GE
NIUS CT-RED

HIGH-PERFORMANCE CUTTING TABLES AND LINES FOR FLOAT GLASS

INTERMAC

LIMITLESS PRODUCTIVITY

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

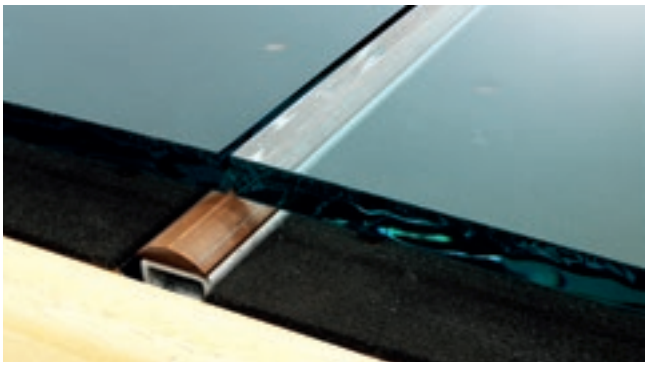
with technological solutions that guarantee high-quality, reliable performance over time.
Genius CT-RED is the range of high-performance cutting tables for both **REGULAR** and **JUMBO** sheets of float glass, for working on cutting lines over two or three shifts. It provides maximum productivity, reliability and durability over time, courtesy of quality components and cutting-edge technological solutions that guarantee continuous cycle, maintenance-free machining precision.

GENIUS CT-RED

- CUSTOMISABLE SOLUTIONS FOR EVERY CUTTING REQUIREMENT
- GUARANTEED RELIABILITY OVER TIME
- MAXIMUM MACHINING PRODUCTIVITY AND FLEXIBILITY
- HIGH CUTTING PRECISION WITH SIMPLE AND INTUITIVE TECHNOLOGY
- INTEGRATION WITH AUTOMATIC LOADING SYSTEM SOFTWARE FOR MAXIMUM PERFORMANCE.

CUSTOMISABLE SOLUTIONS FOR EVERY REQUIREMENT

The Genius CT-RED range of cutting tables is ideal for even the most demanding of glassworks companies, which require machining tools that can withstand high production loads.



BREAK-OUT BARS
The transverse and longitudinal pneumatic bars enable break-out operations to be performed on glass.

BELT SYSTEMS
The belt system is ideal for transferring sheets of glass in line configurations.

THE ENTIRE GENIUS RANGE IS DESIGNED FOR CUTTING LINES THAT CAN WORK ON TWO OR THREE SHIFTS, AND WHICH ARE USED TO PROCESS LARGE VOLUMES.

Genius Ct-Red can be configured in bar or belt versions, in accordance with production requirements.

The Genius cutting table ensures that materials are fully optimised, significantly reducing waste.

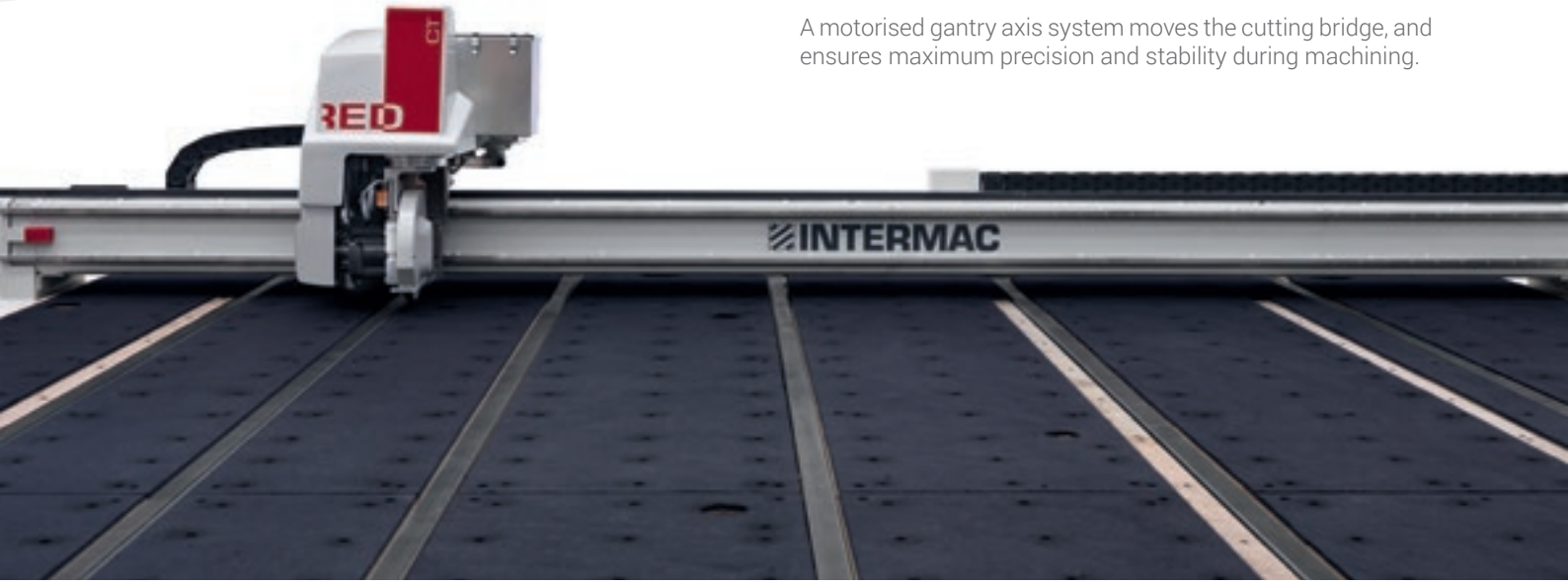
VINYL CUTTING
Genius CT-RED cutting tables guarantee superb machining quality, even when cutting vinyl.

The cutting quality is guaranteed by the proportional electro-pneumatic control system that enables the power/ speed ratio to be measured correctly.

GUARANTEED RELIABILITY OVER TIME

Maximum performance and precision thanks to the planarity of the ground work table.

A motorised gantry axis system moves the cutting bridge, and ensures maximum precision and stability during machining.



The base of the machine is made from a rigid, rectangular structure onto which ground wood panels are attached, ensuring maximum planarity of the working area, essential for optimal glass grooving and break-out operations.

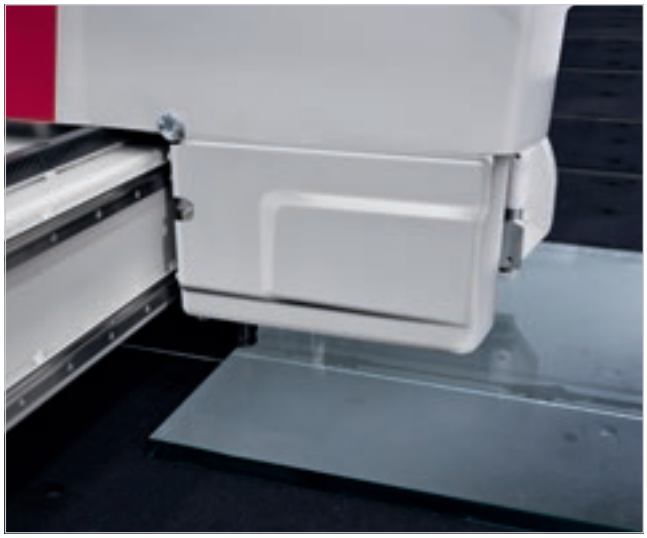
- Acceleration 10m/sec²
- Speed 200 m/min.
- Precision +- 0.15 mm

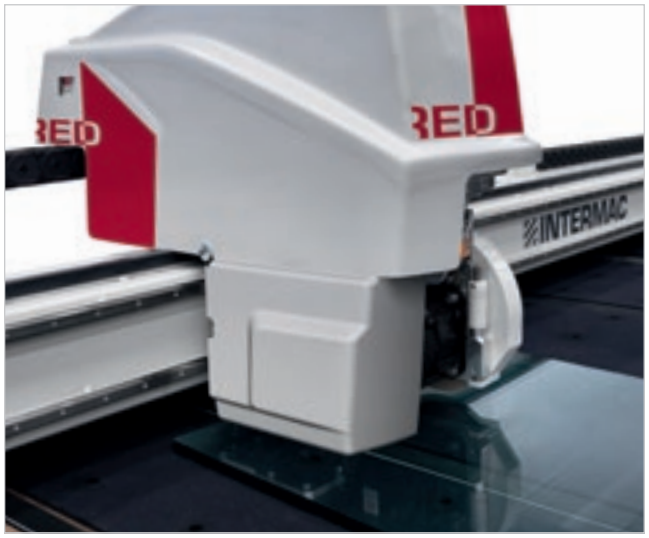
MAXIMUM QUALITY OF MACHINING AND RESULTS

The 6-position automatic tool magazine is an Intermac-patented technology that can be used to make different cuts on a single sheet, greatly improving the quality of the end result.

Automatic tool change with patented technology.

The roller-holder cones allow the cutting tools to be changed automatically.

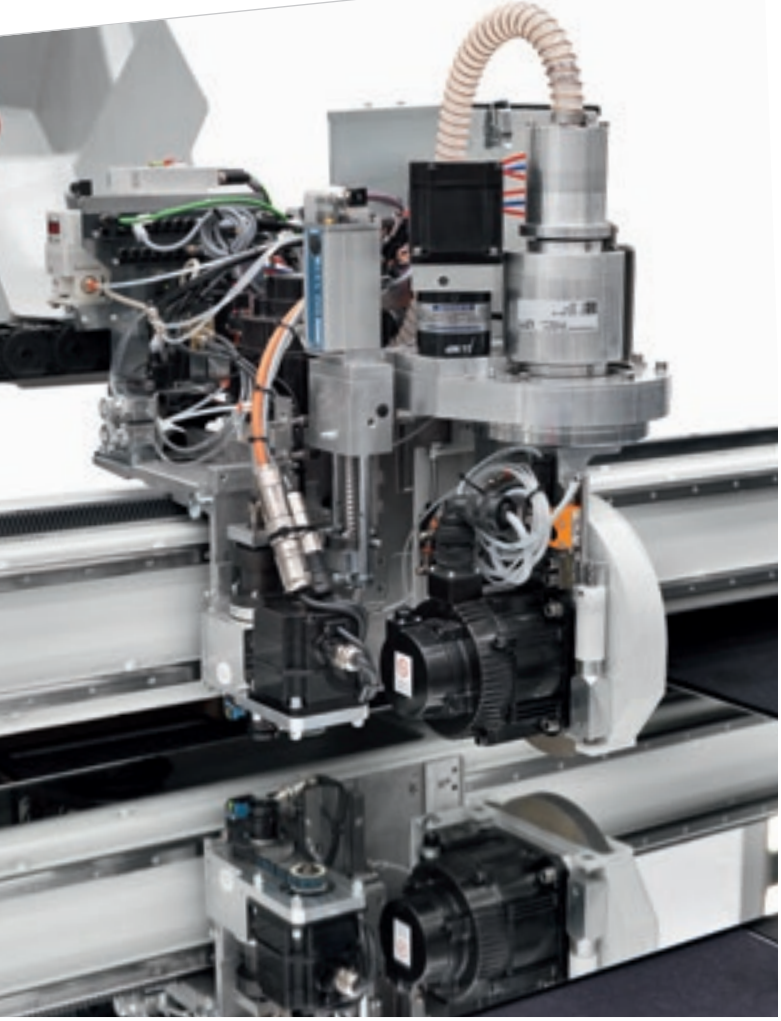




CUTTING LUBRICATION

The delivery of lubricant oil is managed electronically, and occurs in line with the speed of execution of the shape and the specific straight cutting requirements, eliminating waste and simultaneously improving machining results. Precise oil stream dosing with no "drop" effect. Pressurised oil lubrication is also available.

REDUCED CYCLE TIMES



The PC-managed axle speed and the high quality of all of the electronic and mechanical components enable machining times to be optimised, ensuring flexible, dynamic production.

The working head is equipped with an automatic cutting pressure management mechanism that enables the force exerted by the wheel to be adjusted correctly, from the beginning to the end of the cutting operation.

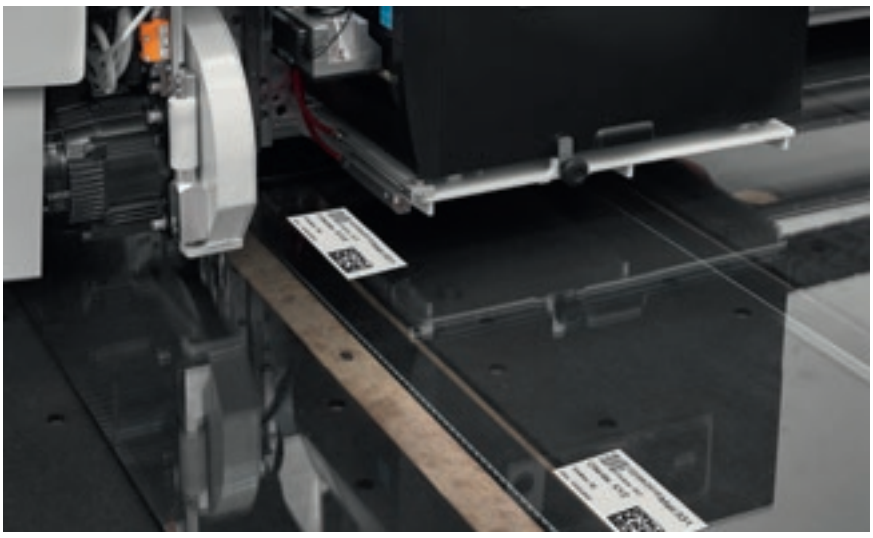
The working head is equipped with a laser reader that automatically detects the position of the sheet on the work table and also acts as a double zero for cutting laminated glass. In addition, it can be used for digitalising templates and models positioned on the work table.

MAXIMUM PRODUCTIVITY

Genius CT-Red offers a complete range of hi-tech solutions, to maximise the productivity of the cutting line.

A digital printer (600 dpi) mounted on an independent carriage for automatic label application helps to guarantee maximum cutting performance.

Standard label 100x70mm.
Available labels 100x100 mm.



Automatic system for applying labels on the surface of the glass.
Compatible with all glass thicknesses and types.

Customisable label containing information that is useful in the production processes typical of glassworks companies.

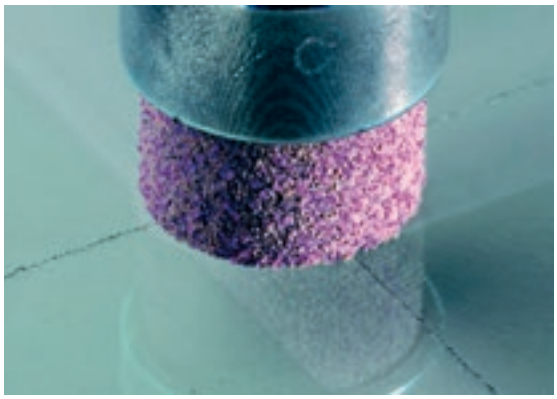
DEDICATED TECHNOLOGIES FOR EVERY REQUIREMENT

Genius CT-RED can perform low emissivity (Low-E) removal operations, thanks to a series of optional devices dedicated to the various production requirements.

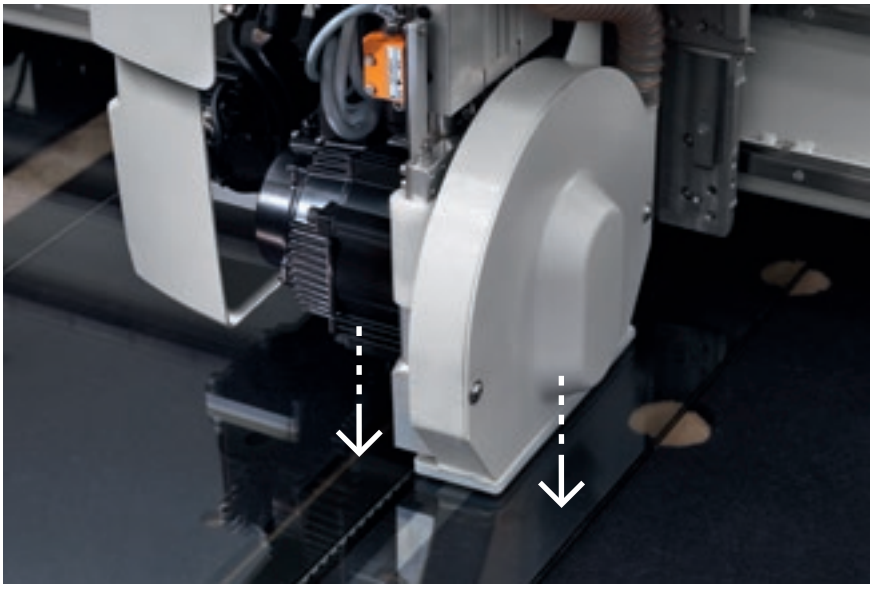
LOW-E REMOVAL

BCR (BRUSH COATING REMOVAL) DEVICE
For removal of low-emissivity film via a motorised metal brush, with adjustable consumption recovery. Standard removal of 20mm width.

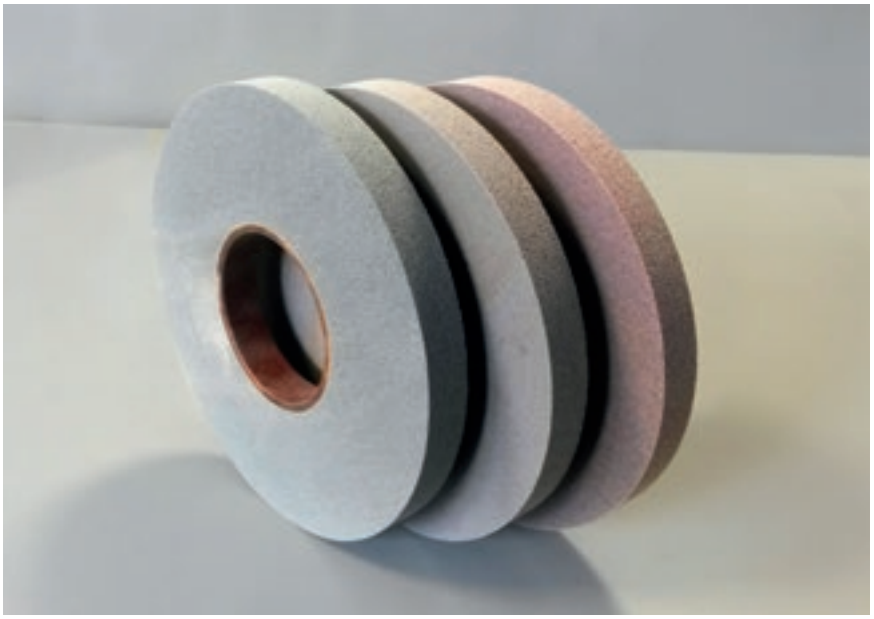
ABRASIVE TOOL
20mm diameter cup grinder in abrasive material for removing low emissivity film.



TCR (TANGENTIAL COATING REMOVER) DEVICE
for removing the low emissivity film with a 200 mm-diameter abrasive grinding wheel. Ensures top productivity and a long lifespan.



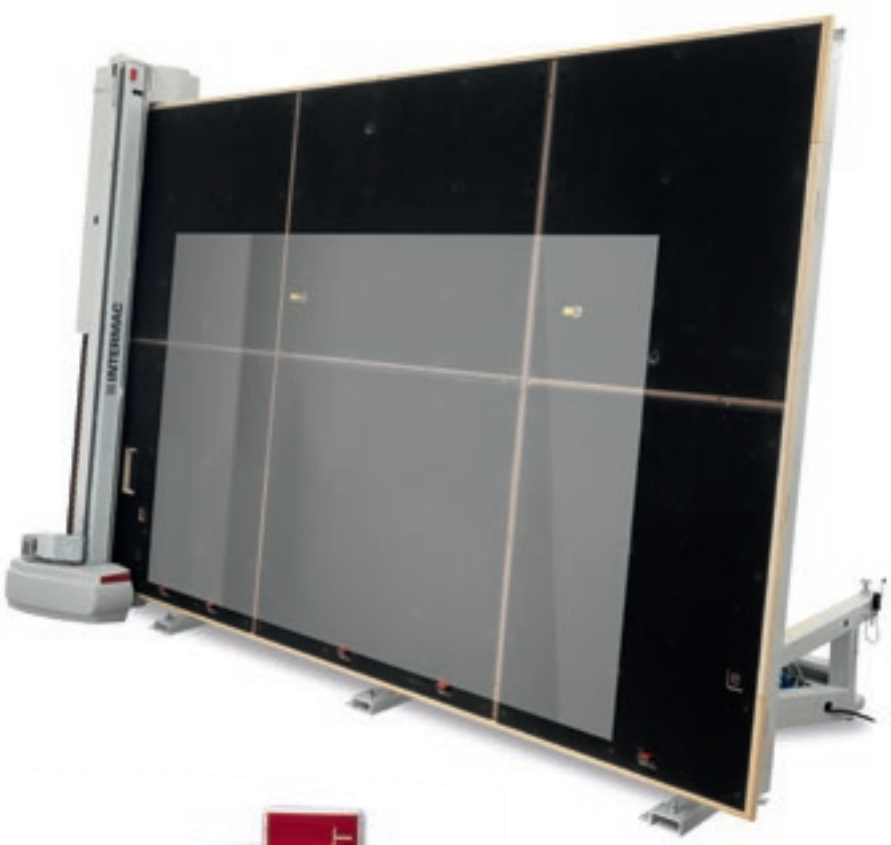
CONSTANT, MAXIMUM QUALITY REMOVAL
thanks to:
- Hood positioning at 1 mm from the glass surface, with automatic grinding wheel wear compensation
- Suction device with a residue collection tank on the cutting carriage.
- Enhanced suction available for treating special protective materials.



Grinding wheels with a diameter of 200mm and a thickness of 20mm, with varying degrees of hardness depending on the characteristics of the low-emissions film. Automatic grinding wheel removal and dressing system.

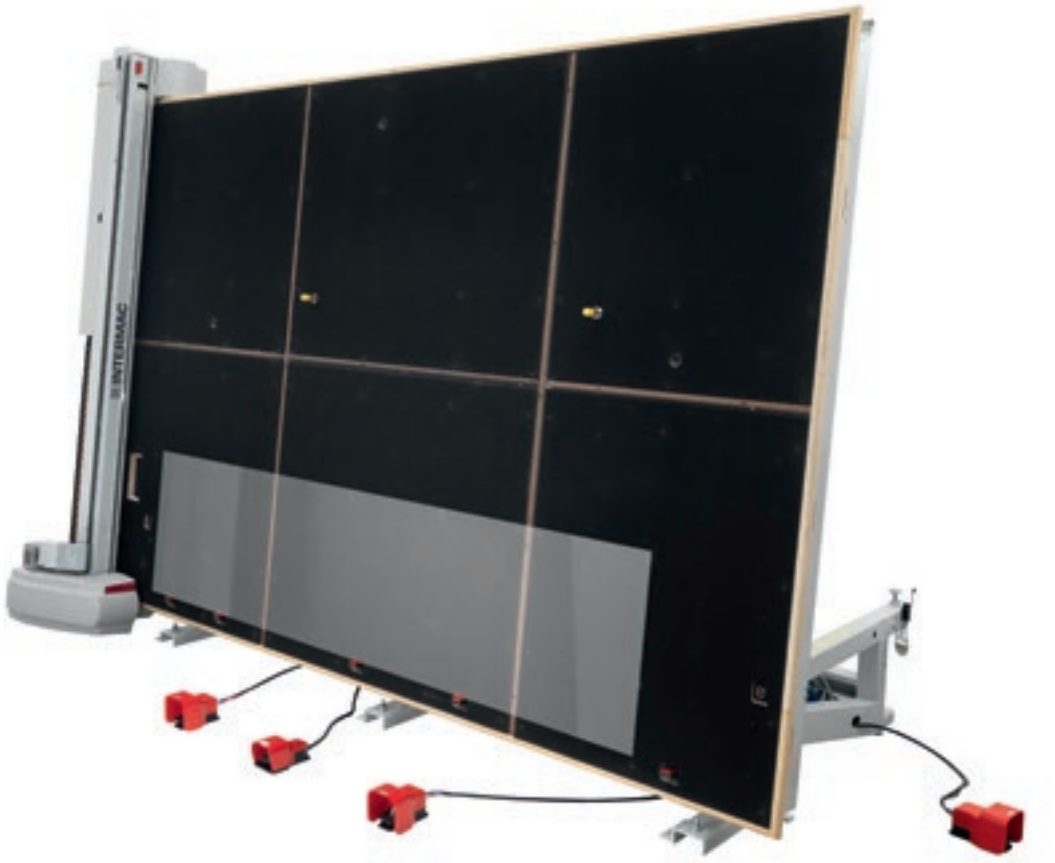
ERGONOMICS AND FACILITATED HANDLING

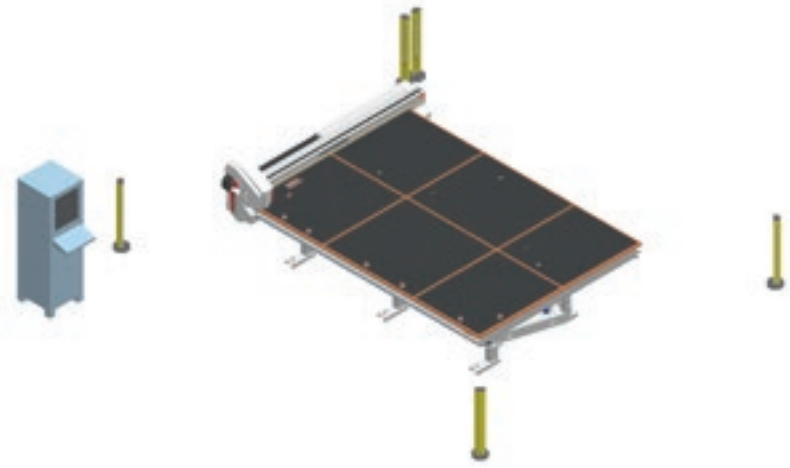
Smooth, even tilting of the table enables large sheets to be loaded.



The automatic feet support the sheet while the table is tilting, acting as mechanical sheet aligners when necessary.

PROTECTION AND SAFETY FOR ALL MACHINING OPERATIONS



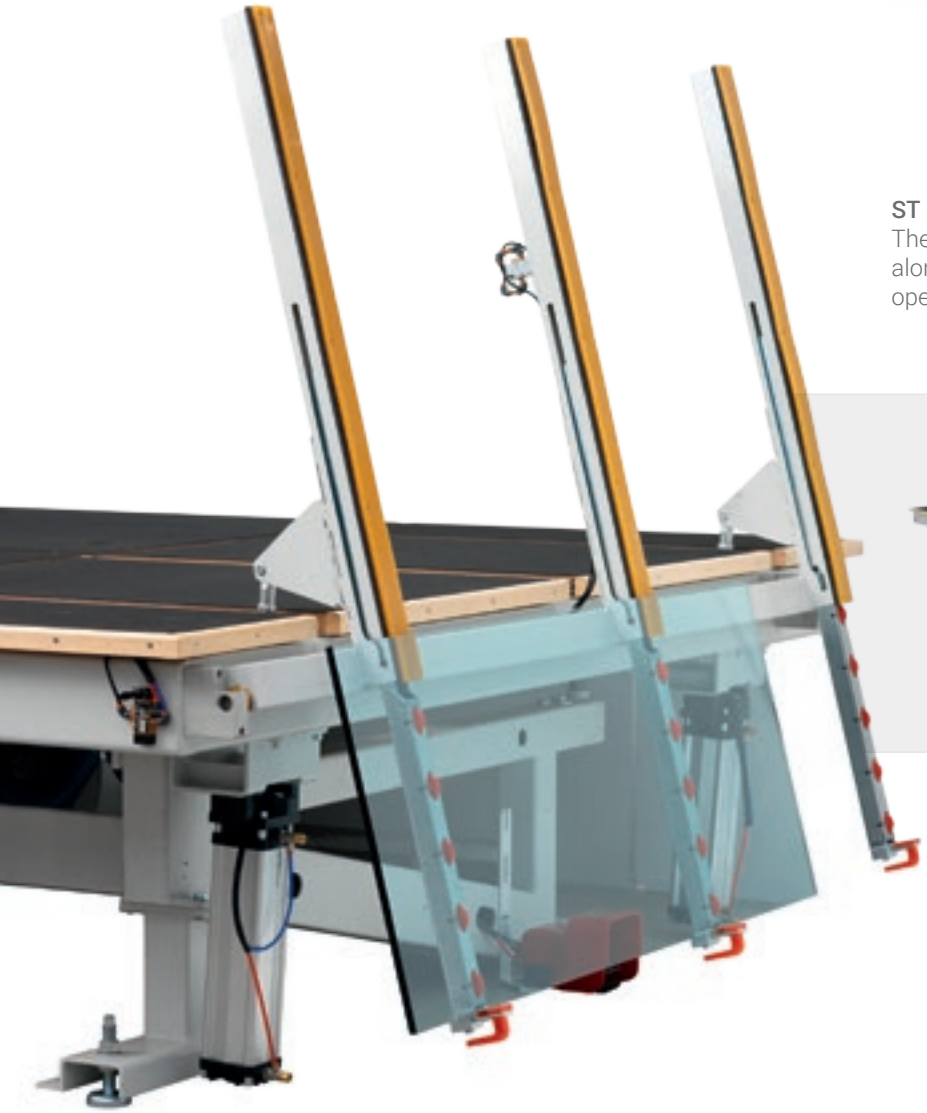


One indispensable condition for obtaining any sort of financing is the respect of the machinery directives and workplace health and safety regulations.

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 and/or accidents.

ABSOLUTE MACHINING FLEXIBILITY

Intermac can offer custom solutions in accordance with the specific needs and production specifications of customers.

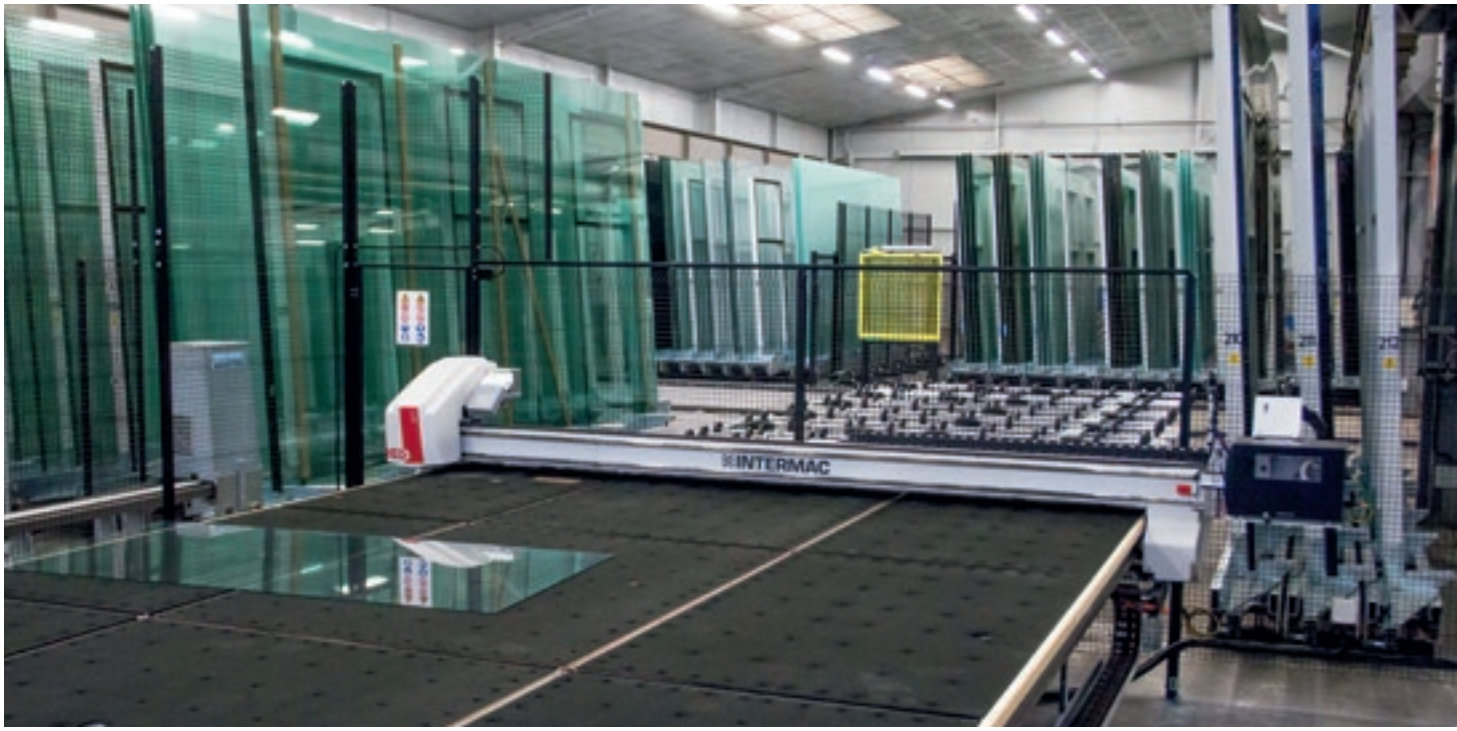


ST SERVICE BENCHES
The Genius ST benches are designed to be used alongside lines for break-out and volume unloading operations.

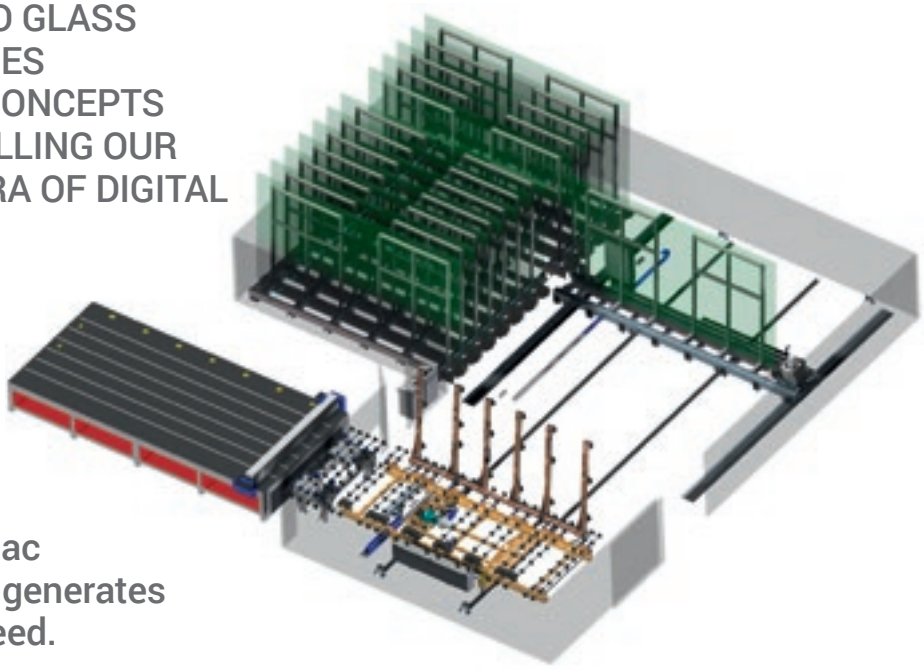
Genius 61 ST

HIGH PERFORMANCE THANKS TO PERFECT IN LINE INTEGRABILITY

Both the stand-alone and automated in line solutions are governed by process optimisation software, with a complete range of technologies that includes Movetro intelligent 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.

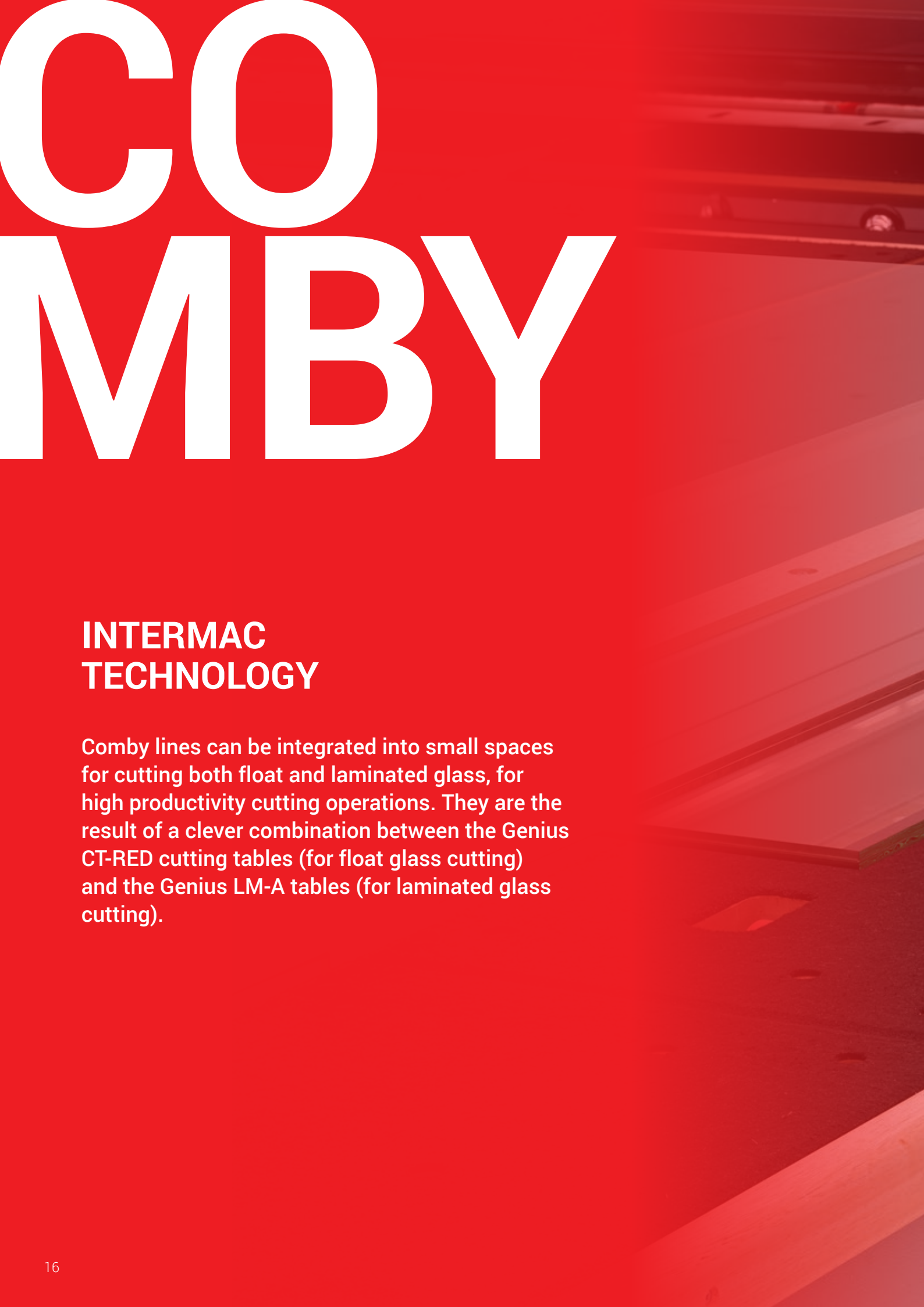


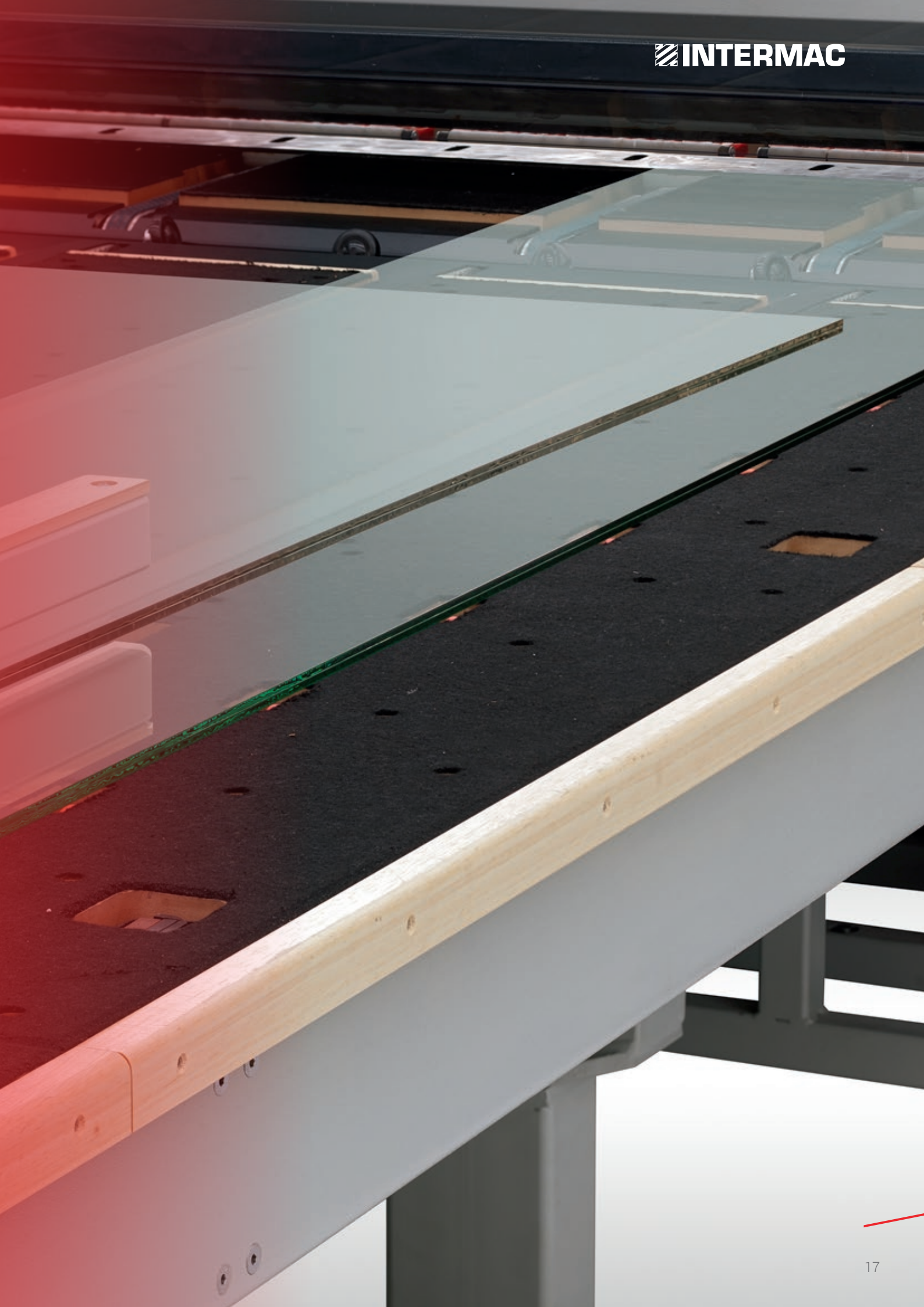
The combination of Intermac and Movetro technologies generates ideal solutions for every need.

COMBY

INTERMAC TECHNOLOGY

Comby lines can be integrated into small spaces for cutting both float and laminated glass, for high productivity cutting operations. They are the result of a clever combination between the Genius CT-RED cutting tables (for float glass cutting) and the Genius LM-A tables (for laminated glass cutting).





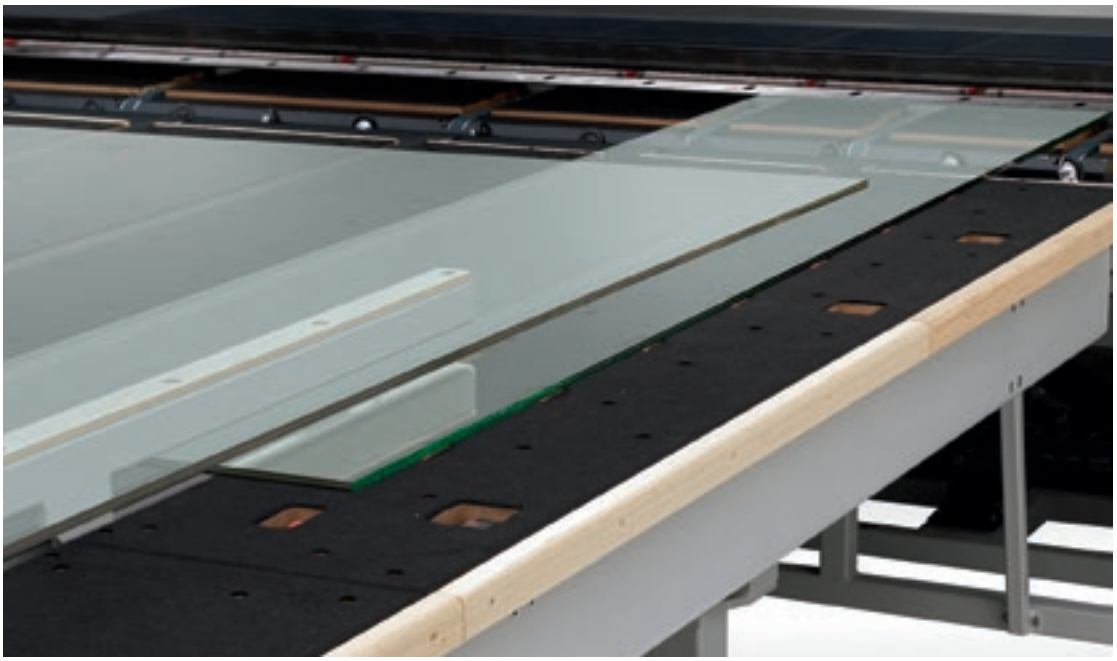
INTELLIGENT COMBINATIONS

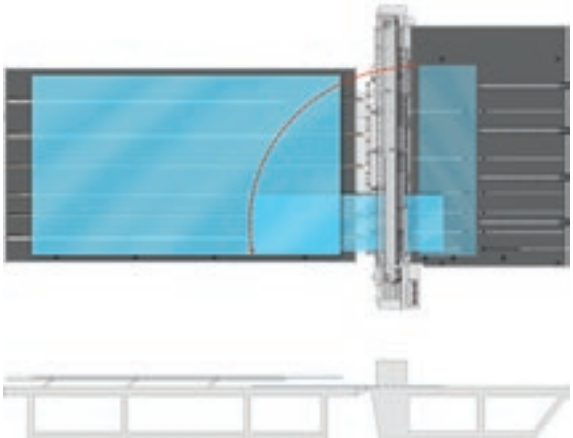
Comby Lines represent a perfect combination of the two float/laminated glass cutting tables that guarantee high productivity, thanks to the addition of:

- bars or belts on float table
- suction cups on float cutting bridge
- Intermac-patented vertical buffer on float table
- large belts on laminate cutting module
- break-out bar on laminate table.

OPTIMISATION OF SPACE WITHOUT COMPROMISING ON PRODUCTIVITY

- Maximum process automation, enabling high volumes of laminated glass to be produced every shift, within a limited space.
- The movement of the glass is automated.
- Option to perform static "X" break-out operations on float glass.
- Possibility of performing manual break-out on the entire float glass sheet downstream from the laminate, with the addition of the RB table.





VERTICAL BUFFER

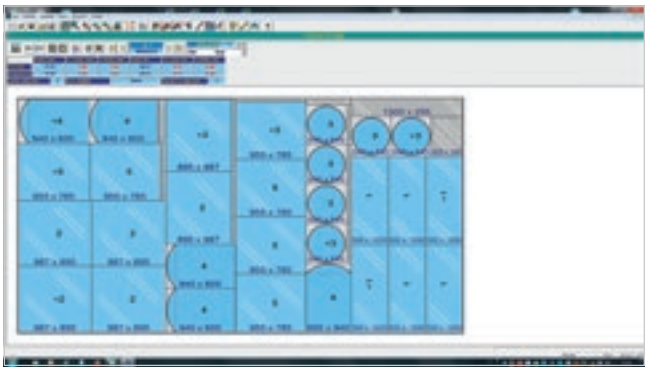
This patented Intermac solution serves to lift the remains of the sheet, enabling the crosspiece to be positioned underneath so that Y-Z-W cuts can be performed. Significant reductions in overall dimensions, without compromising productivity.

MAXIMUM EASE OF USE

The operator interface is simple, intuitive and compatible with the optimisers available on the market.

PC IWNC-based numerical control system (IWNC - Intermac Windows Numerical Control)

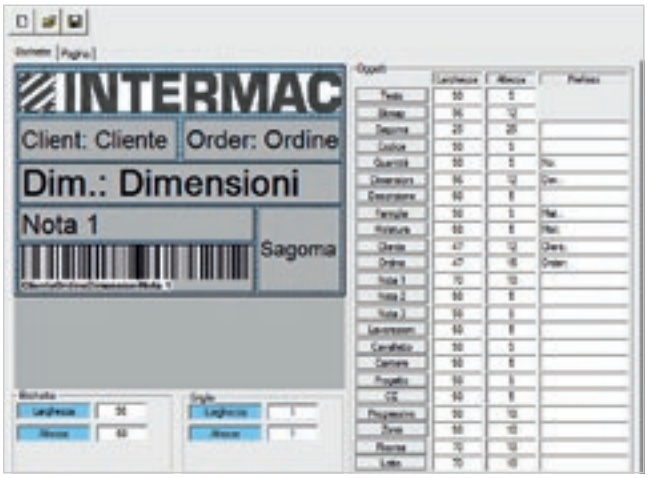
- Ideal both for those using CNC machines for the first time and operator who already have programming experience.
- Management of the working parameters of the machine.
- Creation and modification of cutting patterns and/or of geometric or non-geometric shapes.
- Modules for production report management.

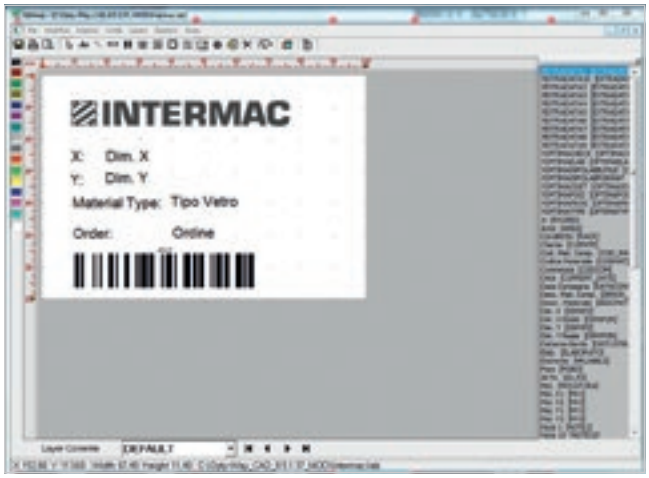


OPTIMISATION SOFTWARE

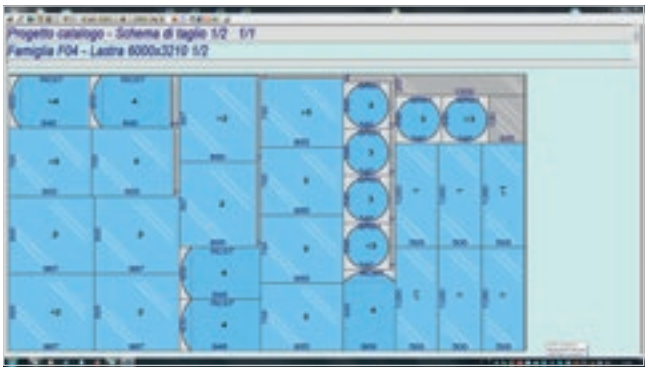
Optimiser for straight and shaped cuts, enabling the following advantages to be achieved:

- Minimises waste.
- Meets the production requirements of glassworks companies.
- Enhances the performance of the machine.





LABEL MANAGEMENT



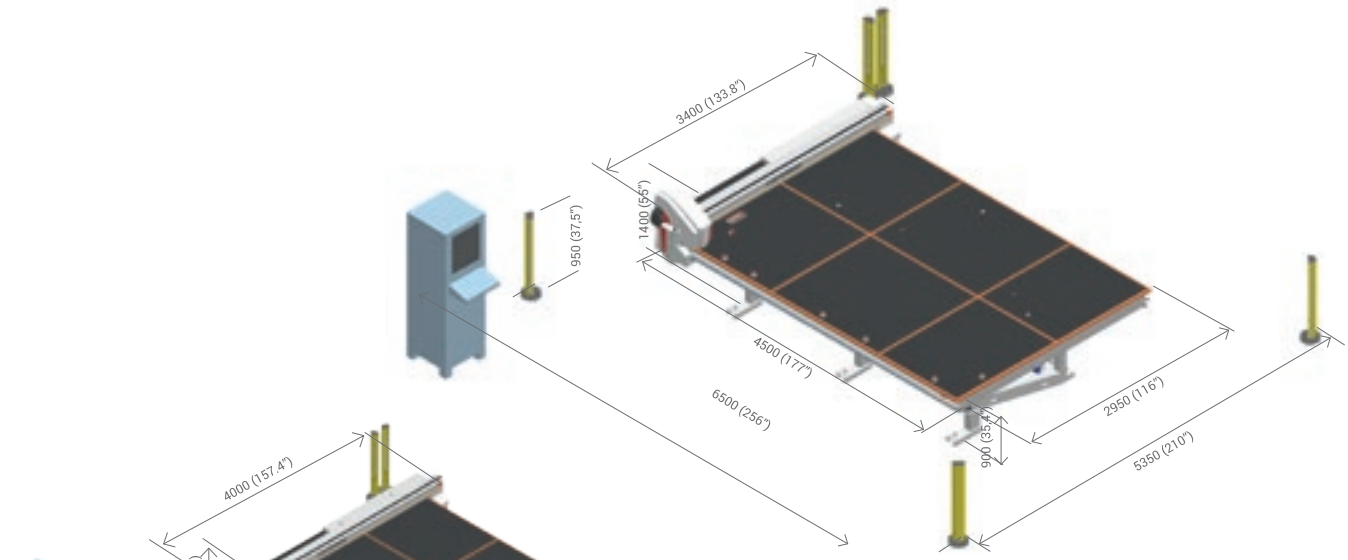
CUTTING PATTERN DISPLAY

- Cutting pattern displayed on monitor.
- Module for managing volumes at the end of the line.

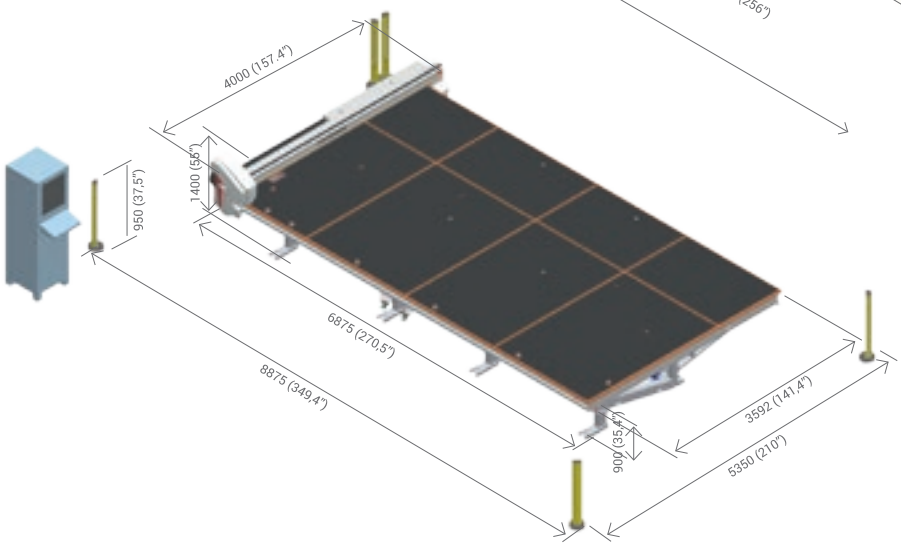
TECHNICAL SPECIFICATIONS

STAND ALONE CONFIGURATION

		GENIUS 37 CT-RED	GENIUS 61 CT-RED
Machinable dimensions	mm	3710 x 2760 3810 x 2750 (opt.)	6100 x 3350
Machinable thickness	mm	2-19 (25 opt)	2-19 (25 opz / max 1000 kg)
Max axle movement speed	m/min	200	200
Max acceleration	m/sec2	10	10
Positioning precision of the working head	mm	± 0,15	± 0,15
Straight and shaped optimisation (optional)		yes	yes
Shearing bars (optional)		2 + 1	3 + 1/ 3 + 2 (opt.)
Table tilting time (optional)	sec	30 (1 stroke)	30 (1 stroke)
Work table height	mm	900 (-15 / +40)	900 (-15 / +40)
Dimensions for shipment (LxWxH)	mm	5500 x 2275 x 2250	7900 x 2275 x 2000
Installed power: fixed table/ tilting table (opt.)	kW	8.8 / 9.57	10.4
Overall weight	Kg	2400	3800



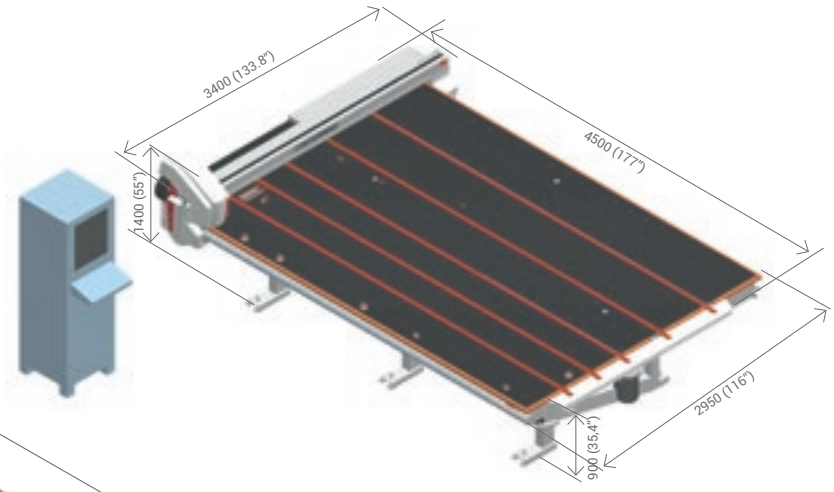
GENIUS 37 CT-RED



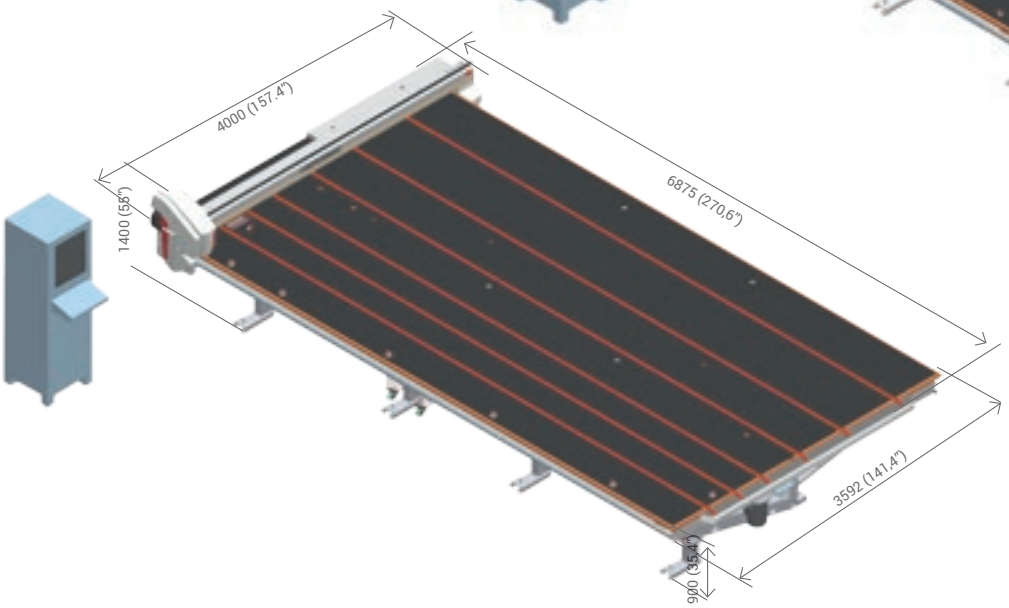
GENIUS 61 CT-RED

IN LINE CONFIGURATION

		GENIUS 37 CT-RED in line	GENIUS 61 CT-RED in line
Machinable dimensions	mm	3710 x 2760 3810 x 2750 (opt.)	6100 x 3350
Machinable thickness	mm	2-19 (25 opt)	3 - 19
Max axle movement speed	m/min	200	200
Max acceleration	m/sec2	10	10
Positioning precision of the working head	mm	± 0,15	± 0,15
Straight and shaped optimisation (optional)		yes	yes
Sheet transfer speed	m/min	40	40
Work table height	mm	900 (-15 / +40)	900 (-15 / +40)
Dimensions for shipment (LxWxH)	mm	5500 x 2275 x 2250	7900 x 2275 x 2000
Installed power	kW	12	15
Overall weight	Kg	2400	4150



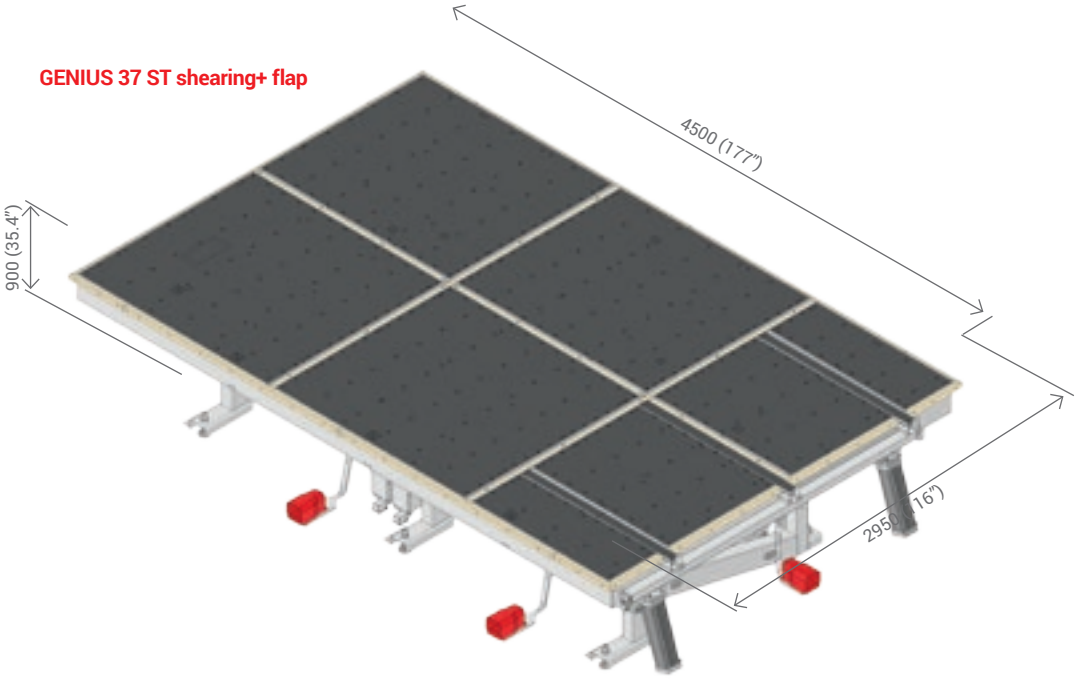
GENIUS 37 CT-RED in line

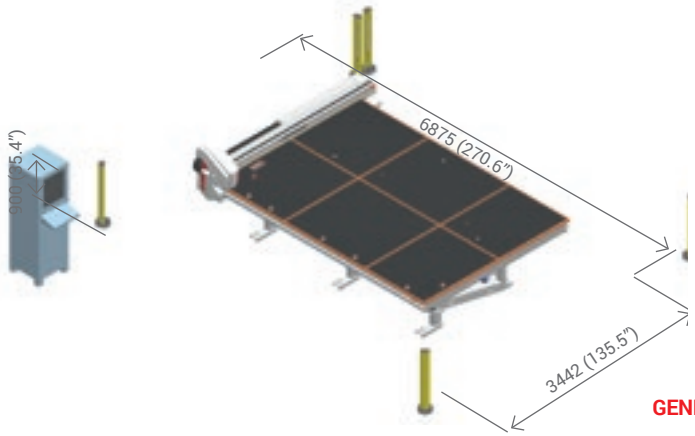


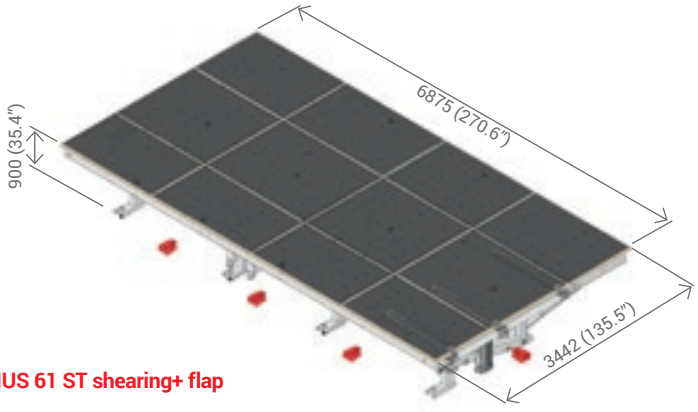
GENIUS 61 CT-RED in line

OVERALL MACHINE DIMENSIONS IN LINE CONFIGURATION

GENIUS 37 ST shearing+ flap

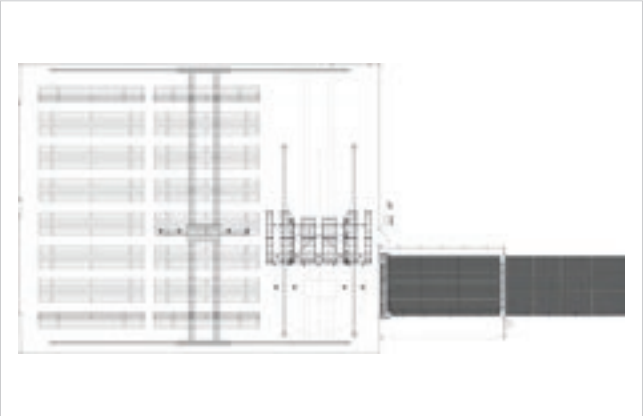






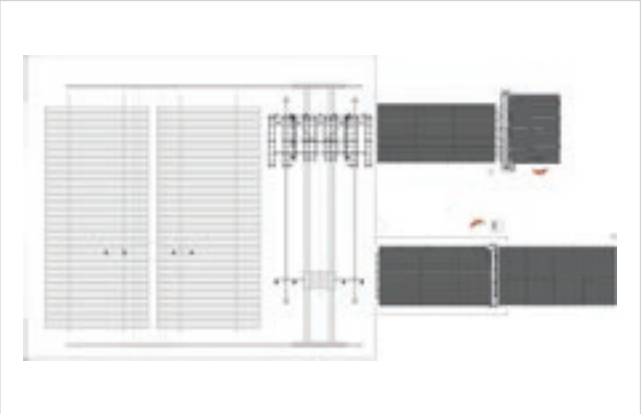
GENIUS 61 ST shearing+ flap

EXAMPLES OF IN LINE CONFIGURATION



System with Movetro overhead crane and fixed magazines with output onto float line.

System with Movetro overhead crane and automatic magazine with output onto float line



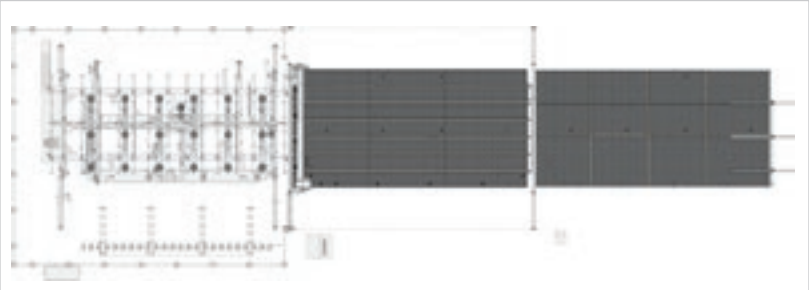
System with Movetro overhead crane and automatic magazines with cutting output onto laminated line and float line.

The technical specifications and drawings are non-binding. Some photos may show machines equipped with optional features. Biesse Spa reserves the right to carry out modifications without prior notice.

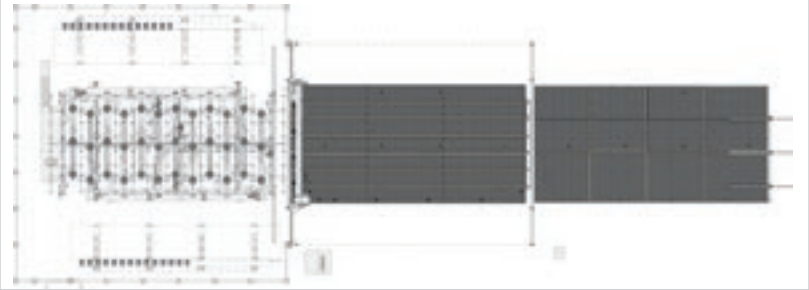
Weighted sound pressure level A (LpA) during machining at the operator's workstation on the vane-pump machine Lpa=79dB(A) Lwa=96dB(A) Weighted sound-pressure level A (LpA) at the operator's workstation and sound power level (LwA) during machining on the cam-pump machine Lwa=83dB(A) Lwa=100dB(A) Measurement uncertainty K dB(A) 4.

The measurement was carried out in compliance with UNI EN 848-3:2007, UNI EN ISO 3746: 2009 (sound power) and UNI EN ISO 11202: 2009 (sound pressure levels at workstation) during panel machining. The noise levels shown are emission levels and do not necessarily correspond to safe operation levels. Despite the fact that there is a relationship between emission and exposure levels, this may not be used in a reliable manner to establish whether further measures need to be taken. The factors determining the exposure level for the workforce include length of exposure, work environment characteristics, other sources of dust and noise, etc. i.e. the number of other adjoining machines and processes. At any rate, the above information will enable the operator to better evaluate dangers and risks.

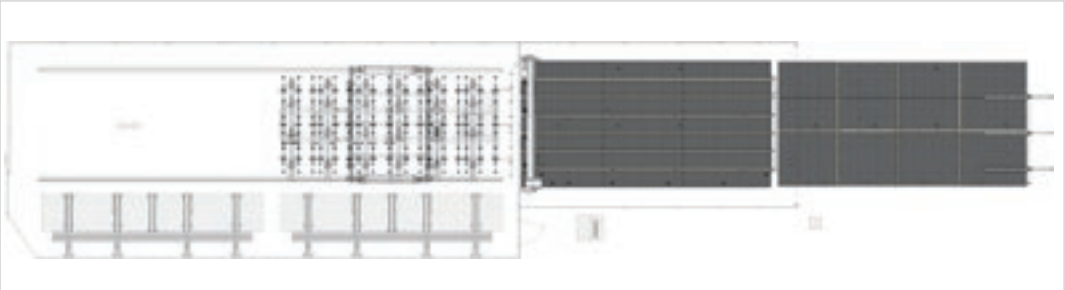
EXAMPLES OF IN LINE CONFIGURATION



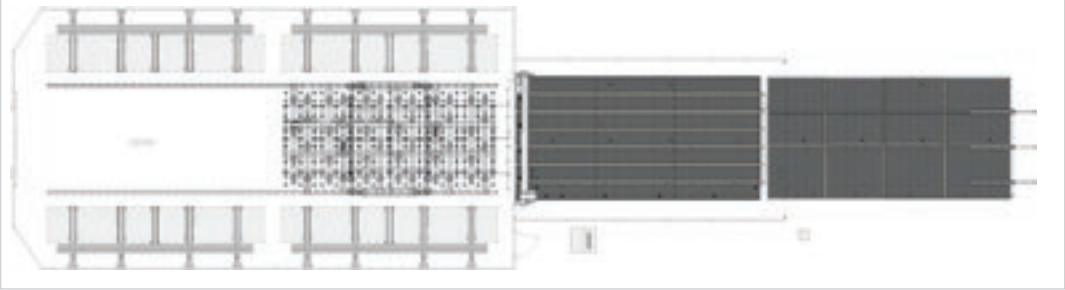
3-piece line: Genius LS-MT fixed single-side + Genius CT-RED + Genius ST.



3-piece line: Genius LS-BT fixed twin-side + Genius CT-RED + Genius ST.

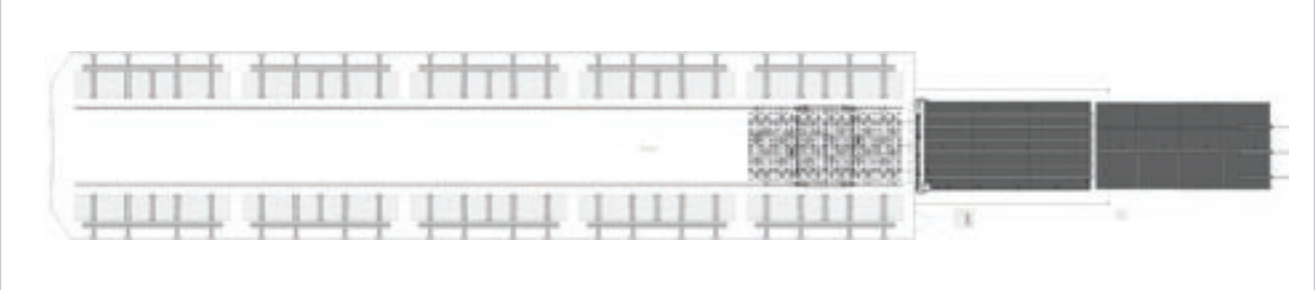


3-piece line: Genius LS-ML (2 pick-up positions) + Genius CT-A + Genius ST

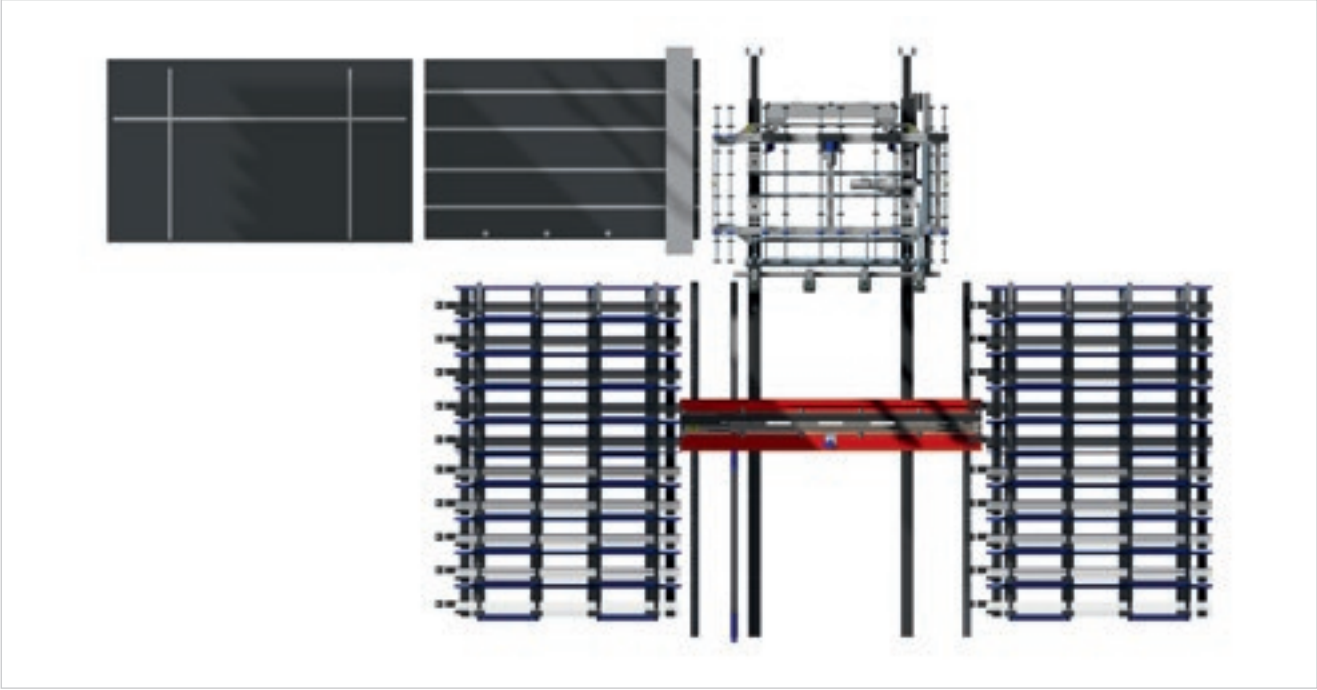


3 -piece line: Genius LS-BL (2 pick-up positions) + Genius CT-Red + Genius ST.

3-piece line: Genius LS-ML (5 pick-up positions) + Genius CT-A + Genius ST



3-piece line: Genius LS-BL (5 pick-up positions) + Genius CT-A + Genius ST



Genius LS-MT system with Movetro Shuttle Lite automatic magazine

INDUSTRY 4.0 READY

**Industry 4.0 is the latest industry frontier, based on digital technologies and machines that speak to the companies.
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-PLUS


Genius CT-RED series

TABLES FOR LAMINATED GLASS CUTTING


Genius LM series


Genius LM-A series

MACHINES FOR LAMINATED AND FLOAT GLASS CUTTING


Genius Comby Lines

LINES FOR LAMINATED OR FLOAT GLASS CUTTING


Genius Lines & Systems

WATERJET


Primus series

DOUBLE ENDING MACHINES AND SYSTEMS


Busetti FK series


Busetti F series


Busetti P series


Customised solutions

WORK CENTRES


Master 23


Master ONE


Master 33.3-38.3-45.3


Master 33.5-38.5-45.5- 45.5 Plus

SPECIAL WORK CENTRES AND AUTOMATIC CELLS


Master 63-65


Master 95


Master 185

SPECIAL WORK CENTRES AND AUTOMATIC CELLS


Master with belts


Master working cell

WORK CENTRES ENGRAVING


Master 34

VERTICAL MACHINES


Vertmax series


V-Loader

VERTICAL WASHING MACHINES


Aqua series

TOOLS FOR GLASS


Diamut tools

STORAGE & HANDLING SYSTEMS

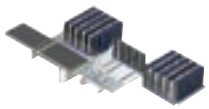
STATIC STORAGE


MOVETRO SERIES - Classifiers

CLASSIC DYNAMIC STORAGE


MOVETRO SERIES - Loading machines

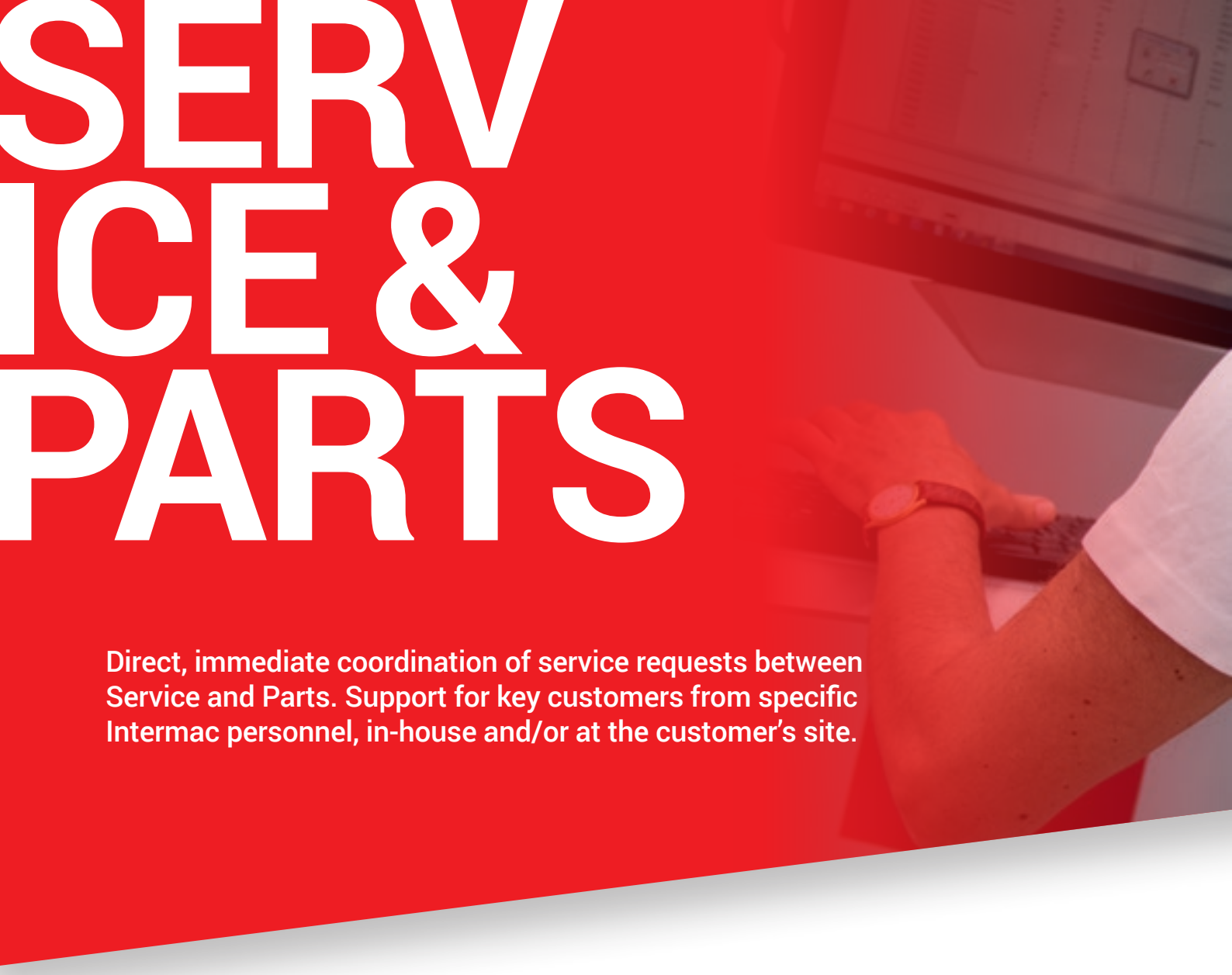
INNOVATIVE DYNAMIC STORAGE FOR MASS PRODUCTION


MOVETRO SERIES - Shuttle storage systems

INNOVATIVE DYNAMIC STORAGE FOR DYNAMIC PRODUCTION


MOVETRO SERIES - Overhead crane - Telescopic loading machines - Arpa

SERVICE & 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.

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.

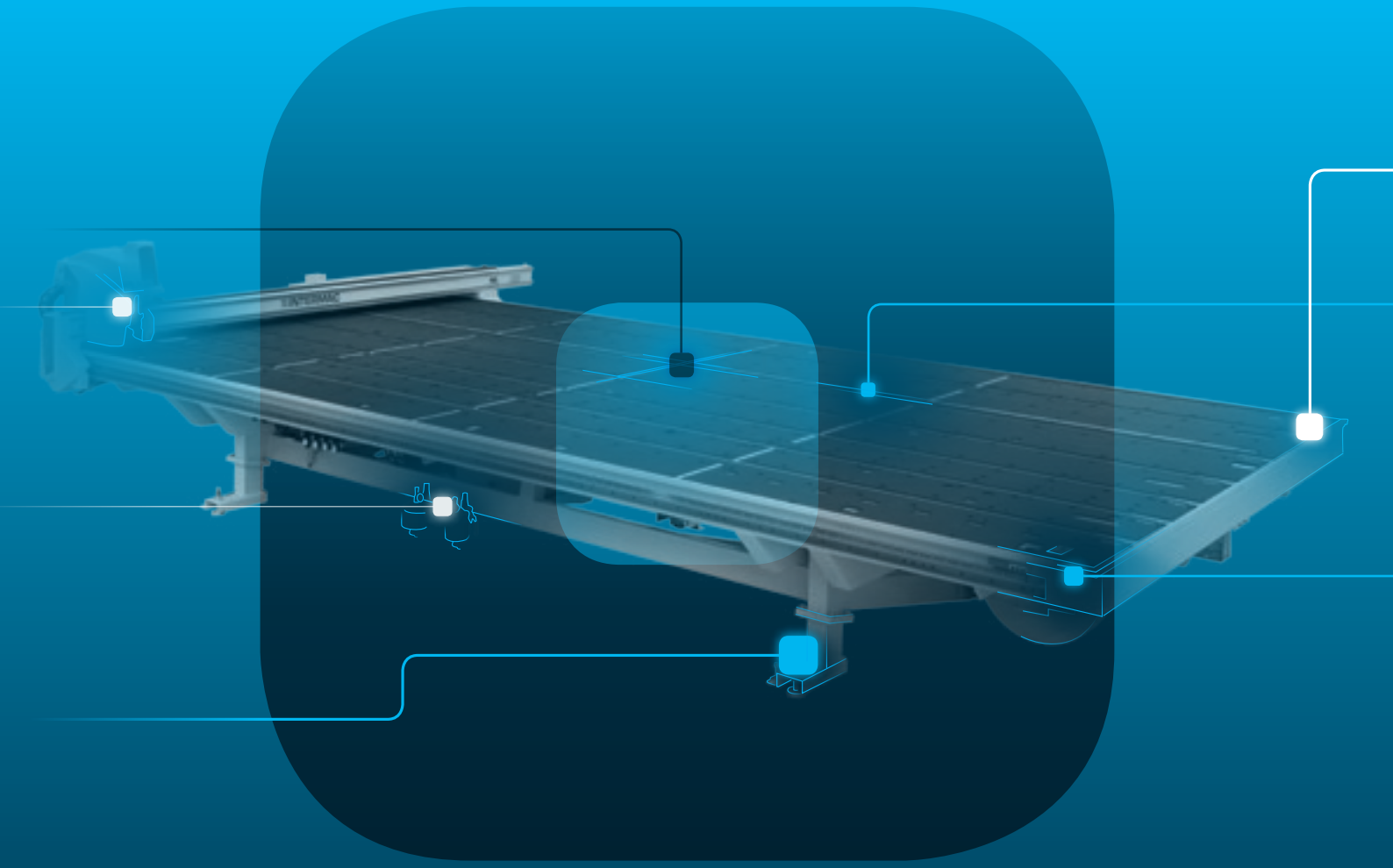
95%
of orders dispatched on time.

30
spare parts staff in Italy and worldwide.

150
orders processed every day.

SOPHIA

GREATER VALUE FROM MACHINES



SOPHIA is the IoT platform created by Intermac 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 Intermac 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.

INTERMAC

in collaboration with accenture

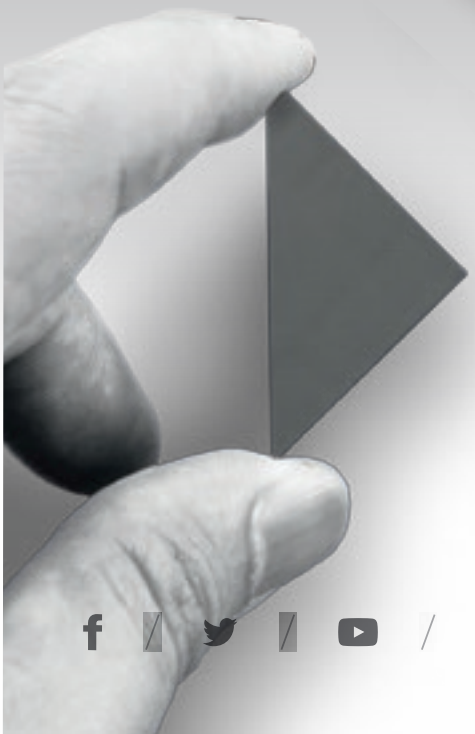
MADE WITH INTERMAC

THE GLASS SPECIALISTS

Specialist Glass Products Limited are primarily a manufacturer and supplier of specialist and bespoke laminates, Curved laminates, annealed, toughened and double glazed form, supplying both the UK and overseas.
Specialist Glass purchased the Cutting Table to replace an existing table. "This not only resolved a major bottleneck in the production process, it also had the added benefit of reducing secondary processing time together with a 30-40% increase in material efficiency, due to the cut quality."
"We wanted to increase productivity - confirms Jonathan Taylor, SGP - and after a few consultations with Intermac, we bought the cutting table with a loading and unloading system. This reduced our cutting time by a massive 60% and we now have a continuous process with tandem working."

LIVE THE EXPERIENCE

BIESSEGROUP.COM



50 YEARS

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

P5812P0731 september 2019

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