESPONDS

The entire **MISTRAL** range sets the standard for automated systems for the storage and handling of sheets of marble, granite, quartz and ceramic.

All **MISTRAL** solutions are tailor made and designed to enhance company performance, optimising the level of automation, efficiency and operator safety whilst at the same time eliminating the risk of accidents due to incorrect handling.





MISTRAL SERIES

- ▀ 100% PRODUCTIVITY INCREASE
- ▀ 100% PERSONALISATION
- ▀ 100% INTEGRATION
- ▀ 50% SPACE SAVED
- ▀ 0 INTERRUPTIONS DURING RESTOCKING
- ▀ 0 RISKS FOR OPERATORS

A SOLUTION FOR EVERY NEED

STATIC STORAGE
MANUAL HANDLING
OF THE SHEETS

DYNAMIC STORAGE
AUTOMATIC
HANDLING
OF SHEETS

CLASSIC

INNOVATIVE

FLEXIBILITY

HIGH CAPACITY

FACTORY 4.0

**THE INTEGRATION OF MISTRAL
WITH INTERMAC CUTTING LINES**



Thanks to its vast range,
Mistral is able to welcome any challenge.

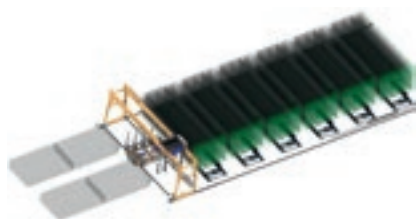
Intermac offers a complete range of products for the storage and handling of sheets of natural, quartz and ceramic materials, offering real solutions for manufacturing needs.



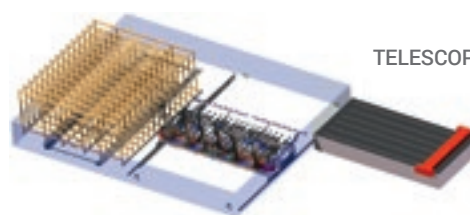
CLASSIFIERS



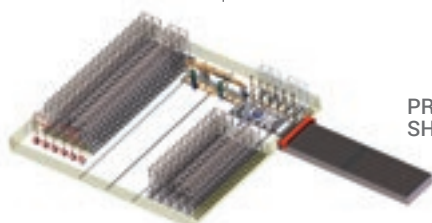
GROUND LOADERS



AERIAL LOADERS



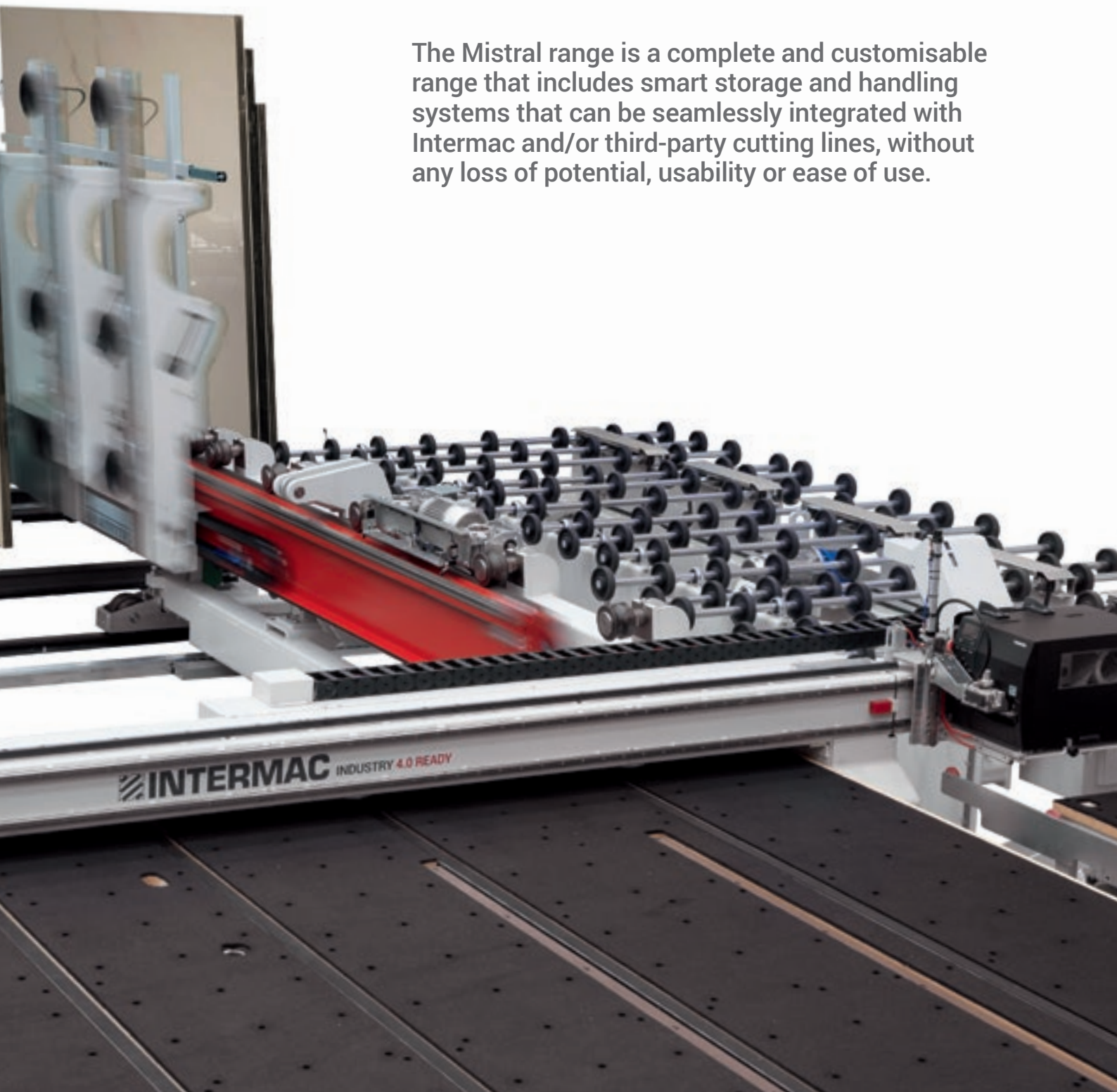
TELESCOPIC LOADERS

PRIME
SHUTTLESWIFT
SHUTTLE

FULL INTEGRATION WITH THE CUTTING LINES



The Mistral range is a complete and customisable range that includes smart storage and handling systems that can be seamlessly integrated with Intermac and/or third-party cutting lines, without any loss of potential, usability or ease of use.



INTERMAC INDUSTRY 4.0 READY

QUALITY AND SAFETY FOR OUR CUSTOMERS

STATIC STORAGE SEMIAUTOMATIC CLASSIFIERS

The entire MISTRAL range is the point of reference for the planning and installation of semiautomatic and automatic systems used to store and handle sheets of natural stone, quartz and ceramic.

SEMIAUTOMATIC OR AUTOMATIC CLASSIFIERS:

- ▀ 4 times smaller than traditional storage systems, thanks to the folding movement used for opening and closing
- ▀ Can be purchased as modules to optimise the use of space in accordance with individual production needs
- ▀ Safe and easy to use thanks to loading (storage) and unloading (retrieval) operations that are quick and SAFE, with no risk of error.



Mistral classifiers are the ideal solution for storing large quantities of sheets in limited space, making them readily available for machining operations: handling is done by electronic means, in complete safety at all times.

A range of semiautomatic warehouses that serve as an excellent solution for anyone who wants to make space in the laboratory.



The systems consists of a series of frames subjected to electro-mechanical movements - activated by an operator with a radio controller - that create a gap between the frames and allow for sheets to be loaded or retrieved.

Though simple in its design, the system used to manually lock/unlock the frames is sturdy and was carefully designed to make the operator's work more comfortable, limiting physical strain. The specific radio controller highlights the simplicity of the design and is extremely easy to use.

SAFE AND HIGHLY AUTOMATED HANDLING

STATIC STORAGE AUTOMATIC CLASSIFIERS

Mistral automatic classifiers are warehouses that provide an excellent solution for anyone who wants to make room in the laboratory, while guaranteeing safe and highly automated handling.

- ✓ **READY FOR AUTOMATIC LOADING**
- ✓ **OPENS WITH A SINGLE MOVEMENT**





The control console features a modern colour touchscreen designed to make the machine controls simple and intuitive; the standard interface also includes remote assistance. It's easy to read with clear and immediate messages available in various languages. Mistral is, once again, practical, simple, modern.



High-tech automated warehouses entirely operated by a single control console with a touchscreen panel. Simply enter the number for the desired piece, and it will be made available for loading or retrieval.

A WIDE RANGE OFFERING ULTIMATE FLEXIBILITY

STATIC STORAGE CLASSIFIERS

Mistral A is the range of automated classifiers with the highest degree of automation and efficiency on the market. Thanks to independent motorisation, Mistral classifiers reduce the number of movements needed to access the material by 50%, guaranteeing improved cycle time and ultimate efficiency over time.



When connected to automated loading systems like the Telescopic or Aerial Loaders, the opening and closing of the warehouse is automatically synchronised by the loading system to optimise access time.

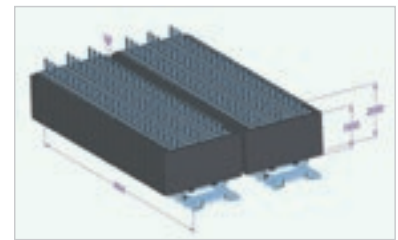
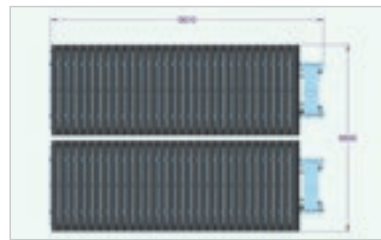
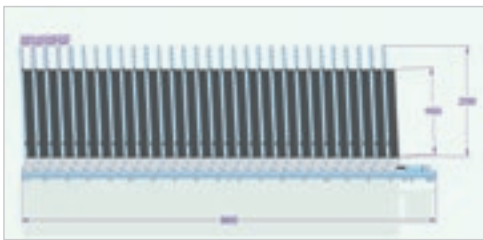
THE NUMBER AND ARRANGEMENT OF MISTRAL MODULES IS HIGHLY CUSTOMISABLE EVEN AFTER INSTALLATION

Option of assembling the warehouse with multiple classifier modules. Each classifier module can be personalised in terms of size, number of positions and usable depth for each position on the basis of storage needs and of the manufacturing space available.



A compact warehouse composed of classifiers with 30 positions

- ▀ Capacity 300 Sheets (20 mm)
- ▀ Overall floor dimensions 35 square metres



A compact warehouse composed of classifiers with 60 positions

- ▀ capacity 300+300 Sheets (20 mm)
- ▀ overall floor dimensions 65 square metres

ARPA WAREHOUSE



The Arpa warehouse system allows for the timely and selective storage of:

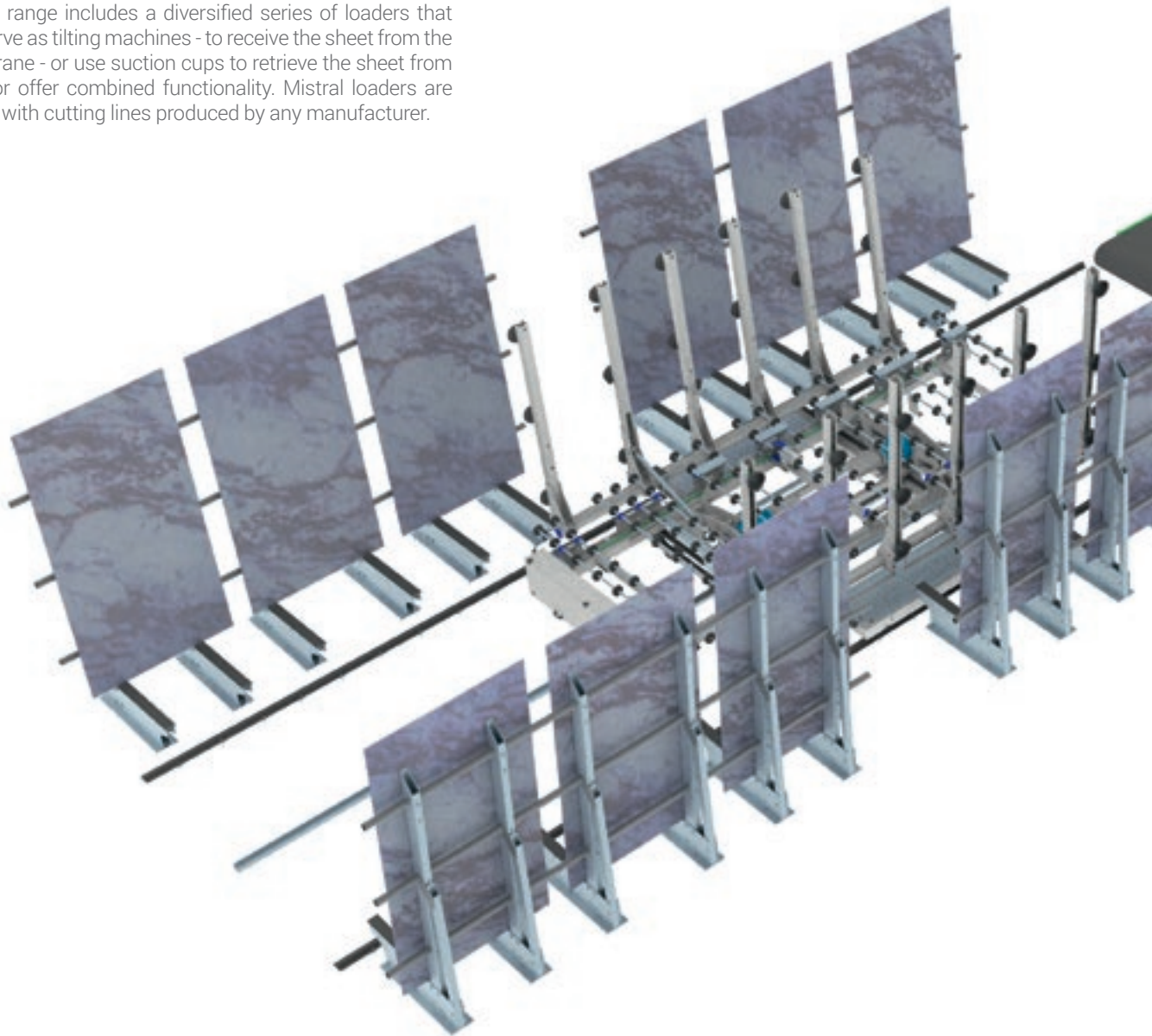
- ▀ individual partly processed sheets between one machining operation and the next
- ▀ scraps left over from the cutting process
- ▀ the Arpa warehouse integrates perfectly with the Mistral handling system both in terms of the piling of sheets that need to be cut, to avoid blocking production while the sheets are being loaded in the warehouse, and the automatic retrieval of scraps produced by optimising the cutting process.

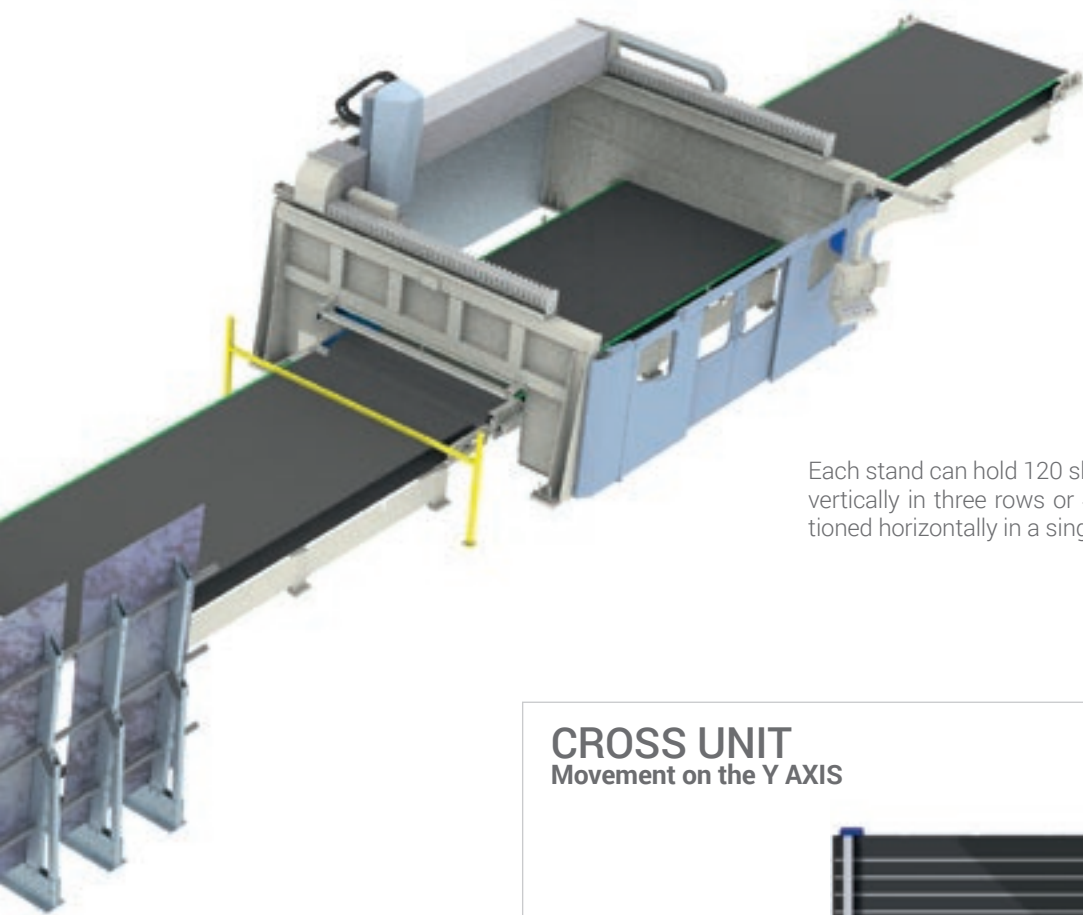
Arpa warehouse systems are modular and can be configured to meet various production needs, as well as on the basis of the space available. The number of positions and the length of the Arpa warehouse can be adapted to the amount of space the customer has available. Every single position can be used to store one or more sheets, whose minimum and maximum size may vary on the basis of the type of Arpa warehouse used.

RELIABLE TECHNOLOGICAL SOLUTIONS AND QUALITY COMPONENTS

CLASSIC DYNAMIC STORAGE LOADERS

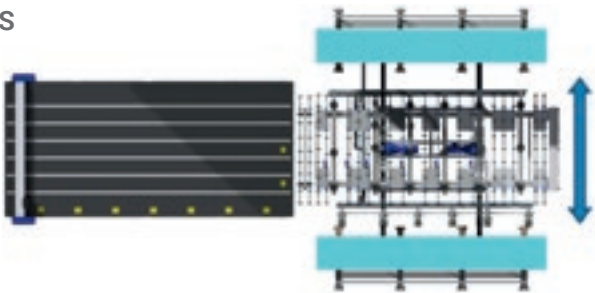
The Mistral range includes a diversified series of loaders that can also serve as tilting machines - to receive the sheet from the overhead crane - or use suction cups to retrieve the sheet from the stand or offer combined functionality. Mistral loaders are compatible with cutting lines produced by any manufacturer.



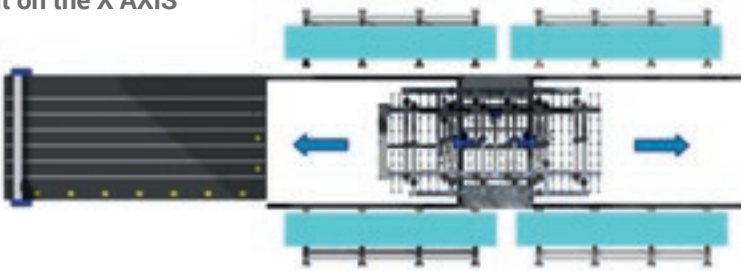


Each stand can hold 120 sheets (thickness 20 mm) positioned vertically in three rows or 40 sheets (thickness 20 mm) positioned horizontally in a single row.

CROSS UNIT
Movement on the Y AXIS



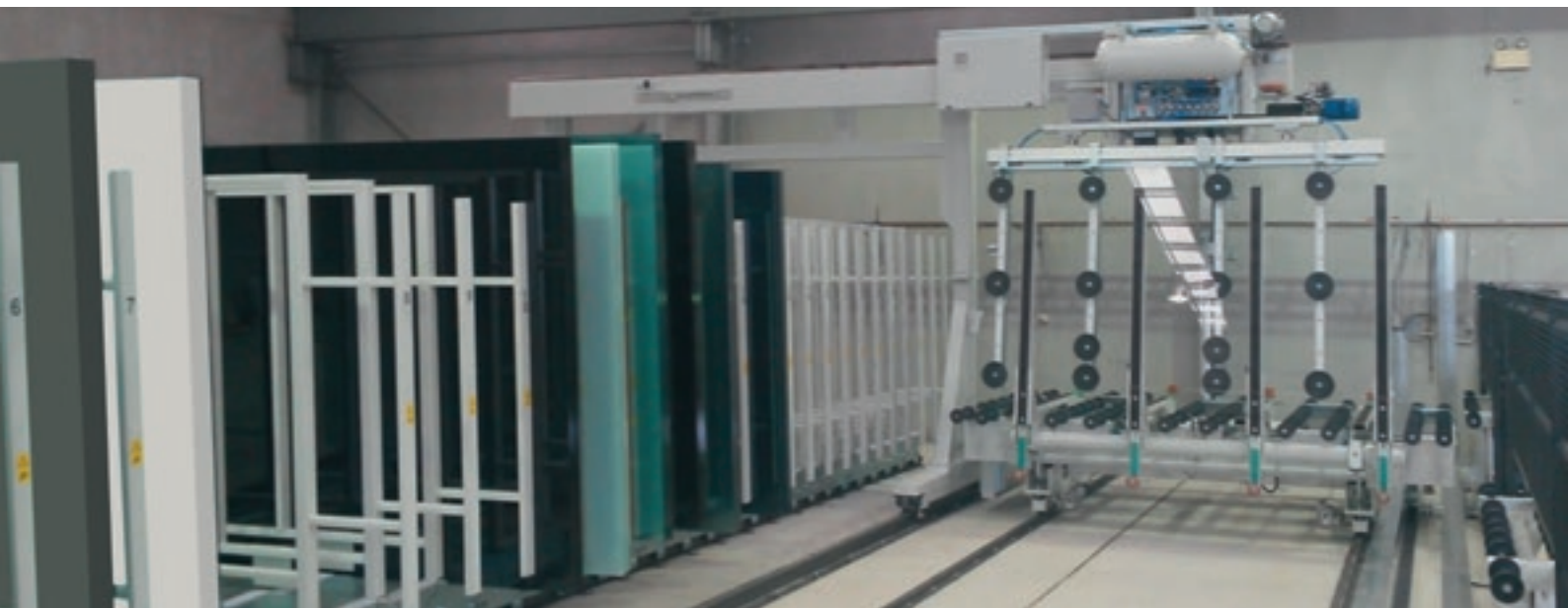
LONGITUDINAL
Movement on the X AXIS



ABSOLUTE FLEXIBILITY AND COMPLETE SAFETY

INNOVATIVE DYNAMIC STORAGE FOR FLEXIBLE PRODUCTION AERIAL LOADERS

AERIAL LOADERS WITH TILTING MACHINE



CAM single beam and CAB dual beam aerial loaders are a range of automated solutions for the aerial loading and handling of individual sheets. Designed for customers who need ultimate manufacturing flexibility and the option of feeding multiple cutting lines, besides meeting safety, automation and spatial considerations.

Advantages offered by aerial loaders include:

PRODUCTIVITY

Extremely reduced cycle times capable of meeting the productivity demands of any customer.

CONTINUOUS CYCLE

Cutting-edge technical solutions allow for production during the day paired with cutting lines and the unloading of trucks at night.

FLEXIBILITY

A different sheet can be delivered to the cutting line in every cycle: ultimate flexibility with the highest levels of speed and safety.

SAFETY

The operator no longer moves the large sheets: all of the operations are executed automatically and the operator doesn't leave the breakout table.

MISTRAL aerial loaders are also capable of returning the scrap material from the cutting line to the warehouse: speed and safety to help reduce waste. The partially cut sheet is returned to the position from which it was originally retrieved and made available in the database for future optimisation operations.

MODELS AVAILABLE

SINGLE BEAM

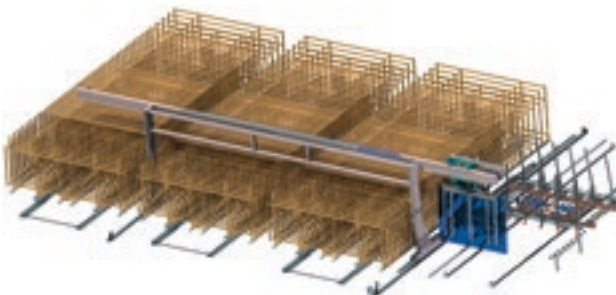
2 SIZES



3 SIZES

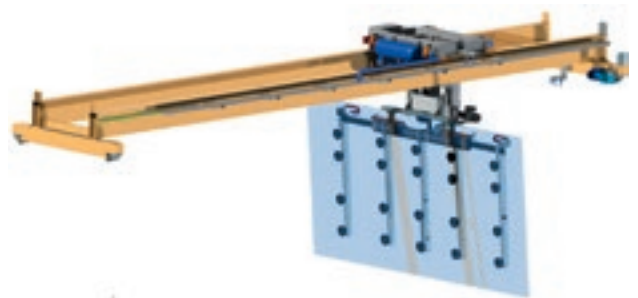


4 SIZES

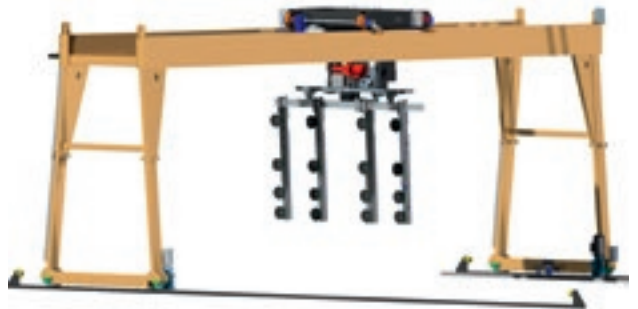


DUAL BEAM

AERIAL



LEGS ON THE GROUND



COMBINED



THE PERFECT COMBINATION OF PRODUCTIVITY AND FLEXIBILITY

FLEXIBLE DYNAMIC STORAGE CAM AERIAL LOADERS

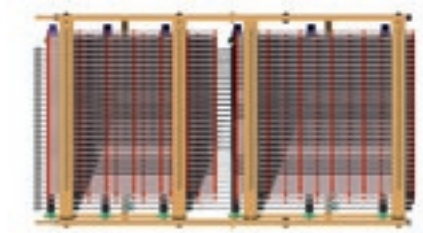
Option of feeding multiple cutting lines: the perfect combination of productivity and flexibility.

- **RAPID AND FLEXIBLE**
- **BOOSTS CUTTING CAPACITY**
- **INCREASES SAFETY**



ARPA HRP WAREHOUSE FOR THE AUTOMATIC MANAGEMENT OF SCRAP MATERIAL

- ✓ DIRECT ACCESS TO THE INDIVIDUAL SHEET
- ✓ SAVES SPACE
- ✓ REDUCES WASTE

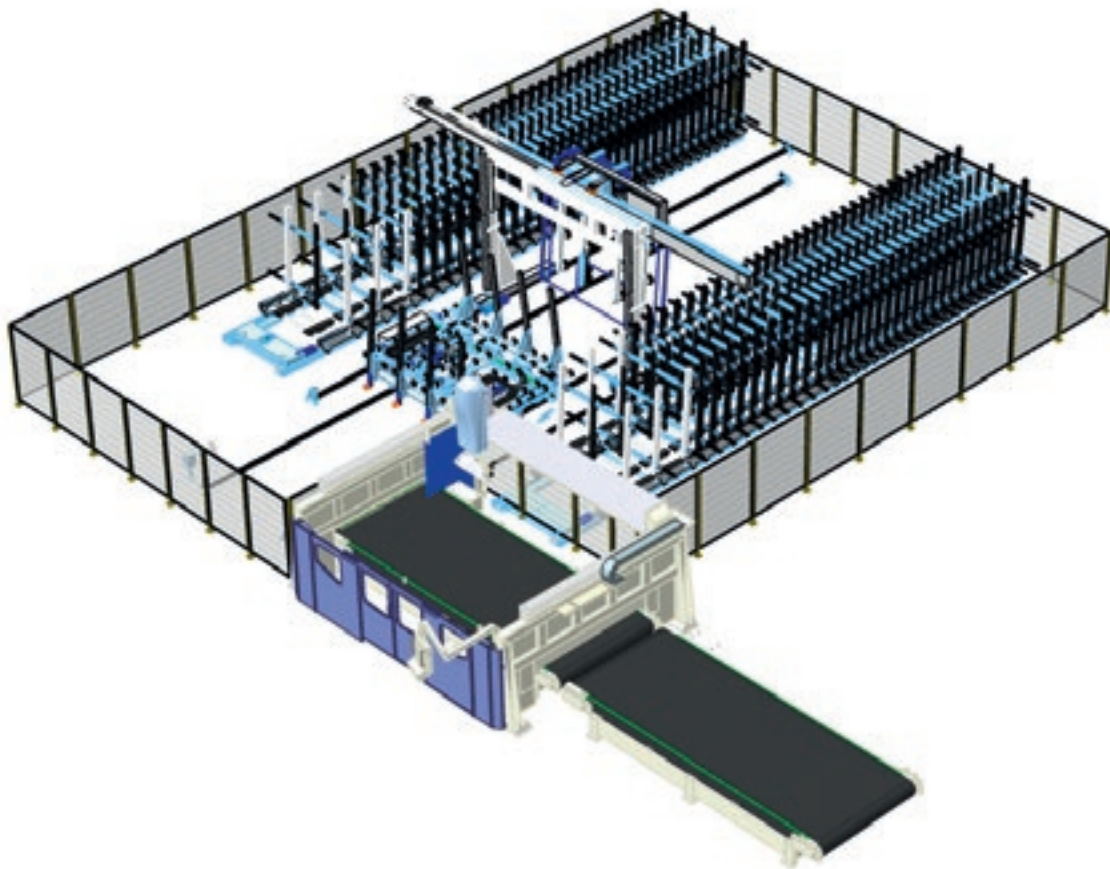


CONTINUOUS CYCLE PRODUCTIVITY

The Mistral aerial loader is a revolutionary automated warehouse that safely and automatically moves the frame loaded with sheets in front of the loaders.

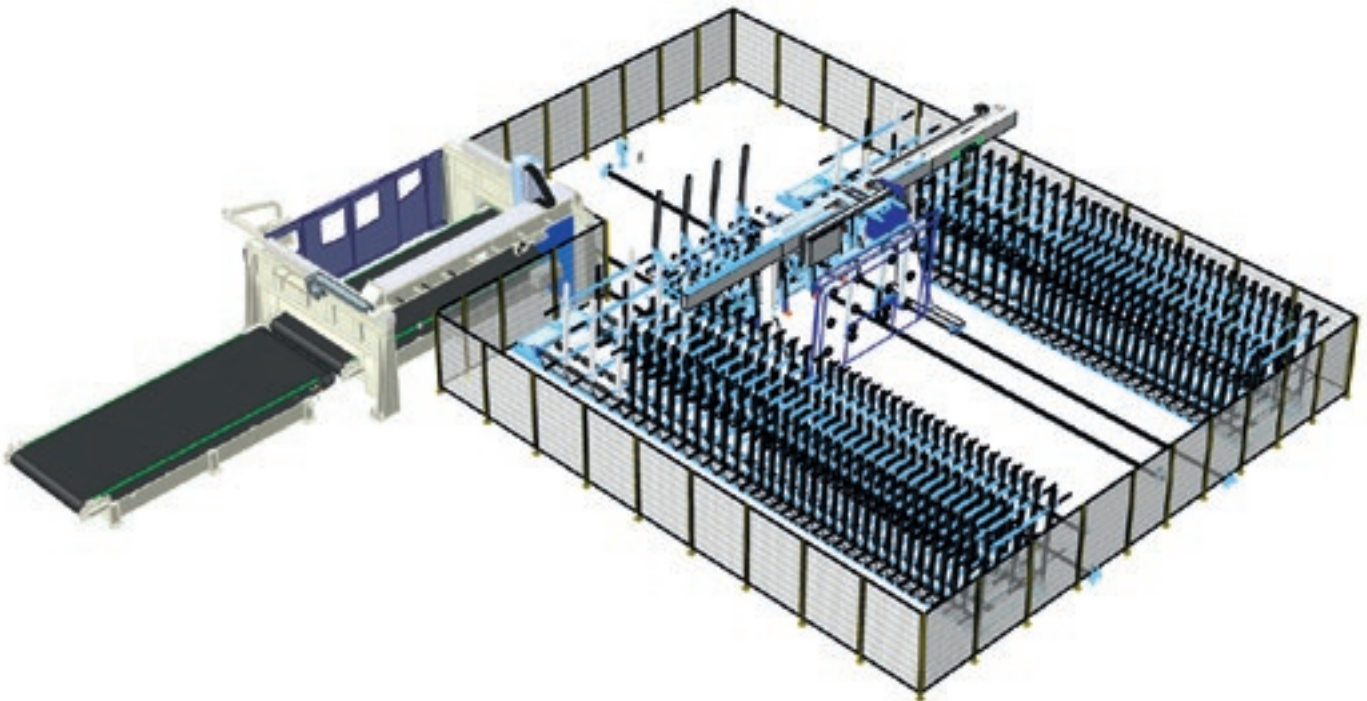
Warehouse with an Aerial Overhead Crane and a double row of classifiers 34+34 for the automatic loading of the cutting line.

- ▀ Capacity 680 Sheets (thickness 20 mm)
- ▀ Overall floor dimensions 250 square metres



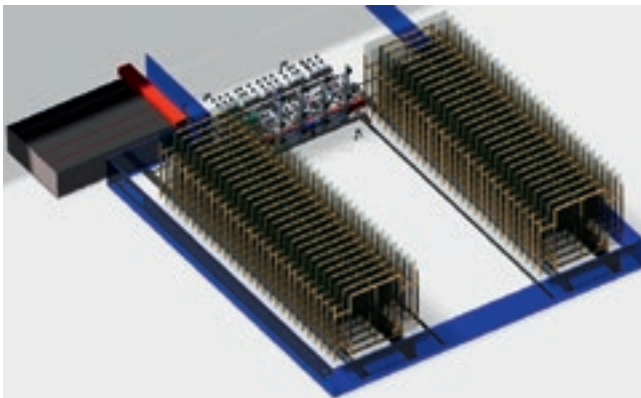
This solution offers advantages in terms of:

- ✓ **CONTINUOUS CYCLE PRODUCTIVITY**
- ✓ **OPTION OF FEEDING MULTIPLE CUTTING LINES SIMULTANEOUSLY**
- ✓ **INCREASED SAFETY**



PRODUCTIVITY AND FLEXIBILITY

INNOVATIVE DYNAMIC STORAGE FOR DYNAMIC PRODUCTION TELESCOPIC LOADERS



50% space reduction if installed in combination with the AUTOMATIC CLASSIFIERS.

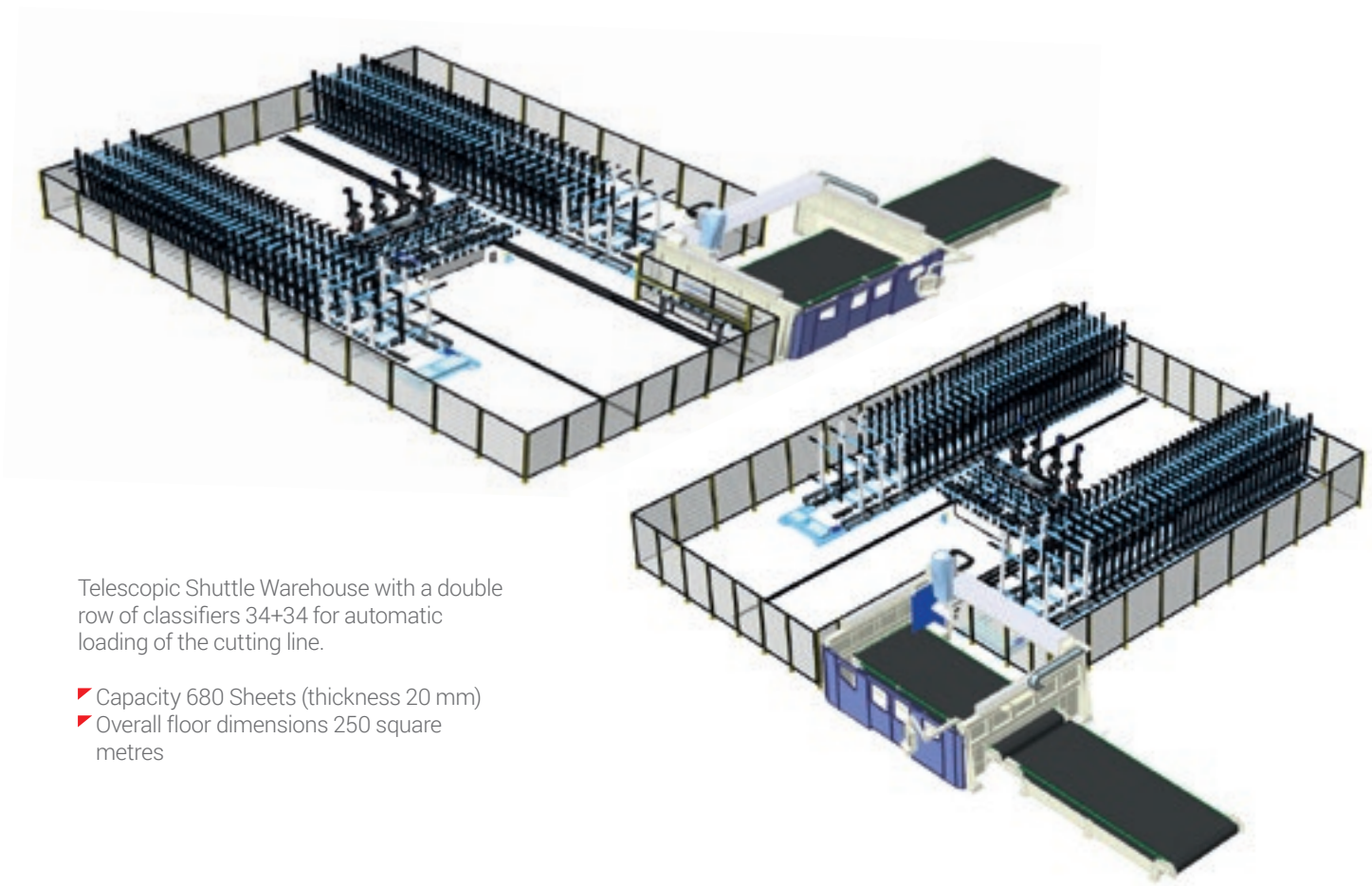


The supervisory software shows the warehouse situation in real time and receives the loading, handling and sheet-return missions automatically - in real time - thanks to integration with the cutting line optimiser. The same information can also be shared with the office for the procurement of materials.



**Movetro offers
a wide range
of one-way
or two-way
telescopic loaders
for loading sheets.**

TELESCOPIC LOADERS - CTB



Telescopic Shuttle Warehouse with a double row of classifiers 34+34 for automatic loading of the cutting line.

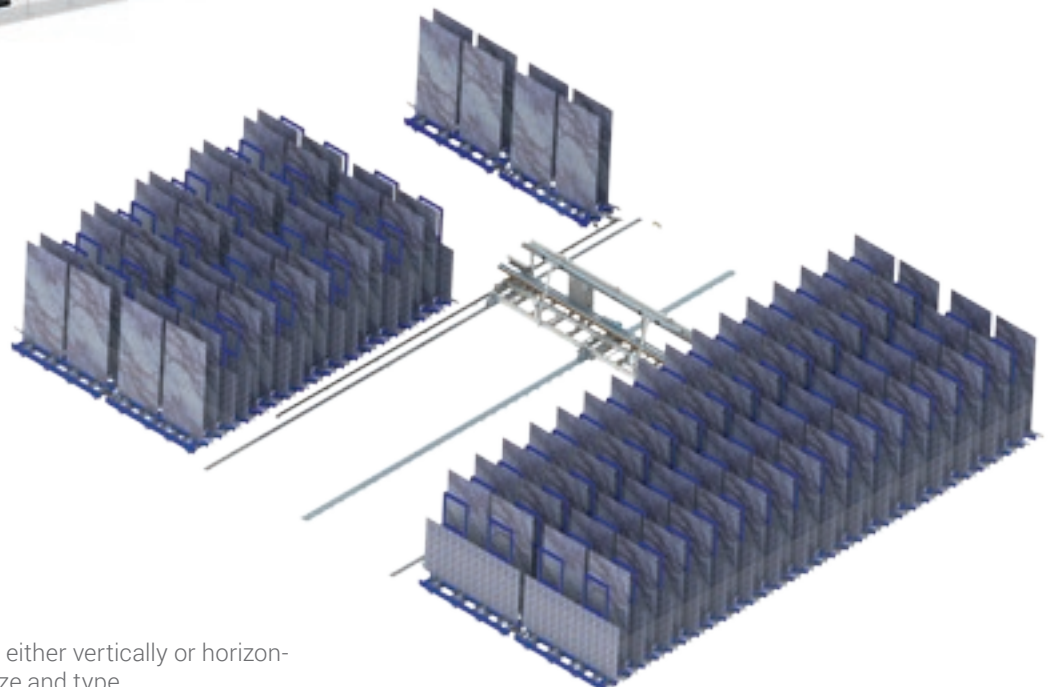
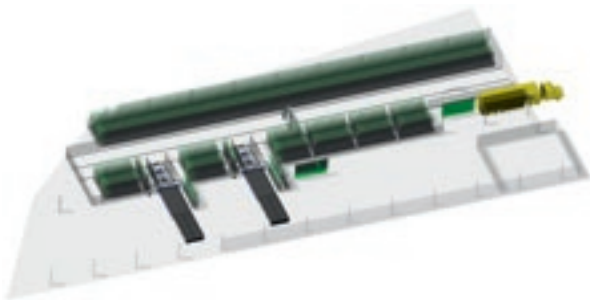
- Capacity 680 Sheets (thickness 20 mm)
- Overall floor dimensions 250 square metres

CONTINUOUS CYCLE MACHINING WITHOUT INTERRUPTIONS

INNOVATIVE DYNAMIC STORAGE FOR MASS PRODUCTION SHUTTLES

AUTOMATIC PRIME SHUTTLE WAREHOUSE WITH LOADERS

PRIME shuttle handling systems are suited for those who need both a large sheet warehouse and the ability to work without interruption, with complete safety, and without interrupting cutting operations while the warehouse is being loaded. Thanks to the modular design, they can be expanded and/or changed even after installation.



Option of storing the sheets either vertically or horizontally on the basis of sheet size and type.

This solution offers advantages in terms of:

SPACE: Reduces the space occupied thanks to the greater concentration of glass compared to classic storage systems.

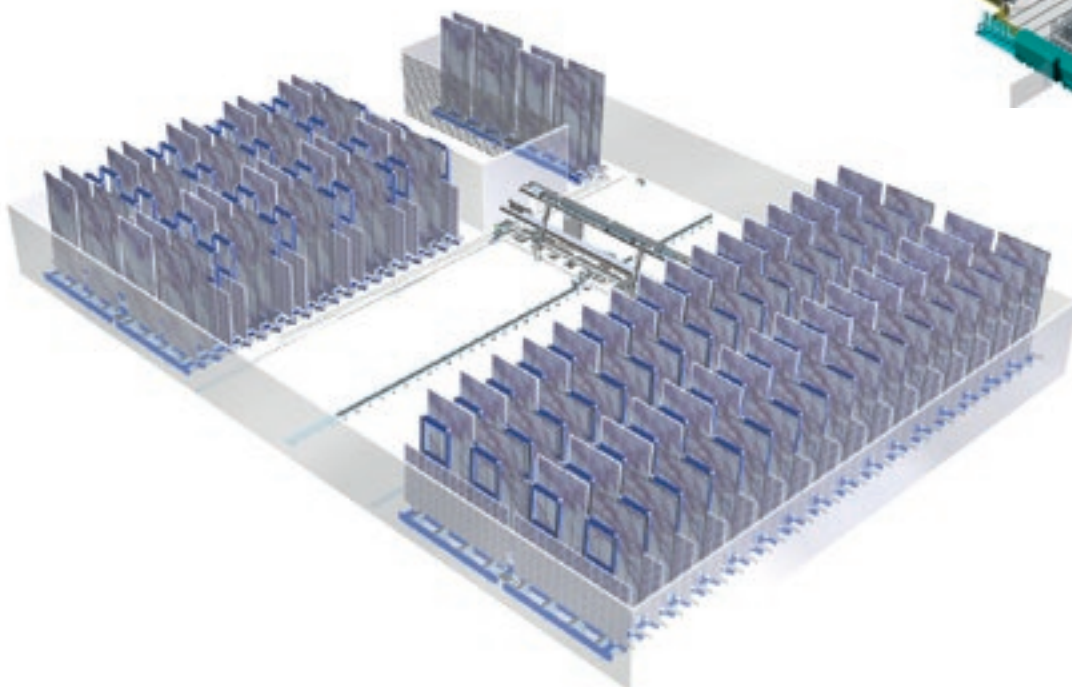
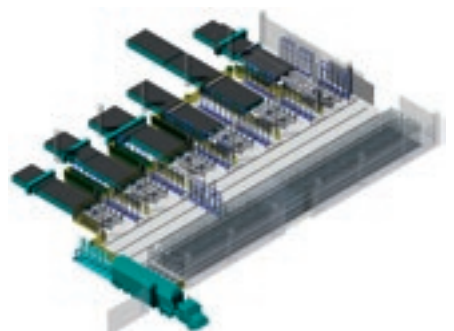
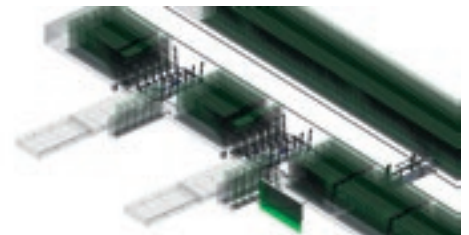
PRODUCTIVITY: the shuttle is capable of automatically moving frames, with a 15.0 tonne capacity, from the warehouse area to the cutting area, and manages multiple cutting lines simultaneously.

CONTINUOUS CYCLE: Thanks to dedicated loading stations, new material is loaded into the warehouse without interfering with cutting operations.

FLEXIBILITY: The shuttle can move across different sections of the plant and make maximum use of the space as a warehouse area even when the plant is not equipped with an overhead crane.

SAFETY: The operator only intervenes while the frame is being loaded in the external station: manipulation of the glass is minimal and all handling is executed automatically.

PRIME shuttles can interface and be integrated with any cutting line, allowing the sheet warehouse to be managed by the optimiser, which governs and manages cutting operations.



SMALLER SPACES AND MAXIMUM PRODUCTIVITY

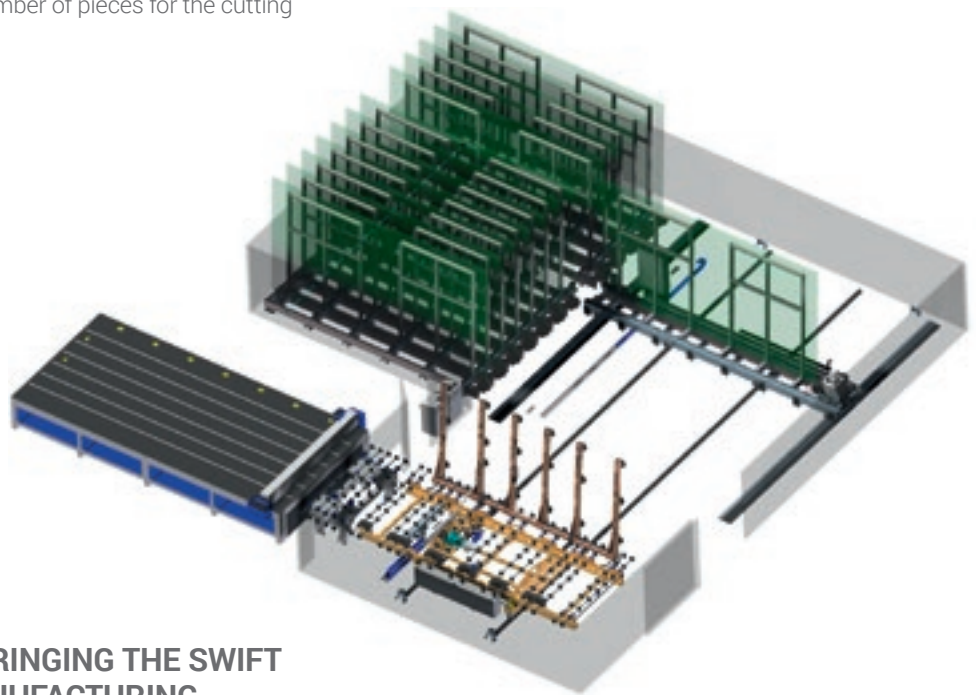
INNOVATIVE DYNAMIC STORAGE FOR MASS PRODUCTION SHUTTLES

SWIFT SHUTTLE

The SWIFT SHUTTLE automated warehouse by Mistral is the most compact solution for the perfect integration of automated loading and cutting systems, introducing the new concept of a cutting line fed by an integrated warehouse.

The **SWIFT SHUTTLE** is the latest integrated solution for cutting lines.

It's the ideal technology for storing and handling sheets, specifically designed to offer a higher number of pieces for the cutting line in a very limited space.

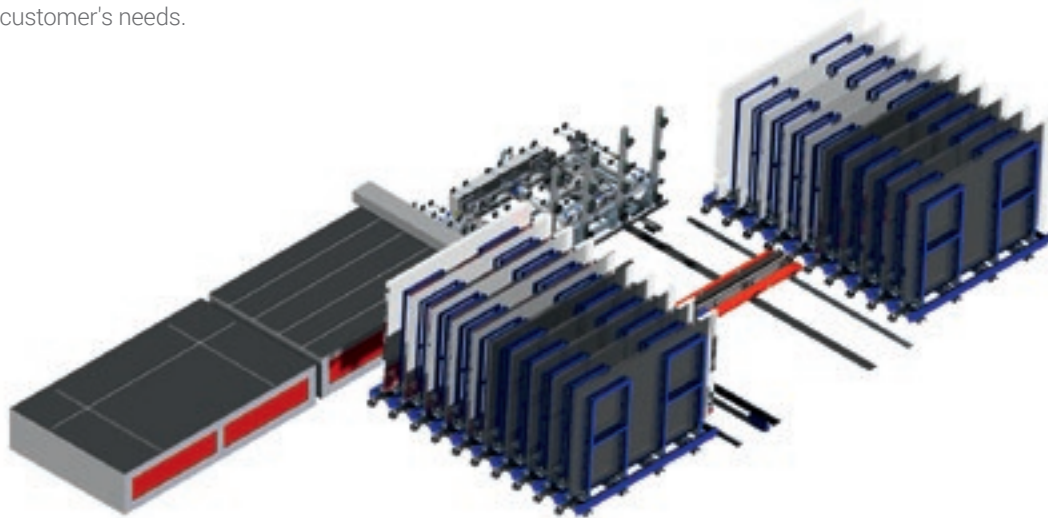


THE ADVANTAGES OF BRINGING THE SWIFT SHUTTLE INTO THE MANUFACTURING SETTING ARE IMMEDIATE:

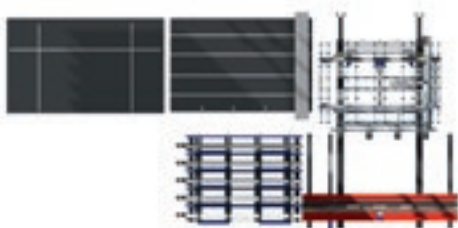
- ▀ Footprint reduction
- ▀ Increased productivity
- ▀ Increased safety

The modular design and assembly that Mistral uses for its shuttle systems ensures that customers will be able to configure their own warehouse on the basis of specific manufacturing and logistic needs and help keep the pace with the growth of the business allowing for expansion even after installation.

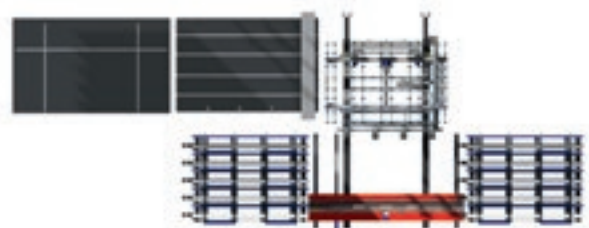
Being highly flexible and configurable allows for ultimate customisation on the basis of the customer's needs.



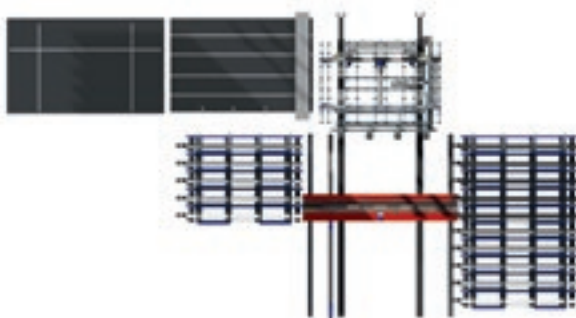
STEP 1



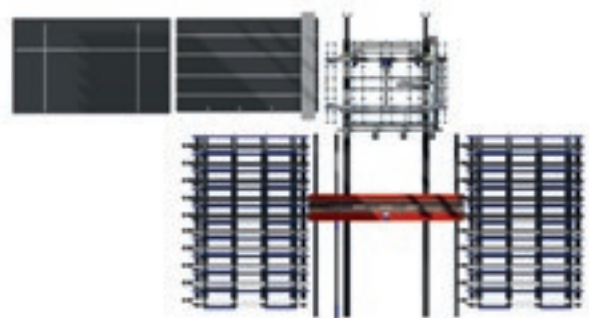
STEP 2



STEP 3



STEP 4

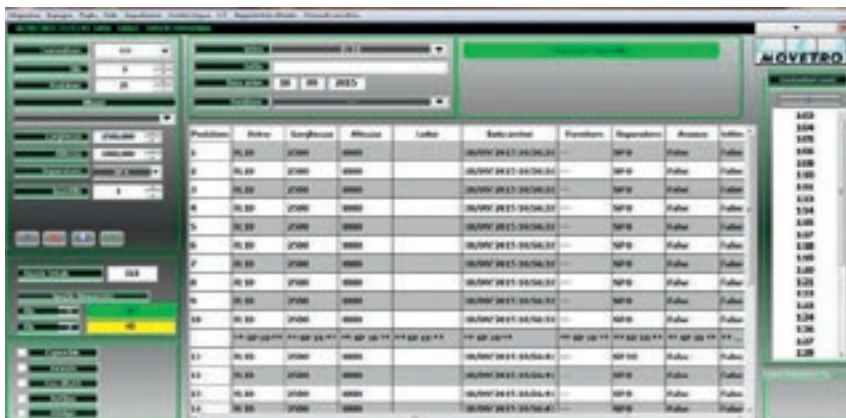


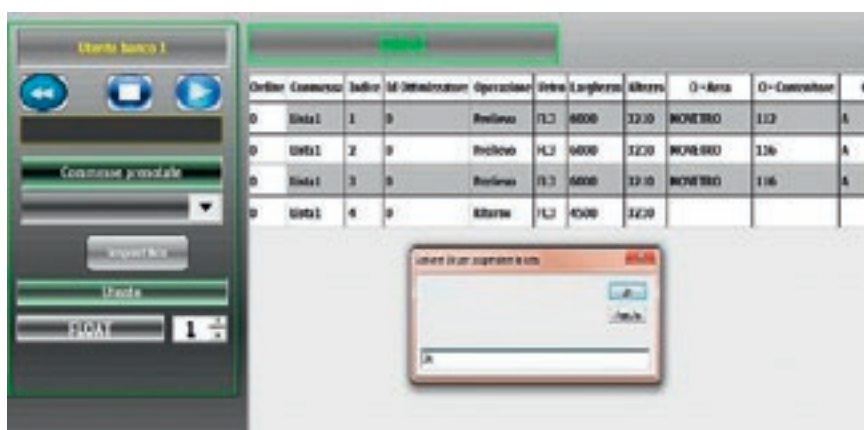
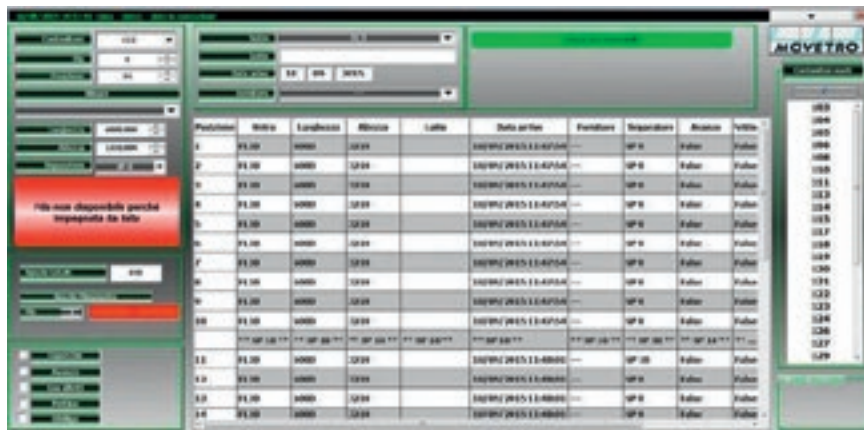
COMPLETE INTEGRATION OF AUTOMATION AND WAREHOUSE MANAGEMENT



The innovative supervisory software by MISTRAL is the product of experience on the field, designed to offer excellence for any customer who requests the ultimate level of integration between automation and warehouse management: to manage a warehouse correctly and efficiently is to meet the company's manufacturing and commercial needs. Two topics need to be addressed: the need to maximise the quality of service offered to the customer and the need to minimise costs for the company, all the while maintaining a tailor-made graphic interface that's simple and intuitive.

- **REAL TIME UPDATES ON THE WAREHOUSE**
- **TRACEABILITY OF THE SHEETS**
- **SHARING INFORMATION WITH THE CUTTING OPTIMISER**

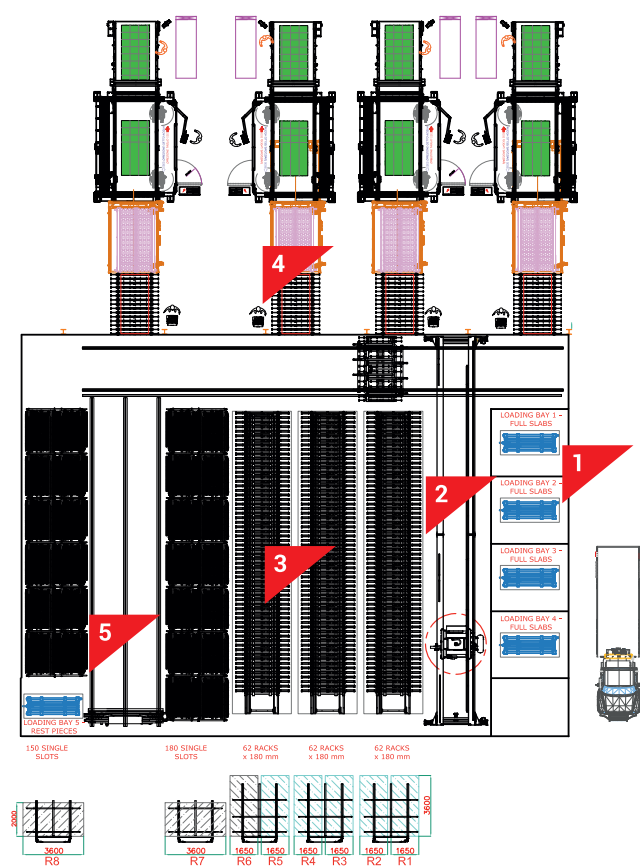




PERSONALISED SOLUTIONS AND FACILITIES

AUTOMATED WAREHOUSE

FOR STORING SHEETS WITH 186 POSITIONS, WITH A SCRAP MANAGEMENT SYSTEM THAT OFFERS 300 SLOTS

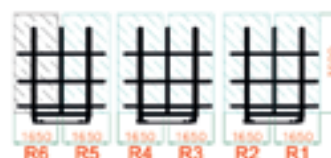


1 LOADING BAYS
stands for positioning the sheets to be loaded in the warehouse.

2 AERIAL OVERHEAD CRANE
equipped with a grasping mechanism that uses suction cups manages every movement:

- Automatic depositing of the sheets from the loading bays to the correct warehouse position
- Automatic sheet retrieval to feed the cutting lines
- Automatic retrieval of scraps for reuse on the cutting lines.

3 THREE STORAGE SYSTEMS
with a total of 186 positions capable of holding up to 3348 sheets (thickness 20 mm).



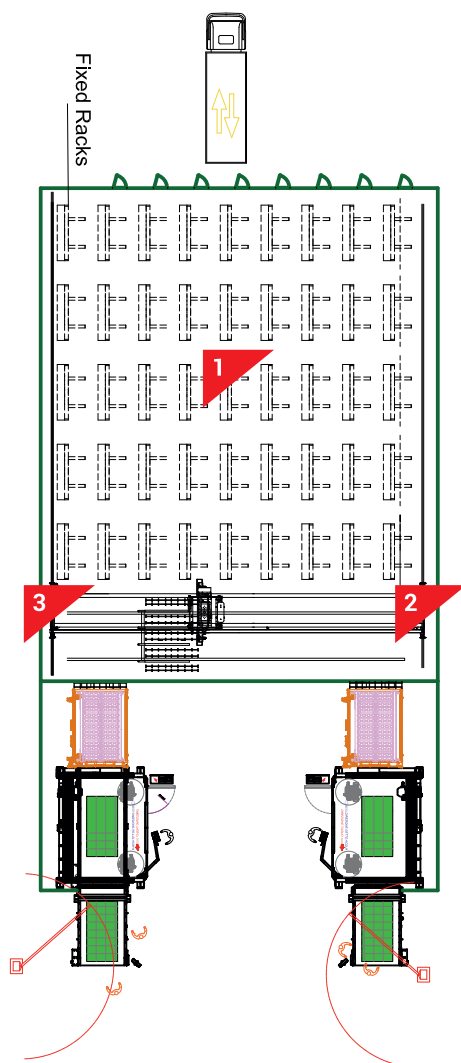
4 LOADER/TILTING MACHINE
capable of receiving the sheet from the overhead crane and transferring it to the free cutting line.

5 AUTOMATED SYSTEM FOR STORING SCRAPS WITH 300 SLOTS
Return to the warehouse happens automatically by means of the shuttle which retrieves the pieces from the scrap bay. The overhead crane collects the scrap material from the shuttle and transfers it to the loader to be sent to the cutting line.

- 186 POSITIONS
- CAPACITY 3348 SHEETS (THICKNESS 20 MM)
- + 300 SLOTS FOR SCRAP MATERIAL
- OVERALL FLOOR DIMENSIONS 780 SQUARE METRES

AUTOMATED WAREHOUSE

FOR STORING SHEETS IN 45 FIXED POSITIONS



- 1 45 POSITIONS**
consisting in fixed stands with a stand depth of 1000 mm.
- 2 AERIAL OVERHEAD CRANE**
features a grasping mechanism with suction cups, used to retrieve the sheet automatically.
- 3 LOADER/TILTING MACHINE**
capable of receiving the sheet from the overhead crane and transferring it to the free cutting line.

- ▀ 45 POSITIONS
- ▀ CAPACITY 2250 SHEETS (THICKNESS 20 MM)
- ▀ OVERALL FLOOR DIMENSIONS 780 SQUARE METRES

INTEGRATION

HIGH PERFORMANCE THANKS TO PERFECT INTEGRABILITY IN THE LINE

The combination of Intermac and Movetro generates ideal solutions for every type of need.

Both the stand-alone and the automated in-line solutions are controlled by process optimisation software, and the result is a complete range including Movetro smart storage and handling systems, integrated with the Intermac Genius range of cutting tables. Intermac and Movetro glass machining technologies incorporate the key concepts of industry 4.0, propelling our customers into the era of digital manufacturing.



PERSONALISED SOLUTIONS AND FACILITIES

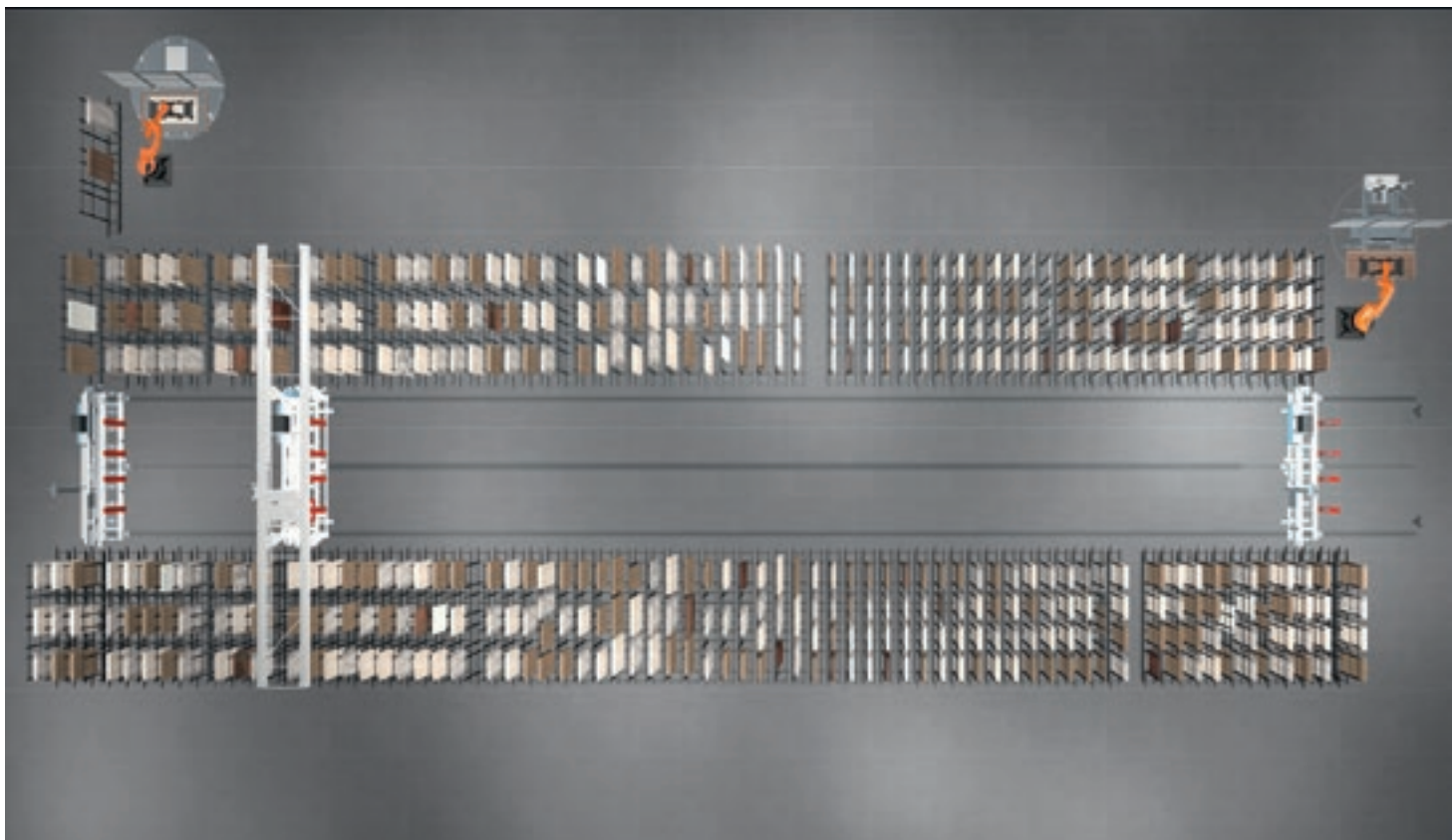
FOR THE LOGISTICS OF QUARTZ AND CERAMIC SHEETS

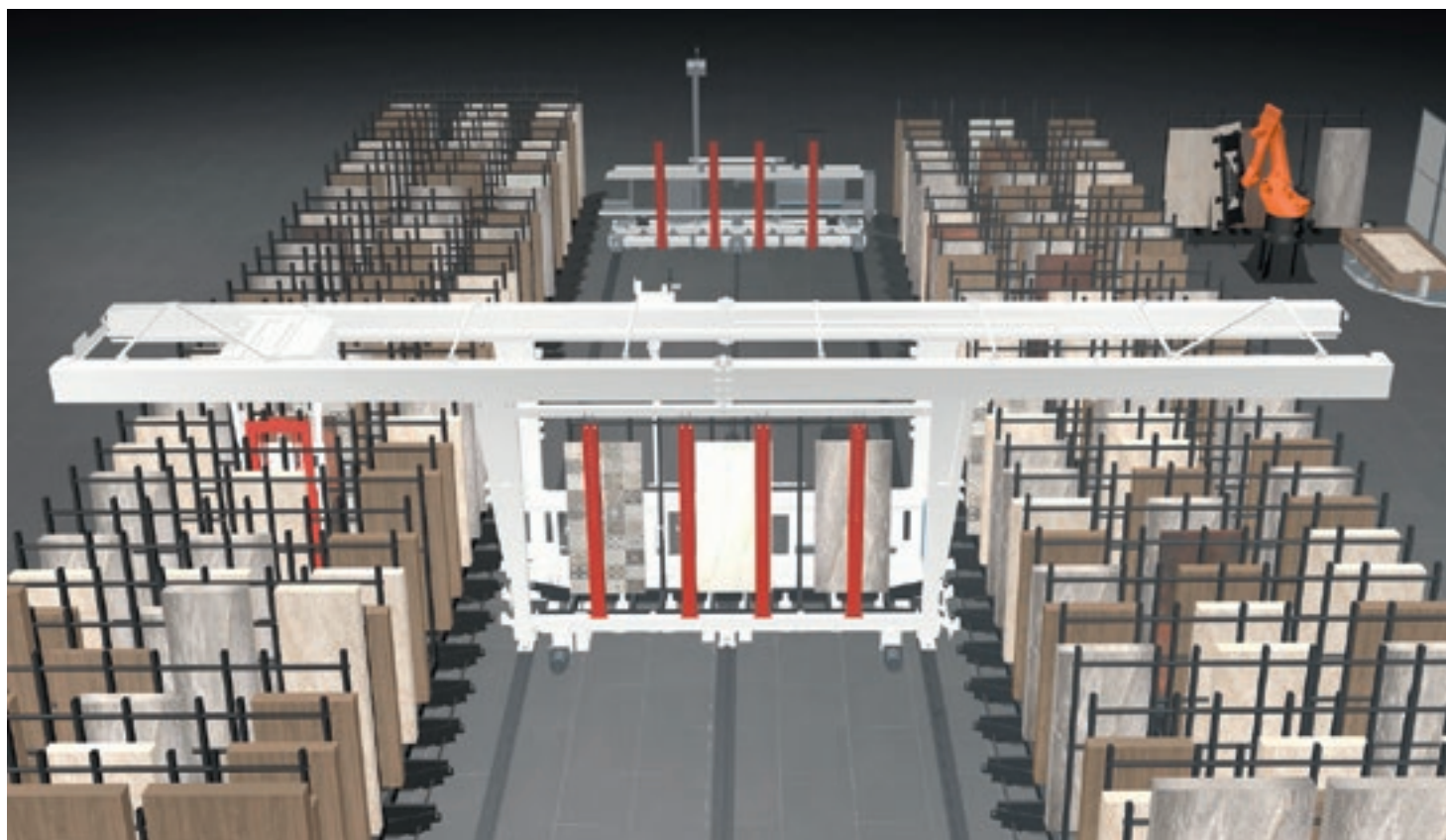
The system is composed of:

- ▀ **2 ROBOTIC CELLS** for the automated loading of sheets to the warehouse
- ▀ **331 STANDS** with the option of storing from 101,000 to 33,000 sheets depending on sheet thickness
- ▀ **14 POSITIONS FOR BACKUP STORAGE**
- ▀ **14 TRANSITIONAL POSITIONS** for moving the stands from one section of the warehouse to another
- ▀ **2 SHUTTLES**
- ▀ **SWITCH SHUTTLE**
- ▀ **2 ROBOTIC CELLS** to prepare the vertical stands or houses for customer orders.

Max plant productivity of 1500 pickings per day considering:

- ▀ **70% MULTIPLE PICKINGS**
- ▀ **30% INDIVIDUAL PICKINGS**





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.

A photograph of a person from behind, wearing a white polo shirt with "SERVICE TEAM" printed in red on the back. They are standing in front of industrial machinery.

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.

COMPLETE RANGE OF SOLUTIONS FOR STONE

INTERMAC.COM
DONATONI.EU
MONTRESOR.NET

INTERMAC

WATERJET



Primus 184

Primus series

WORK CENTRES



Master 23



Master One



Master 33.3-38.3-45.3
Master 33.3 Plus-38.3 Plus-45.3 Plus



Master 33.5-38.5-45.5
Master 33.5 Plus-38.5 Plus-45.5 Plus

UNIVERSAL WORK CENTRES



Master 850-1200

AUTOMATIC UNIVERSAL WORK CENTRES



Mastersaw 625 Double Table

TABLES FOR SINTERED MATERIALS CUTTING



Genius RS-A

DOUBLE EDGING MACHINE FOR SINTERED AND NATURAL MATERIALS



Busetti F Series

STORAGE AND HANDLING SYSTEMS FOR SINTERED MATERIALS



Navetta Lite

TOOLS FOR STONE



Diamut Tools



BRIDGE SAW



Spin 625 cnc



Jet 625 cnc



Echo 725 cnc



Sprinter 825 cnc



Twin



Quadrix XL 1600



Quadrix DV 1100

CUTTING LINES



Quadrix DG
1000 / 1300 / 1600 / 2000

MULTIFUNCTIONAL SAW CENTER



Kronos 600 / 800

UNIVERSAL SAW CENTRES



Zenit

POLISHING AND CALIBRATING MACHINE



Geko

ROBOT



Cyberstone CR01 / CR02

SLABS LOADING/UNLOADING



SX-3 / SX-5



Belt



HORIZONTAL EDGE POLISHER FOR FLAT EDGES



Lola 6.4



Lola 8.6



Lola 10.8

HORIZONTAL EDGE POLISHER FOR FLAT AND TOROIDAL EDGE



Luna 7.4



Luna 8.6

VERTICAL EDGE POLISHER FOR FLAT EDGES



Vela 7.2

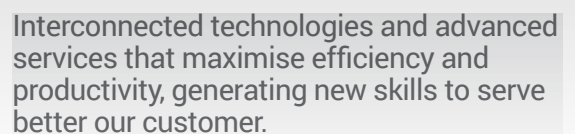
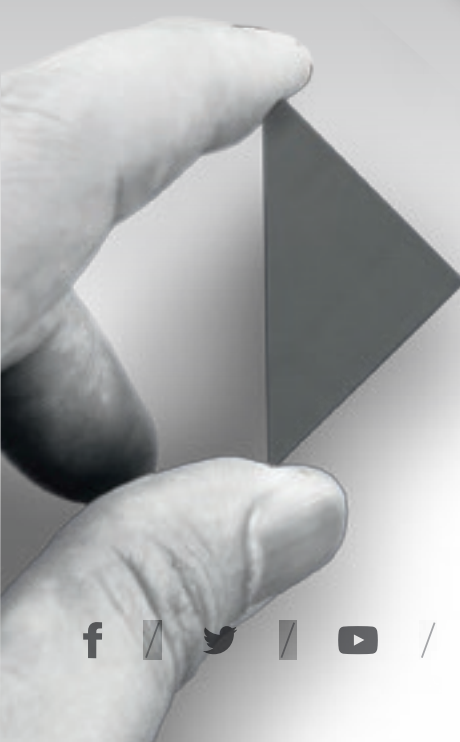
V-GROOVE



Viva 3.2

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