

### CUTTING TABLE FOR SINTERED MATERIALS



### INNOVATIVE TECHNOLOGY FOR SINTERED MATERIALS AS WELL



**Genius RS-A** is the work table for cutting ceramic materials measuring up to 12 mm in thickness for straight cuts and 3 mm in thickness for contoured cuts and is the perfect synthesis of Biesse's technological and innovative ability to transfer the technology it has developed over decades to the glass sector. Genius RS-A is capable of better optimising the sheet being processed, guaranteeing a level of productivity that is unattainable with traditional technology, and maintaining a heightened level of cutting precision over time, thus guaranteeing an excellent return on investment.

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### **GENIUS** RS-A

- F ERGONOMIC AND COMPACT, THANKS TO SIGNIFICANTLY REDUCED OVERALL SIZE AND HEIGHT
- VINPRECEDENTED RELIABILITY OVER TIME AND A HEIGHTENED LEVEL OF CUTTING PRECISION
- **^ ABSOLUTE FLEXIBILITY IN MACHINING OPERATIONS**
- **ABILITY TO DRY CUT WITHOUT PRODUCING DUST**
- SIMPLE TO USE THANKS TO ITS INTUITIVE SOFTWARE

### EXCELLENT CUTTING PRECISION

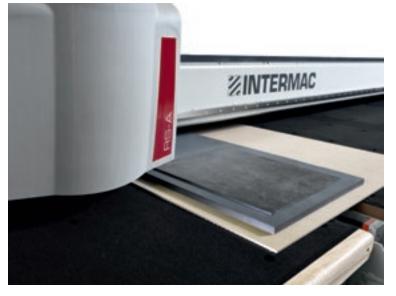
Genius RS-A is the best entry-level cutting work table on the market and is the perfect solution for cutting sintered material like laminam, kerlite, and porcelain stoneware. It is capable of cutting materials measuring from 3 to 12 mm for straight cuts and 3 mm for contoured cuts.



Biesse expands the limits for cutting low-thickness ceramic materials with new technology developed to perform the precision cuts typical of interior design (cladding for interiors and floors), counter tops, and construction (ventilated façades, stairs, thresholds, and windowsills). The Genius cutting table is easy to use and reduces waste. The main functions (cutting, breakout and loading/unloading, for example) are all included in the basic machine.



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



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

The Genius RS-A optimises machining, the amount of space required and maintains high levels of cutting precision over time, guaranteeing an optimal return on investment.

### 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 up of a rigid and rectified structure on which panels of rectified wood are applied which ensure the maximum planarity of the work area, a necessary condition for optimal processing and cutting of the sheet.



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







The operating head is equipped with a system that automatically manages the cutting pressure and ensures that the roller apply the proper force for the entire duration of the cut. 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





The aligning foot serves to align the sheet for the mechanical squaring of the sheet.

#### **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 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 with extreme precision.

### **GENIUS** RS-A

### PROTECTION AND SAFETY FOR ALL MACHINING OPERATIONS

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



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

## COMPACT, ERGONOMIC LOADING SOLUTIONS

With Genius RS-A it is possible to automate most of the operations necessary for cutting sheets of material. Genius RS-A puts an industrial calibre tool in the hands of small companies, allowing them to take a significant leap forward in terms of productivity and a 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.



### **GENIUS** RS-A

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



The retractable load feet automatically extend from the work table.



The arms of the tilting table come out automatically from the work table.



The arms of the tilting table automatically move back into the load position.



The machine operator manually positions the sheet of material on the tilting table.



The arms of the tilting table retract, bringing the sheet into position.







The retractable feet automatically move to the safety position before the cutting operation begins. The operating head automatically begins the cutting cycle.



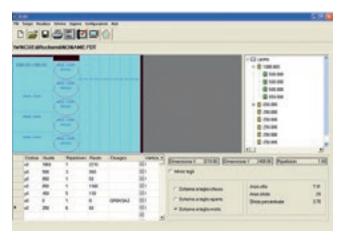
## MAXIMUM EASE OF USE

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.

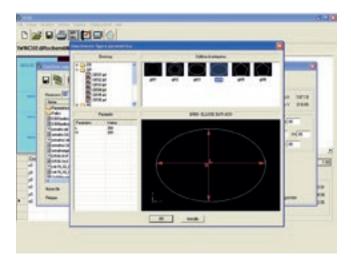


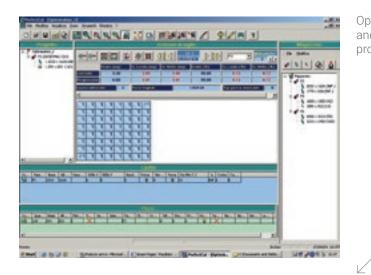
#### Numerical control on PC IWNC base (IWNC - Intermac Windows Numerical Control)

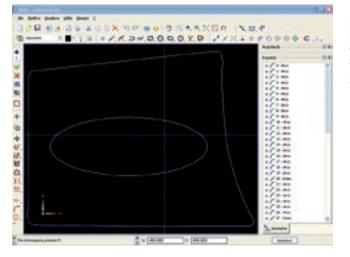
- <sup>r</sup> Ideal both for those using CNC machines for the first time and those who already have programming experience.
- Management of the working parameters of the machine.
- Creation and modification of the cutting patterns and/or the geometric or non-geometric shapes.
- Modules for quick estimate 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 sheets before cutting.







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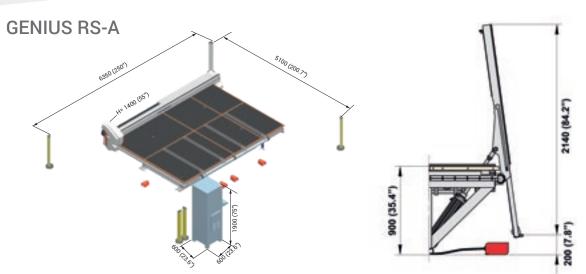
Parametric library on the machine, containing parametric shapes ready for the optimised cut and working directly on the machine.

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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 SPECIFICATIONS



#### GENIUS

Machinable dimensions	mm	3710 x 2600
Machinable thickness	mm	3-12
Max axle movement speed	m/min	200
Max acceleration	m/sec <sup>2</sup>	10
Positioning precision of the working head	mm	±0.15
Rectilinear and contoured optimisation (opt.)		SI
Break-out bars		2+1
Maximum loadable sheet size	mm	3710x2600x12
Maximum unloadable sheet size	mm	3710x2600x12 (300 kg)
Work table height	mm	900 (-15,+40)
Installed power	kW	9,5

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.

Sound pressure level on operator workstation (LpA) 79 dB (A) Superficial weighted noise level A (LwA) 96 dB (A)

Genius RS-A

Uncertainty of measurement K = 4dB(A)

The measurement was carried out in compliance with UNI EN ISO 3746, UNI EN ISO 11202 and subsequent amendments. The noise levels shown are emission levels and do not necessarily correspond to safe operation levels. Even though there is a relation between emission levels and exposure levels, this cannot be used reliably to establish whether or not further precautions are necessary. The factors determining the actual noise levels to which the operating personnel are exposed include the length of exposure, the characteristics of the work environment, other emission sources (e.g. the number of machines and machining operations nearby). At any rate, the above information allows the operator to better evaluate dangers and risks.

# **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**



# CUSTOMER CARE IS WHO WE ARE

SERVICES is a new experience for our customers, to offer not just excellent technology but the added value of an increasingly direct connection with the company, the professionals who work there and the experience they embody.



#### ADVANCED DIAGNOSTICS

Digital channels for remote interaction online 24/7. Always ready to intervene on-site seven days a week.



#### A WORLDWIDE NETWORK

39 branch offices, over 300 certified agents, retailers in 120 countries, and spare parts warehouses in America, Europe and the Far East.



#### SPARE PARTS AVAILABLE IMMEDIATELY

Identification, shipping and delivery of spare parts for every need.



#### **EVOLVED TRAINING OPPORTUNITIES**

Lots of on-site, online and classroom training modules for personalised growth.

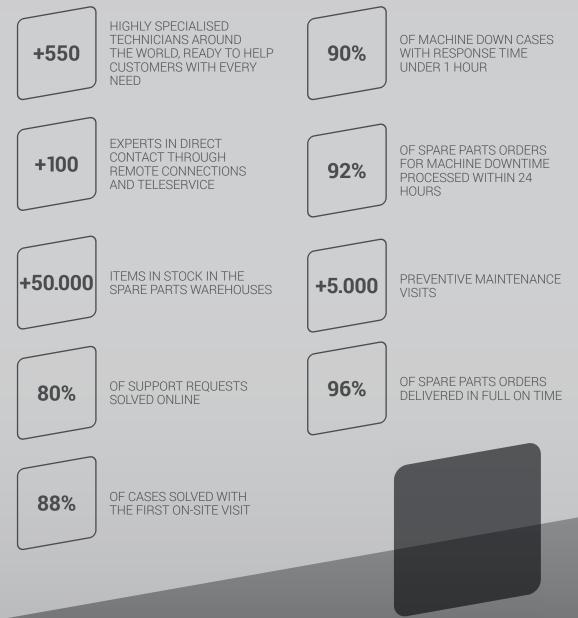


#### VALUABLE SERVICES

A wide range of services and software packages to help our customers achieve continuous improvements in performance.

### **SERVICES**





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# We simplify yo manufacturing to make the po of any materia



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

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