

# GENIUS RS-A

FLOAT GLASS  
CUTTING TABLES



 **INTERMAC**

# ALL FUNCTIONS IN A SINGLE SOLUTION



## 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 RS-A** is the entry-level cutting table for float glass that offers the same technological solutions as the high-level systems used in the cutting lines of the biggest industry operators. It optimises the sheet being machined in order to maintain high levels of cutting precision over time, guaranteeing a great return on investment.



## **GENIUS RS-A**

- ✓ **ERGONOMIC AND COMPACT, THANKS TO SIGNIFICANTLY REDUCED OVERALL SIZE AND HEIGHT**
- ✓ **UNPRECEDENTED RELIABILITY OVER TIME**
- ✓ **EXTREMELY HIGH CUTTING ACCURACY**
- ✓ **ABSOLUTE MACHINING FLEXIBILITY FOR FLOAT GLASS AND VINYL CUTTING AND LOW E REMOVAL, ALSO SUITABLE FOR CUTTING NEW-GENERATION CERAMIC MATERIALS**
- ✓ **EASY TO USE THANKS TO THE INNOVATIVE SOFTWARE.**

# EXTREMELY HIGH CUTTING ACCURACY

Genius RS-A is the best entry-level cutting table on the market and is the ideal solution for making the transition towards more automated production processes.



## VINYL CUTTING

Genius RS-A cutting tables guarantee superb machining quality, even when cutting vinyl.

The Genius RS-A optimises the sheet being machined in order to maintain high levels of cutting precision over time, guaranteeing an optimal return on investment.

The Genius cutting table ensures excellent optimisation of the material to be cut, with waste reduced to zero.

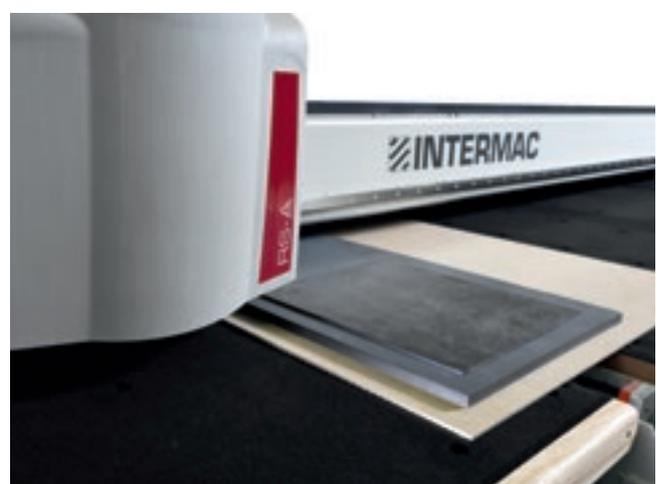


## GENIUS CAN CUT THICKNESSES FROM 3 TO 19 MM, WITH:

- ▶ acceleration of up to 10m/s
- ▶ axis movement speed of up to 200m/min
- ▶ working head position precision to within +/- 0.15mm

## ALSO IDEAL FOR CERAMIC MATERIALS

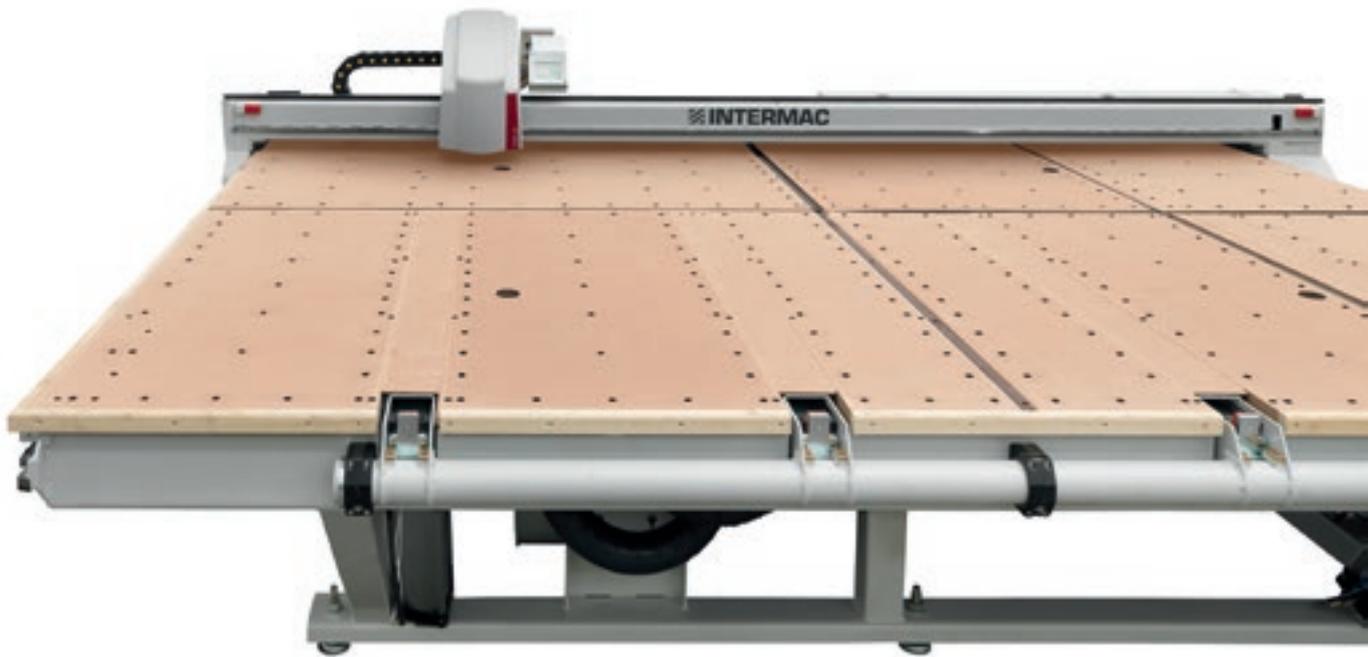
Intermac expands its cutting horizons to low-thickness ceramic materials, with a new technology that enables pieces of up to 12 mm thick (for linear cuts) and 5 mm thick (for shaped cuts) to be cut with ease.



The Genius RS-A enables linear and shaped ceramic sheets to be dry-cut in a simple, intuitive manner.

# UNPRECEDENTED RELIABILITY OVER TIME

Offering features derived from high-end technologies along with superb performance, the Genius RS-A guarantees consistent, accurate machining results over time, as well as extreme ease of use.



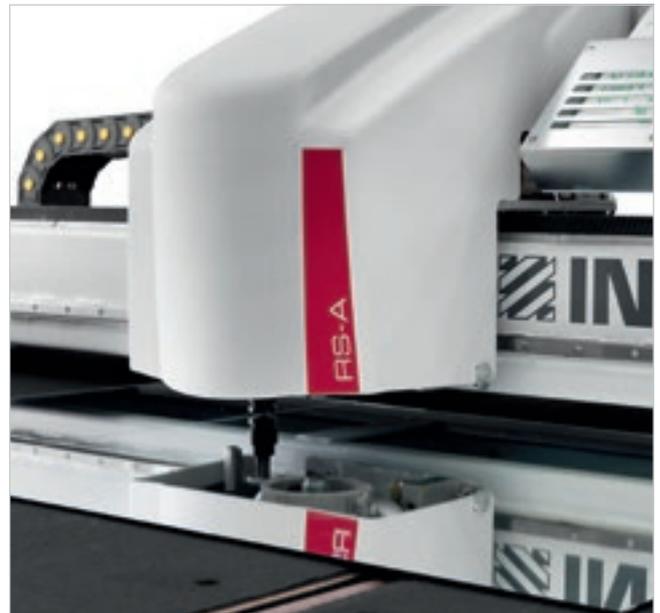
## MAXIMUM PERFORMANCE AND PRECISION THANKS TO THE PLANARITY OF THE GROUND WORK TABLE

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 machining and break-out operations.



The entire Genius range is designed for cutting lines that can work perfectly on two or three shifts, and which are used to process large volumes.

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



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 management of the axle speed and the high quality of all of the electronic and mechanical components enable machining times to be optimised, ensuring flexibility and dynamism.

## CUTTING LUBRICATION

The delivery of lubricant oil for the wheel occurs in line with the speed of execution of the shape, and with the specific straight or shaped cutting requirements, eliminating waste and simultaneously improving machining results. Precise oil stream dosing with no "drop" effect.

# REDUCED CYCLE TIMES AND INCREASED PRODUCTIVITY



## OPTICAL READER FOR SHAPES

The optical reader for "learning" shapes scans for points on the surface of the template, regardless of the type of material. The management software automatically regenerates the profile detected, enabling the shape to be cut immediately. One of the many advantages of this system is its ability to detect the internal and external profiles of the template in a single passage, preventing the operator from having to perform multiple independent scan cycles, resulting in reduced waiting times and room for error.



## OPTICAL READER FOR ORIENTATION OF GLASS SHEET

The optical reader on the working unit recognises the placement of the sheet on the work table, and enables machining operations to be carried out without having to position the sheet to be moved periodically, reducing waiting times and ensuring maximum precision when zeroing the sheet. This device also performs the "double zero" function for cutting glass with extreme precision.



## BREAK-OUT BARS

Transverse and longitudinal pneumatic bars for easy glass shearing.



Genius RS-A 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 the Low-E coating with a motorised metal brush with a diameter of 20 mm, and a mechanical brush wear compensation system designed to ensure consistent Low-E removal results.



### GCR (GRINDER COATING REMOVAL) DEVICE

for removal of Low-E coating with a cup grinder (20 mm diameter) and automatic suction system.

# AN INTELLIGENT AND COMPACT COMBINATION

**The combination of the two Genius RS-A cutting tables for float glass and the Genius LM cutting table for laminated glass represents a smart, compact solution for companies that need to work with both of these materials.**

The combination of these two cutting tables enables time savings of up to 30% when loading the next sheet, using one table for cutting and the other as a "service" table.

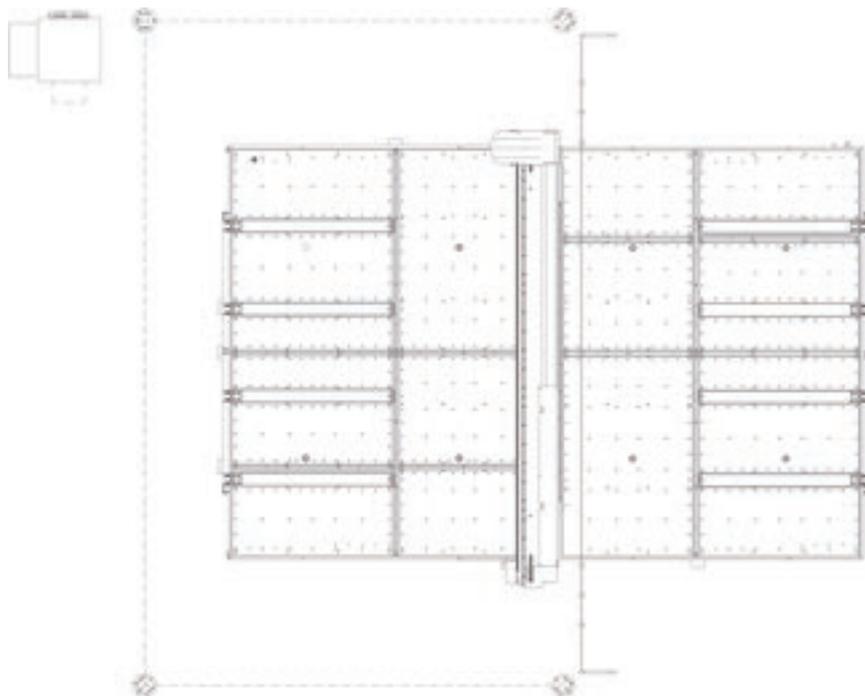


**TWO MACHINES IN ONE COMPACT PACKAGE:  
PARTICULARLY SUITABLE FOR COMPANIES  
WITH LIMITED SPACE THAT PRODUCE A RANGE  
OF PRODUCTS.**

# A SOLUTION FOR EVERY NEED

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

The Genius RS-A can work as a stand-alone machine, and once the sheet has been positioned, it is possible to perform all loading, cutting, break-out and unloading operations, as necessary.



The Genius RS-A can also be combined with RB break-out tables or RC loading tables, in accordance with the customer's specific production requirements.

# COMPACT, ERGONOMIC LOADING SOLUTIONS

With the Genius RS-A, the majority of the operations required for cutting glass sheets can be automated. The Genius RS-A offers small businesses a tool that was originally designed for industrial use, enabling these firms to take a major leap forward in terms of productivity and reduction in wasted time.



The Genius RS-A is compact in terms of both width and height, thanks to the tilting arms that only extend to a maximum of 2.5 metres.



The machine operator launches the production cycle from the machine control area.



The retractable load feet automatically extend from the work table.



The tilting arms exit from the work table.



The tilting arms automatically reach the loading position.



The machine operator manually loads the glass sheet on the tilting arms.



The tilting arms automatically put the glass sheet on the work table.



The tilting arms automatically put the glass sheet in the working position.



The drop-down feet automatically move back to their safety position for the cut cycle start. The operating head automatically begins the cutting cycle.



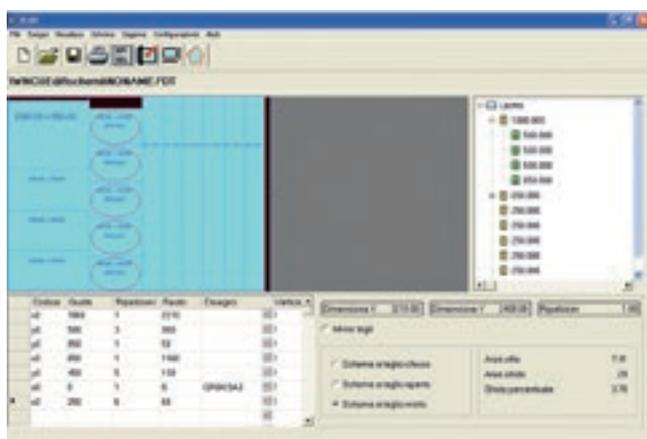
# MAXIMUM EASE OF USE

The operator interface is simple and intuitive, and enables cutting programmes generated by a range of the optimisers present on the market to be imported, courtesy of the integrated OTD (Optimiser Transferring Data) universal interface that automatically defines cutting parameters and generates the programme for the cutting table.

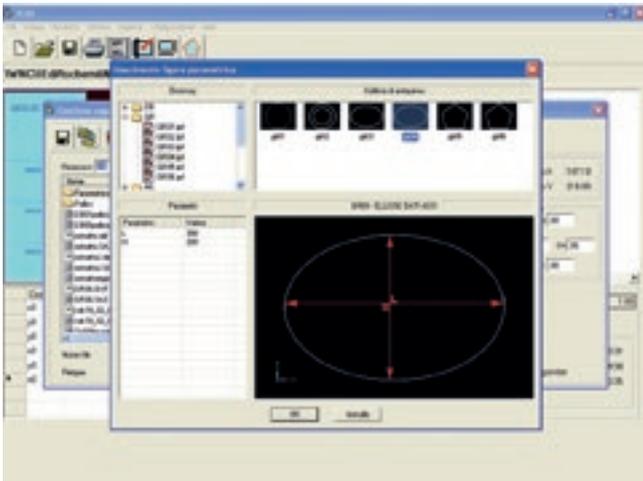


## Numerical control on PC IWNC base (IWNC - InterMac Windows Numerical Control)

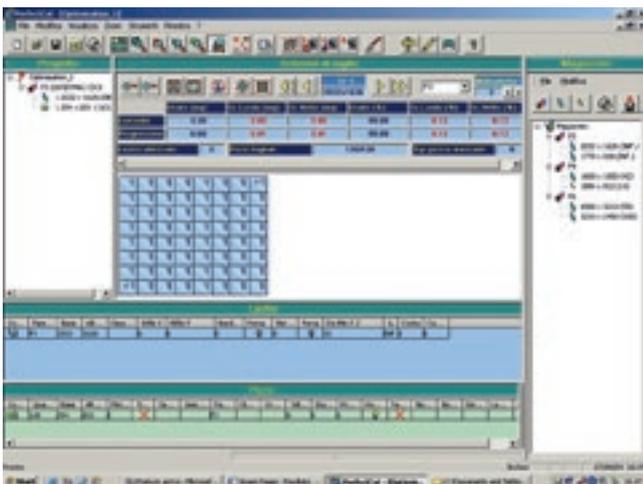
- ▶ Ideal both for those using CNC machines for the first time and those who already have programming experience.
- ▶ Management of the working parameters of the machine.
- ▶ Creation and modification of the cutting patterns and/or the geometric or non-geometric shapes.
- ▶ Modules for quick estimate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



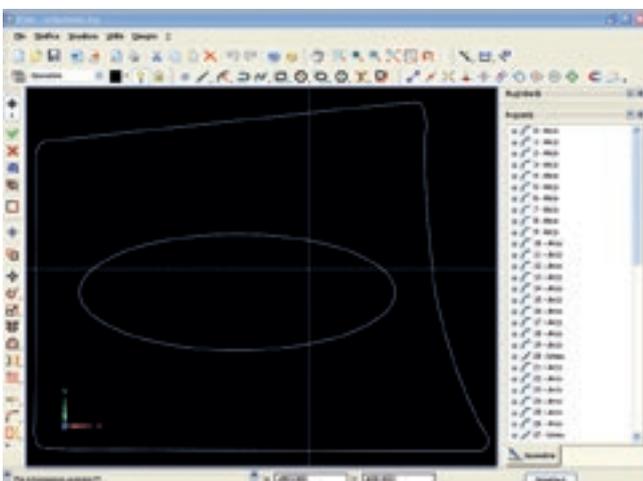
Cutting editor in the Windows environment, with a user-friendly graphic interface, for making straight cuts on sheets without employing the optimisation program. Particularly recommended for quick, immediate cuts, it can manage an endless number of nesting levels and also offers a function for inserting shapes in the glass sheets before cutting.



Parametric library on the machine, containing parametric shapes ready for the optimised cut and working directly on the machine.



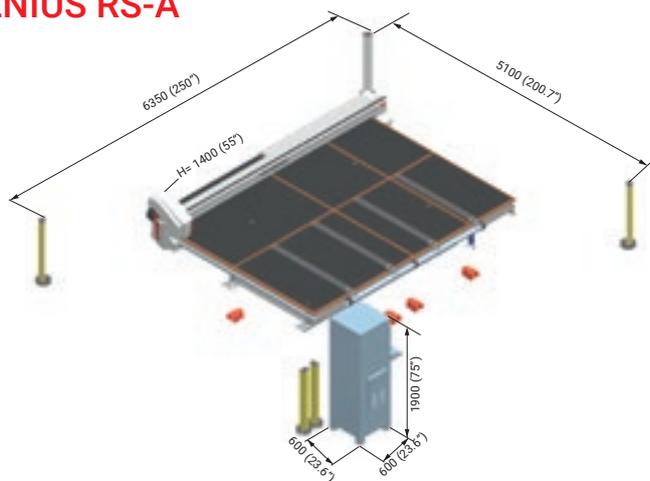
Optimiser for straight and shaped cuts. Ideal for shaped cuts and open cuts, this software allows even the most complex production to be optimised to ensure minimum wastage.



Multi-tasking programming software in the Windows environment, for designing shapes complete with parametric programming, automatic geometric profile regeneration functions using a FreeForm function and an automatic function for optimising and regenerating the geometries of artistic shapes in .dxf format (for cuts on vinyl).

# TECHNICAL DATA

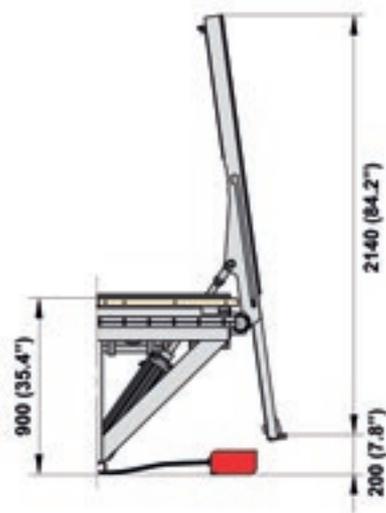
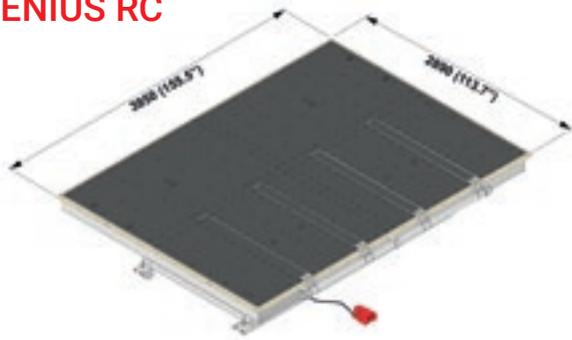
## GENIUS RS-A



## GENIUS RB



## GENIUS RC



## GENIUS

Machinable dimensions	mm	3710 x 2600
Machinable thickness	mm	3 - 19
Max axle movement speed	m/min	200
Max acceleration	m/sec <sup>2</sup>	10
Positioning precision of the working head	mm	+ - 0.15
optimisation of straight and shaped cutting		SI
Break-out bars		2+1
Maximum loadable sheet size	mm	3710x2600x19
Maximum unloadable sheet size	mm	3710x2600x12 (300 kg)
Work table height	mm	900 (-15,+40)

# 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.

**INDUSTRY 4.0 READY**



# 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.

# 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.

# COMPLETE RANGE OF SOLUTIONS FOR GLASS

## FLOAT GLASS CUTTING BENCHES



Genius RS-A      Genius CT-A series      Genius CT-RED series

## LAMINATED GLASS CUTTING BENCHES



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 184      Primus series

## MACHINES AND SYSTEMS FOR DOUBLE-EDGING GRINDING



Busetti F series      Busetti P series      Soluzioni su misura

## 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

## SPECIAL PROCESSING CENTRES AND AUTOMATIC CELLS



Master con cinghie      Celle di lavoro Master

## PROCESSING CENTRES FOR GROOVING OPERATIONS



Master 34

## VERTICAL CNC



Vertmax series      V-Loader

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.

# MADE WITH INTERMAC

## GLASS ART AND CUTTING-EDGE TECHNOLOGY

"In Fiam's workshops, we have always tried to respond to designer ideas, even when they were apparently impossible to implement. Designers, like artists, have a creativity that stimulates cutting-edge innovation. So, over time, we have been able to develop new technologies that have allowed us to create unique objects on an industrial scale".

"Everything started with a stool. A glass stool, of course. A photographer friend came to see me in my glass workshop, saw me standing on the stool and took a picture that was published in some newspapers. That's when I thought: why

not try to make furniture with this material?

From the first, self-built oven to bend glass sheets through to the first collaborations with artists and designers, it's been an ongoing learning curve.

Along with design innovation, Fiam has always invested in technological innovation too. In this respect, the partnership with Intermac for the development of solutions such as bilateral grinding machines and the Master processing centres range is a strategic one.

Our company has always worked in partnership with internationally-re-

nowned Italian and foreign designers. People like Massimo Morozzi, Rodolfo Dordoni, Giorgetto Giugiaro, Enzo Mari, Cini Boeri through to Vico Magistretti, Ron Arad, Makio Hasuike. Not forgetting Philippe Starck, Daniel Libeskind and Massimiliano Fuksas".

*Vittorio Livi,  
founder and sole director  
Fiam Italia, Italy*

