DONATONI D625

CNC BRIDGE SAW

DONATONI
Stone Tech Creators

To highlight a machine and its potential often means to open the doors to new opportunities and markets

CONTENTS

PRECISE, SIMPLE, COMPLETE

CNC BRIDGE SAW

UNPRECEDENTED QUALITY AND FINISH

The **DONATONI D625** is a **5 interpolated axis** simple and compact bridge cutter, ideal for the production of kitchen tops, vanity tops, shower trays and claddings for the building industry in marble, granite and artificial stone.
It allows to perform several types of processing such as orthogonal cuts up to 200 mm thickness, oblique, circular, elliptical, inclined, togheter with milling, drilling and straight, concave, convex, arched or elliptical shapes.
The **DONATONI D625** is equipped with inverter-controlled electro-spindle and is fitted with diamond tools, such as an end mill, excavation wheel and horizontal blade. Thanks to X and Y axes sliding system on linear guides with recirculating balls and racks with hardened and ground steel teeth both with automatic centralized grease lubrication, the **DONATONI D625** allows to obtain finished products extremely fine and precise
The motion is given by brushless motors coupled to high precision gearboxes.

It is supplied complete with a series of optional and hot-galvanized monoblock structure that does not require foundations, allowing installation and start-up in a very short time.

COMPLETE SOLUTION

EXTREMELY COMPACT

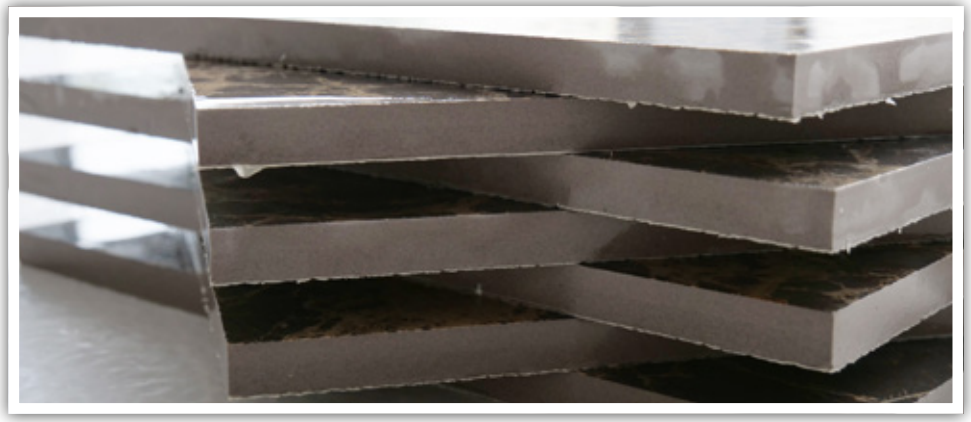
PRECISE CUTS AND SHAPES

SIMPLE AND QUICK TO PROGRAM

WIDE RANGE OF PROCESSING

NO NEED OF FOUNDATION

EASY TO TRANSPORT AND TO ASSEMBLY



PERFECT BALANCE BETWEEN DIMENSIONS AND REALIZATION FLEXIBILITY

PROCESSING

Kitchen tops, vanity tops, floors, panels for external and internal claddings, stairs steps, window frames, shower trays, building products.








QUALITY WITHOUT COMPROMISE

MAIN FEATURES

- 5 INTERPOLATED AXES
- Z-AXIS STROKE: 450 MM (17,7 IN)
- BLADE DIAMETER MIN / MAX: 350 - 625 MM (13,7 - 24,6 IN)
- MAXIMUM CUTTING DEPTH: 200 MM (7,8 IN)
- AUTOMATIC CENTRALIZED GREASE-LUBRICATION OF SLIDING GUIDES
- BRUSHLESS MOTORS AND HIGH-PRECISION GEARBOXES CONTROLLED BY INVERTER FOR X-Y-Z AXIS SLIDING

TYPE OF PROCESSING

LONGITUDINAL CUTS

CIRCULAR CUTS

CROSS CUTS

ELLIPTICAL CUTS

OBLIQUE CUTS

STRAIGHT, CONCAVE, CONVEX, ARCHED, ELLIPTICAL SHAPES

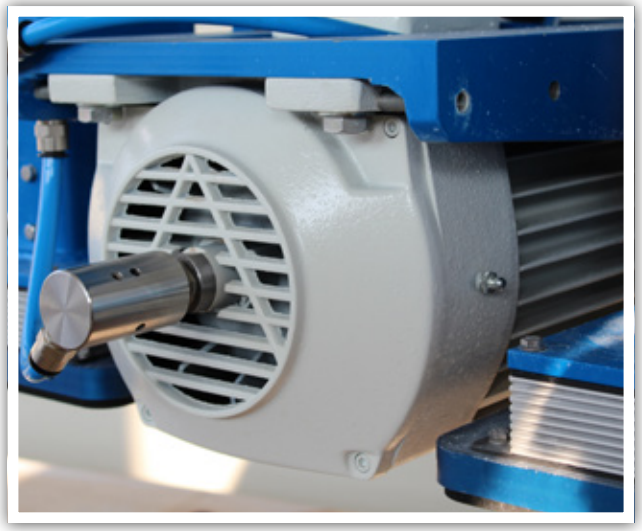
INCLINED CUTS 0-90°

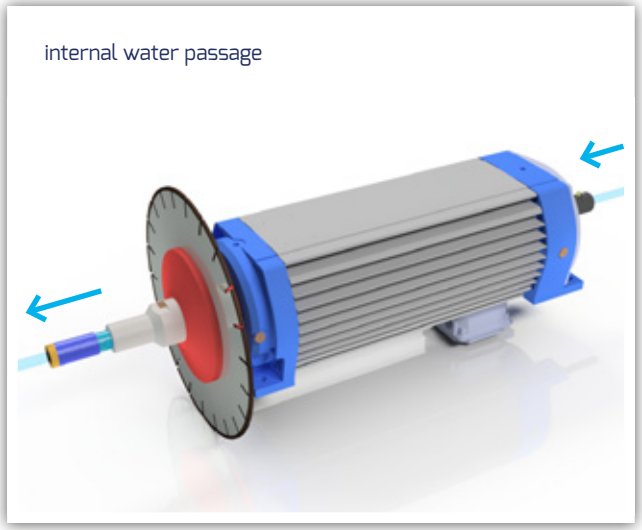
ORTHOGONAL CUTS UP TO 200 MM THICKNESS

A COMPLETE PACKAGE IN A SINGLE MACHINE

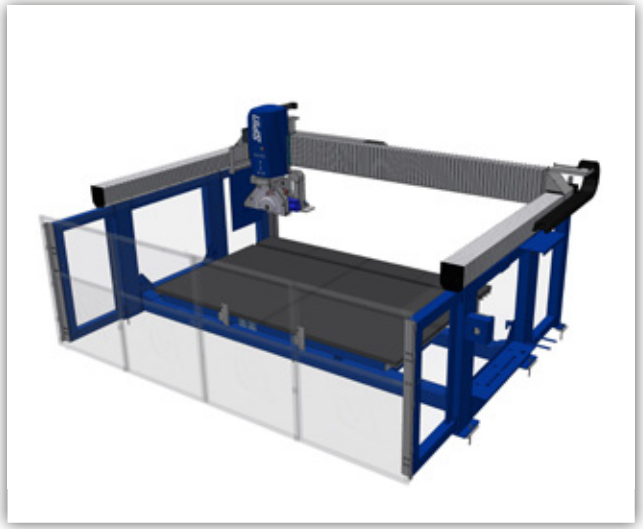
MAIN COMPONENTS

High quality electro-spindles controlled by an inverter allowing the adjustment of the nr. of revolutions from 0 to 5500 rpm, so granting the use of blade and diamond tools such as a core drill or milling cutter. The tool change is of manual type.

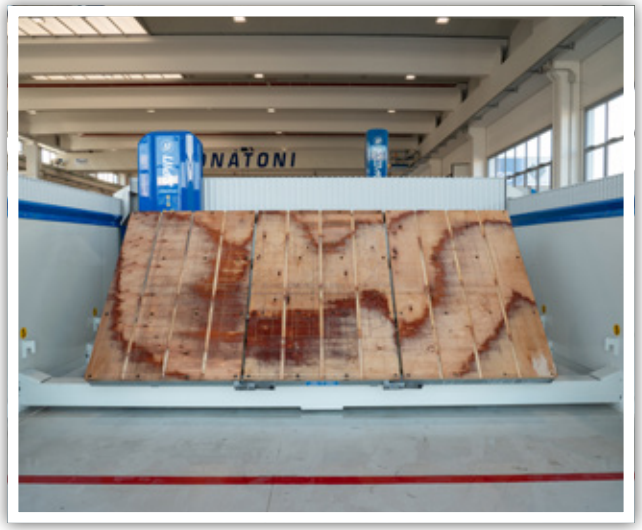


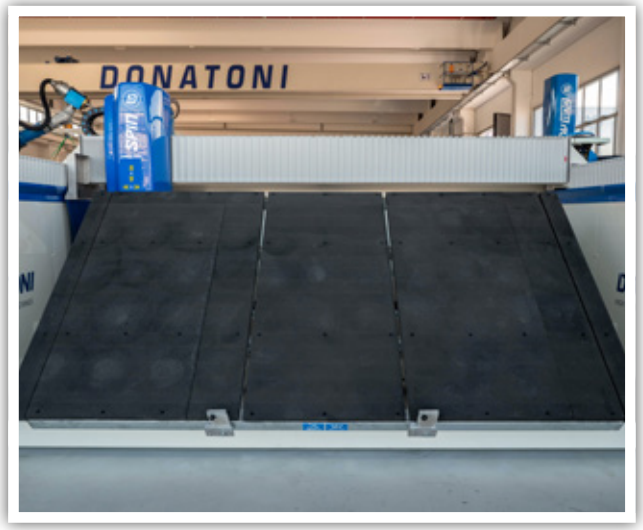


Monoblock frame composed of supporting walls and supporting beams of the tilting bench, in hot-galvanized steel.



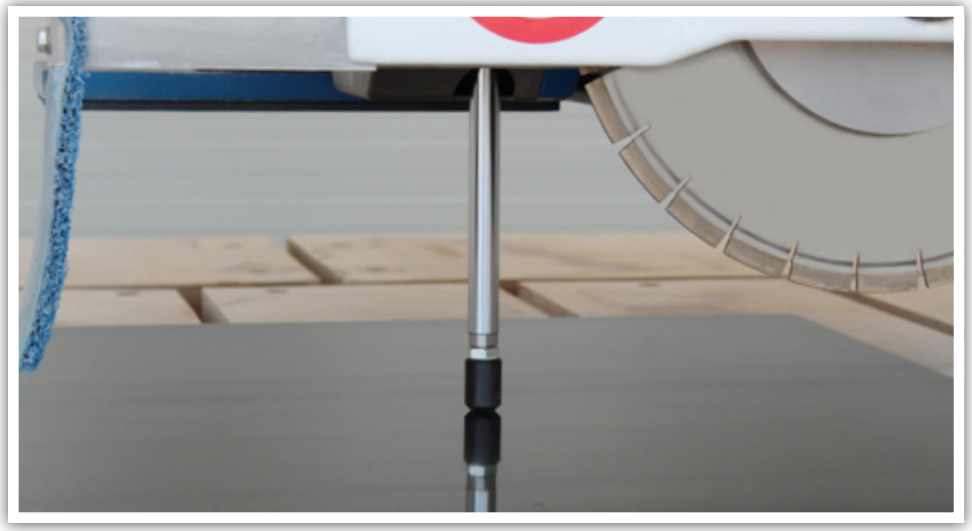
Tilting workbench with hydraulic lifting system, available in wood or rubber (optional) with maximum capacity up to 1650 kg.





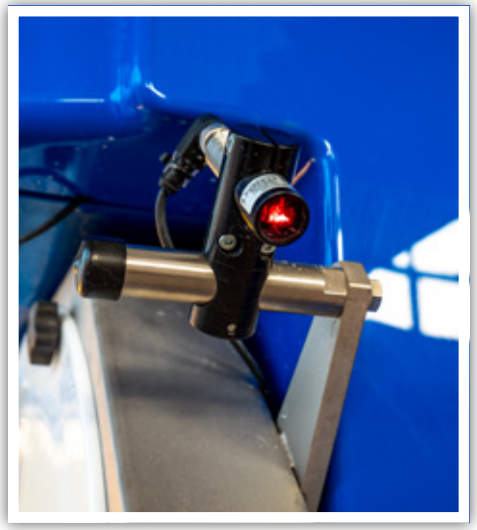
Blade presetting unit: measurement system of blade diameter.

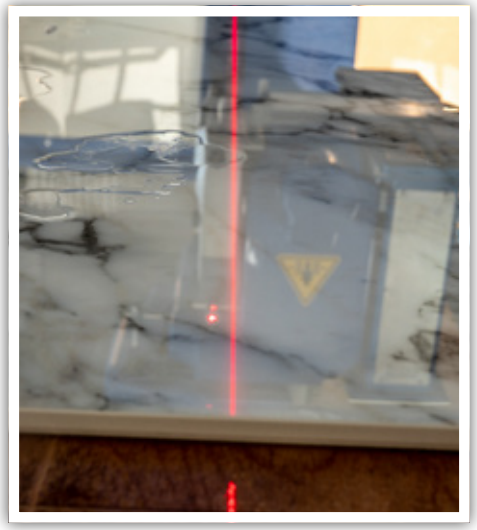
Slab thickness detector: system for automatic detection of slab thickness, for use with a max. 525 mm. blade diameter.



Front and rear guards: front and rear protections with double locking allen key system. The closures have the possibility by folding opening so allowing a smaller footprint.

Laser marking

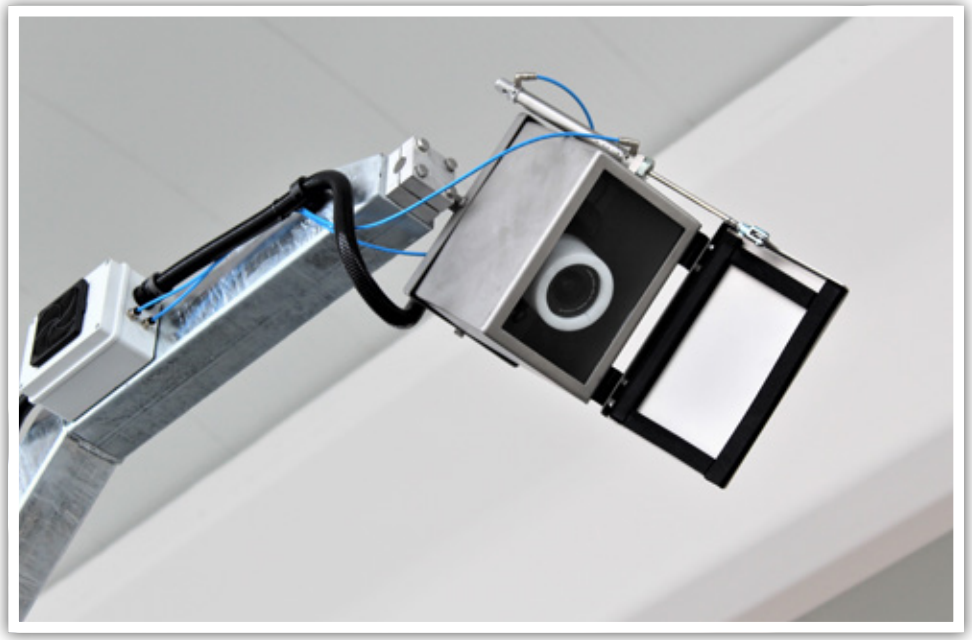


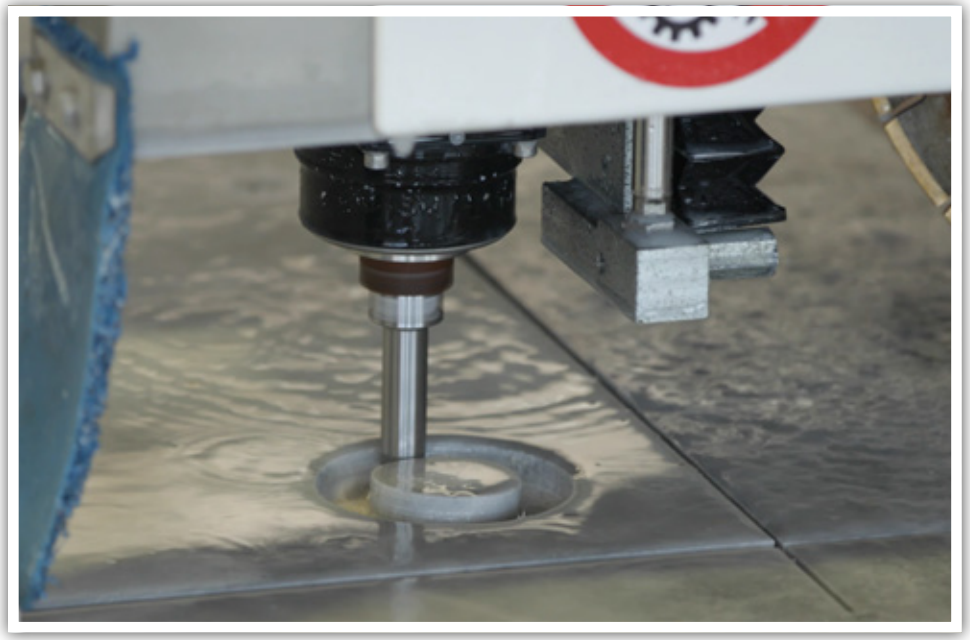


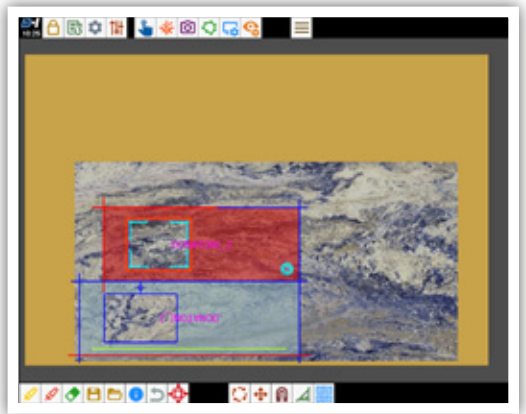
ACCESSORIES AND MECHANICAL COMPONENTS OPTIONAL

Photoslab: slab detection system, with camera placed above the working bench and image acquisition software. The application allows to speed up machine programming, pieces positioning and slabs defects detection.

Tools +: vertical lateral electrospindle managed by inverter with nr. 0-14,000 rpm, allows the operator the use of small diameter diamond tools with ½ "gas connection for incremental cutting / blind or through hole drilling and the performance of combined operations with blade and milling cutter.







AN INTELLIGENT SYSTEM TO MAKE YOUR WORK EASIER

LET US GUIDE YOU TOWARDS THE FUTURE OF INTELLIGENT MACHINES

D-INSIDE:

EQUIP YOURSELVES WITH A SUPERIOR FORM OF INTELLIGENCE

OPERATOR INTERFACE WITH PC AND 21" TOUCH SCREEN MONITOR

HIGH PERFORMANCE THANKS TO THE NEW POWERFUL PC

USB PORTS FOR TRANSFERRING FILES

CONTROLS FOR THE MANUAL MOVEMENTS OF EACH AXIS

MOBILE, STIFF ARM THAT ALLOWS THE OPERATOR TO PROGRAM WITH 1 HAND

D-I INSIDE

Perfect machining can only be achieved through multiple movements that need to be perfect coordinated. Just as all the movements in the human body are managed through brain impulses, similarly, the movements of our machines are managed by **integrating the machine with the programming software.**

Every Donatoni machine is born with an intelligent work management system, integrated with all the parts that manage its movements; we call this system **D-Inside**, the real brain of the machine. It is an advanced interface that is simple to use, even for inexperienced operators, which allows the machine-software system to be coordinated.

The D-Inside system offers many programming options and can be interfaced with the different types of Donatoni software, such as Parametrix and all the additional modules, or with CAD-CAM DDX EasySTONE, so as to customise the machine to meet the customer's requirements.

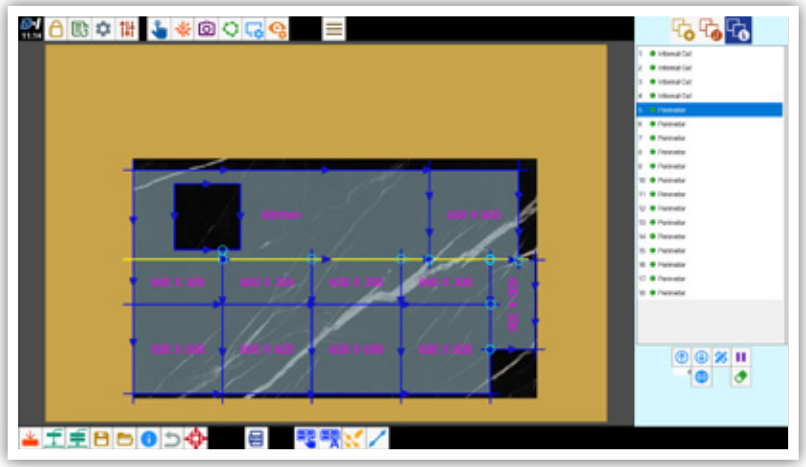
PARAMETRIX

Parametrix is the **simple and user-friendly Software** developed by Donatoni Macchine that was conceived to optimise cutting different shaped pieces from slabs.

It is a software which **allows you to manage cutting processes using a blade, it allows the user to input both rectilinear and curvilinear shapes** (steps, kitchen worktops, rectangles, covers) using pre-defined shapes in the program or shapes imported from DXF files.
Depending on the surface available, it is possible to set the position of the pieces and the sequence of the cuts, optimising the times and reducing the material waste.

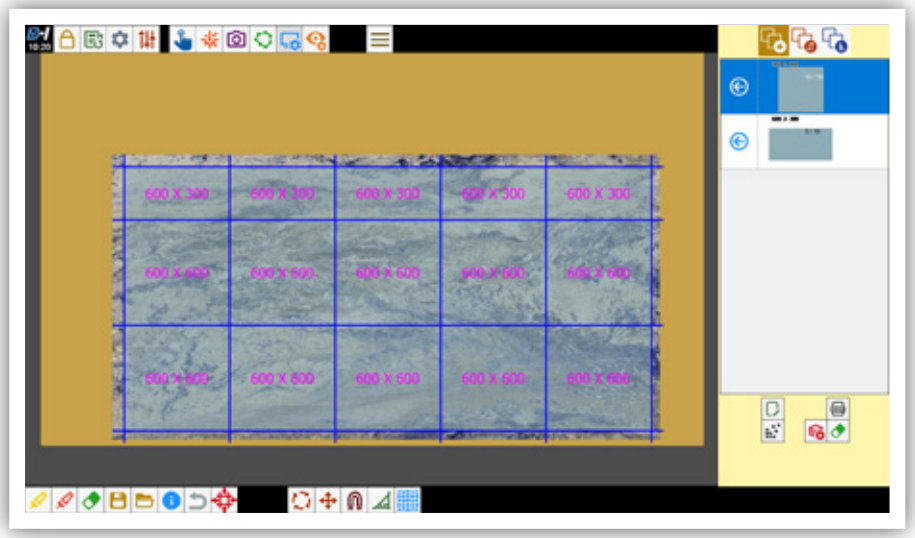
The software includes the following functions: **for preventing the collision of pieces, manual and automatic piece nesting, managing production and order statistics.**

Parametrix can be used together with Photoslab and Move-System, which allow the slab to be detected automatically and the cut pieces to be moved using a suction cup system, thereby **reducing operator intervention to a minimum.**



Automatic nesting

Automatically inserts the square or rectangular pieces into the work area, optimizing the use of the slab and automatically avoiding any highlighted defects.



Drilling and processing with the milling cutter

It allows you to manage the use of tools, drills and milling cutters, with which it is possible to cut pieces or parts of the slab, to complete the initial work process with the blade, such as "L-shaped" internal corners, or to make the lowering for built-in parts. The change from blade to drill during the work process is automatically managed by the program. (Only for the following machines versions: tools, top, mtc, atc, and with the tool+ accessory).

Positioning of the pieces on the slab

With the manual nesting function, it is possible to preview any collisions between the parts, thereby making it easier to position the pieces in the best possible way. The "magnet" function helps the operator align the pieces one next to the other, in order to reduce the number of cuts. It is possible to save the partial layout and then complete the required positioning layout later.

Managing and changing of cuts

After having positioned the pieces, the cuts can be modified: it is possible to lengthen them, to change their order, to disable them, to add pauses, as well as other types of modifications, before pressing the start button to start the cutting phase.

Bookmatching (optional)

Starting from a project in DXF format and slab photo, it supplies the user with a 2D image of the parts to be cut and, therefore, allows the user to see the aesthetic result obtained by combining the pieces and to fully evaluate the "bookmatching"-type process.

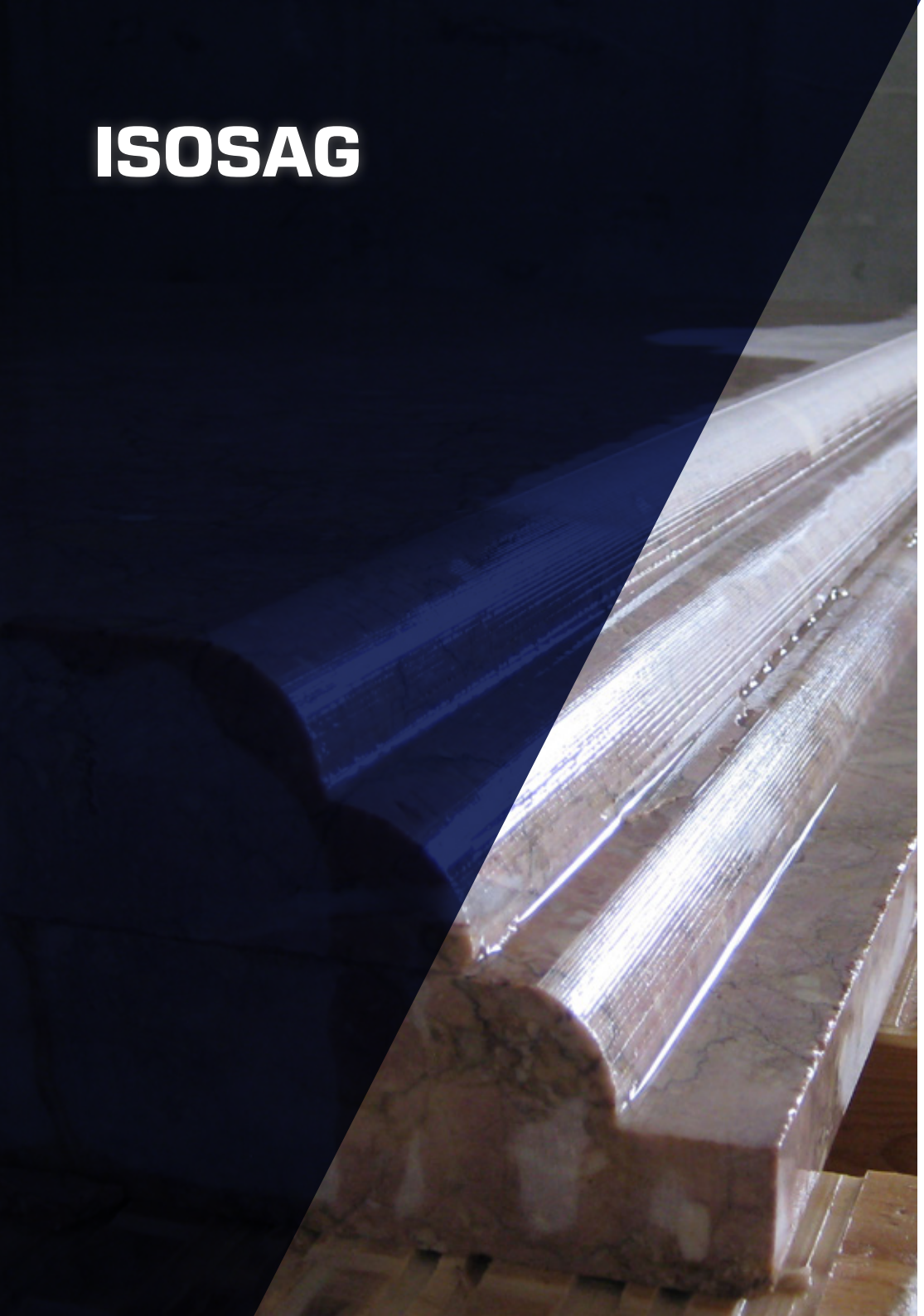
Piece unloading module (optional)

The program allows the pieces to be unloaded in a predefined area; the operator uses the screen to select the cut pieces to be unloaded with the Move System of the machine (the software requires an increase of the Y-axis stroke length).

DM_TL (optional)

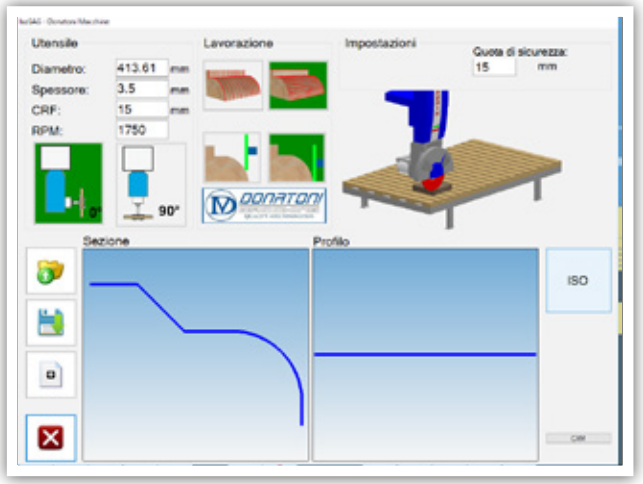
Program for honing / polishing / brushing slabs by means of the plate carrying Frankfurt abrasives.

ISOSAG



ISOSAG is the software that allows the user to create files for carrying out rectilinear or concave/convex arc shapes with both a vertical and a horizontal blade. The shaping process can be performed in roughing mode (combing) or in finishing mode (brushing), or in combined mode.

The program is supplied with a library of profiles that can be quickly modified (in terms of size) by the machine operator and saved as a new profile.



SCAN-CNC

OPTIONAL

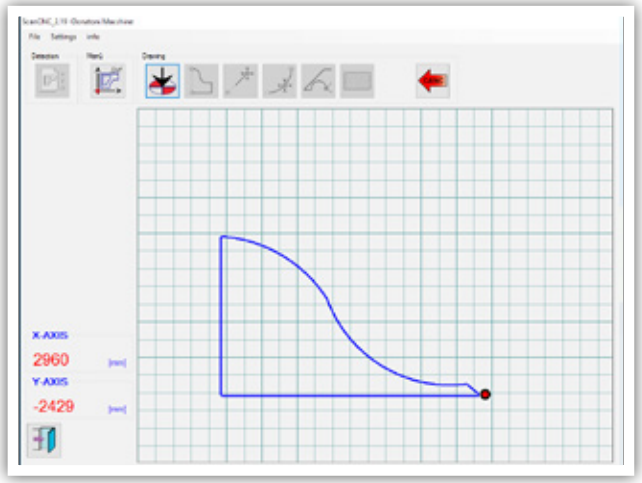
It is a detection system composed of a laser pointer mounted on the machine head, which allows the detection of two-dimensional profiles with a linear or curvilinear shape. The software creates the drawing (file DXF) in real time and displays it on the machine monitor.

Once the detection procedure has been completed, the operator can:

· Process the template on the touch screen of the machine using Parametrix software.

· Store the template file in archive of the machine's PC.

· Store the file on an external PC, using a USB key, to allow it to be further processed or associated with other files by using external CAD-CAM software.



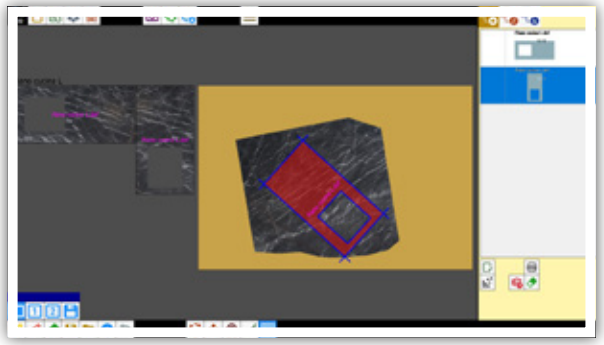
PHOTOSLAB

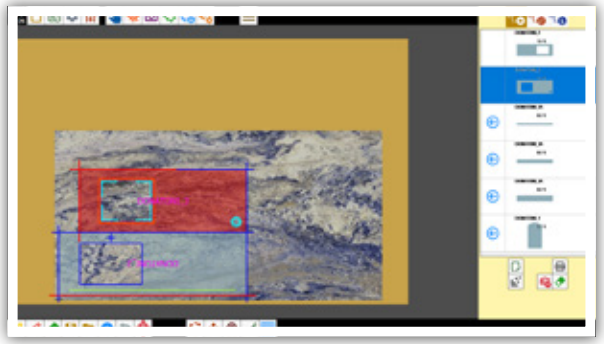
SUPPLIED WITH THE CAMERA FOR SLABS

By means of a camera placed above the machine and the related software, the dimensions of the slab being cut are automatically detected, and thanks to the high quality of the image, it is possible to see blemishes, veins and any cracks that are present.

Therefore, this system allows the user to optimise the use of the slab, the speed with which the pieces are positioned, while avoiding possible defects and enabling the cuts to be carried out following the veins of the material.

The software is automatically enabled when the “camera for slabs” is installed





CAD-CAM

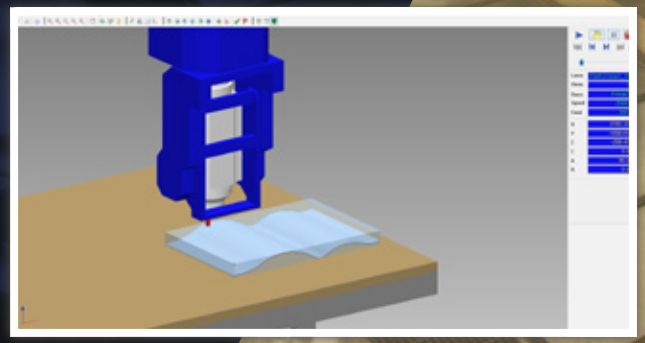
OPTIONAL

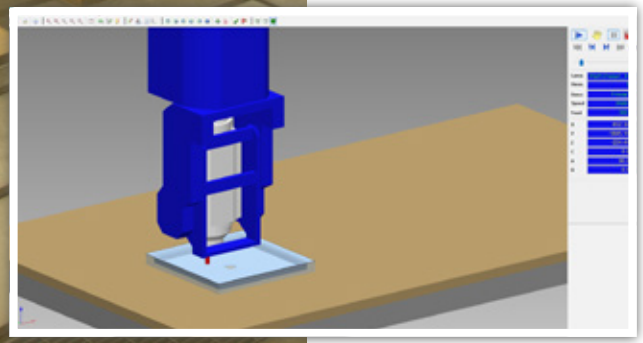
The CAD-CAM software designs, imports and executes 2D and 3D files in DXF, IGES, STL, PNT, STEP and RHINO formats, and also defines surfaces and shapes using laser scanning. Multiple work processes can be set: roughing, drilling, profiling, emptying and polishing, which can be carried out, thereby optimising the execution process.

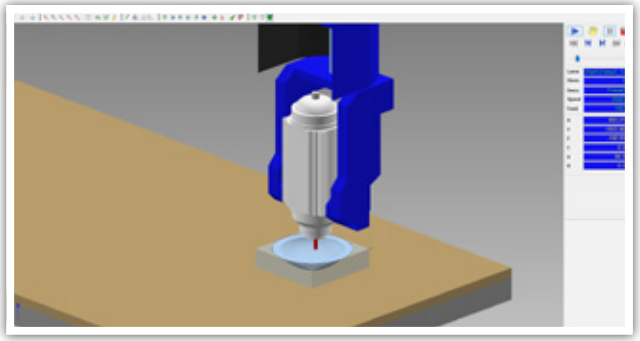
After having been imported, the software optimises the work process sequence, performs the roughing / finishing process, taking into account the raw material left over after processing.

With CAD-CAM it is possible to display the3D image of the work process with virtual milling and to modify it, if required. The 3D simulation of the work process, including empty movements, is realistic because it is based on the Customer's machine model and shows the three-dimensional model of the work centre, the bench, the motors, the tools, the sub-pieces and the pieces.

Once the design phase has been completed, CAD-CAM generates the piece-programs and sends them directly to the Customer's work centre. Finally, it calculates the processing times and costs, supplying an accurate report of the work performed.







WITH DONATONI YOU ARE NEVER ALONE

AFTERSALES
SERVICE AND ASSISTANCE

The relationship with the customer does not end with the supply of the product but continues and is strengthened through a reciprocal collaboration which creates value for both customer and supplier.

DIRECT CONNECTION WITH OUR TECHNICIANS

Donatoni Service is the company department that is totally devoted to our customers and their needs; it provides a wide range of **services aimed at meeting our customers' all-round requirements**, before, during and after the delivery and installation of the machine and throughout its useful life.
Our highly-qualified personnel have sound experience and are capable of responding to any question or request. We use an open approach that is attentive to specific individual needs since our objective is to cooperate with and support the customer in its production activities, not only through assistance but also with **technical services and advice** which allow operators to improve their know-how and enhance their production. Speed, reliability and professionalism are the strengths that allow us to ensure an efficient response to your requests; our Service uses the latest generation communication tools and **a global network of partners** so as to provide prompt answers and solutions.

WORLDWIDE ASSISTANCE STRUCTURE

Donatoni is present in many countries worldwide thanks to a structure of reliable and competent partners and agents, among which the Biesse group Intermac branches.

MACHINE INSTALLATION

Our machine are installed by highly specialized technicians granting extraordinary levels of professional work. Installation includes a careful installation service, commissioning of the machine and training of operators according to the model of machine installed.

ON SITE ASSISTANCE

We provide on site assistance at the clients premises if not possible to use the Tele Assistance by modem.

DIRECT CONNECTION - ON-LINE ASSISTANCE

Each machine is supplied with a system that enables it to be connected by Tele-Assistance to our After-sale service (we require connection to the network via a cable). This service enables our technical staff to virtually access the customer machine and to carry out checks, updates and to provide technical assistance as if they were there at the machine location in person.

PARTS AND REPLACEMENTS SERVICE

We handle requests for parts and replacements in any part of the world, in short time frames in order to minimise machine down-time.

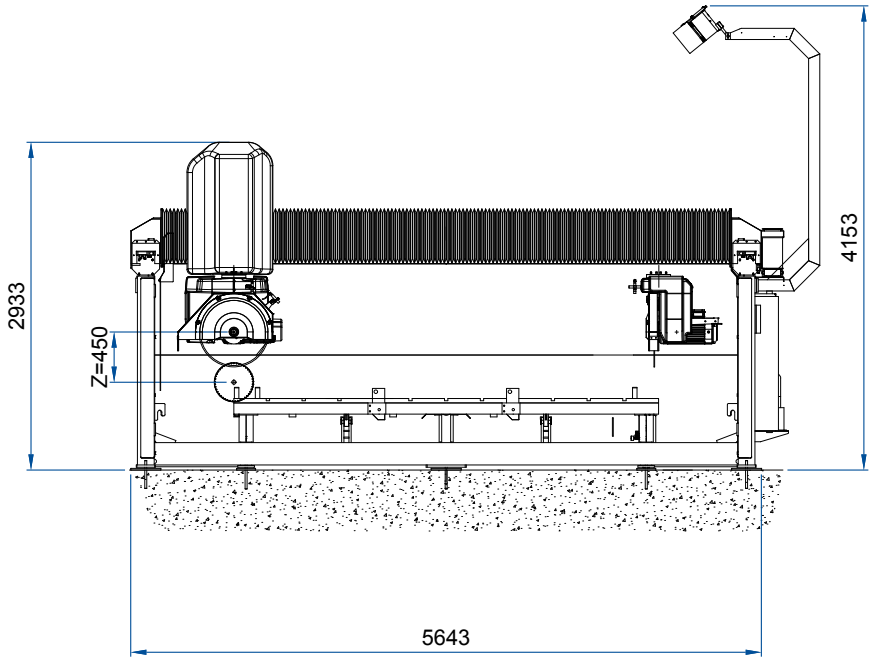
CAD-CAM TECHNICAL ADVICE

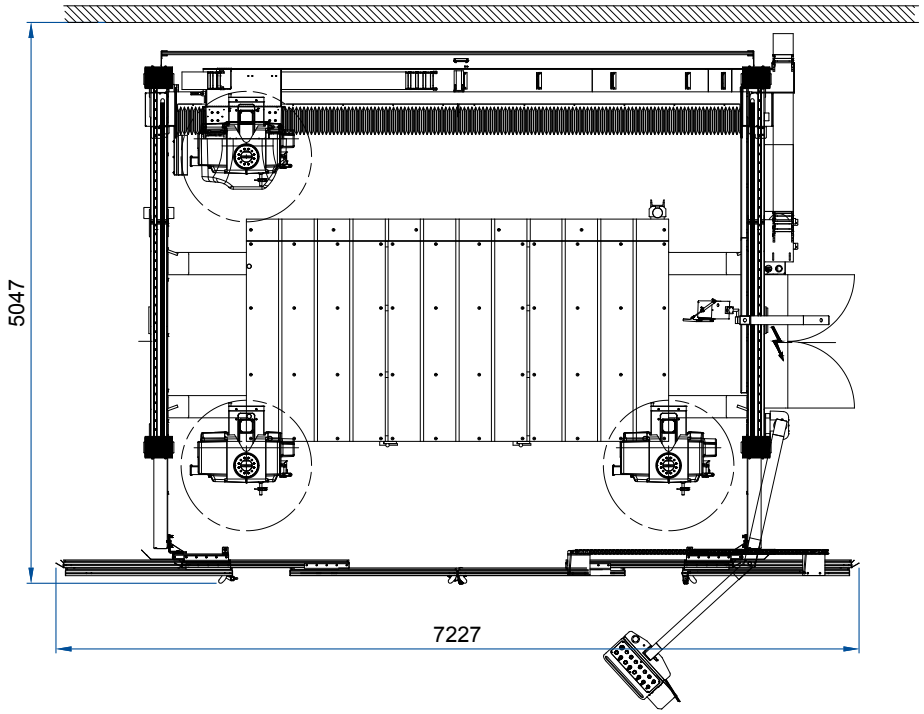
we help our customers in creating and designing projects and objects.

THEORETICAL/PRACTICAL TRAINING

Training courses and update courses regarding new applications and software at our offices or at customer premises. Our offices are equipped to host courses for technicians and operators. The rooms are next to the machines on display in our show room and therefore this allows tests and checks to be carried out directly on the console of the machine and the level of learning can be evaluated.

TECHNICAL DATA





DONATONI D625

Number of interpolated axes	n°	5
Carriage stroke axis X	mm in	3800 149,6
Bridge stroke axis Y	mm in	2780 109,4
Vertical stroke of the head axis Z	mm in	450 17,7
Disk head rotation (axis C)	degrees	-5° / 365°
Disk head tilting movement (axis A)	degrees	0 / 90°
Working table dimensions	mm in	3800x2000 149,6x78,7
Minimum disk diameter	mm in	350 13,7
Max disk diameter	mm in	625 24,6
Max cutting depth	mm in	200 7,87
Electro spindle motor power	kW	13 S6

TOOL rotation with inverter	RPM	0 / 5500
Speed axis X	m / min ft / min	0 – 40 0 - 131,2
Speed axis Y	m / min ft / min	0 – 30 0 – 98,4
Speed axis Z	m / min ft / min	0 – 5 0 – 16,4
Adjustable cut feeding speed	m / min ft / min	0 – 25 0 - 82
Water consumption (3 bar)	l / min gal / min	35 9,2
Air consumption	l / min gal / min	20 5,2
Standard voltage	Volt / Hz	400±10% / 50
Max blade dia. with thickness detector (stroke 200 mm)	mm in	625 24,6
Total installed power	kW	25
Approx total weight of the machine	Kg lb	4800 10582,2

NOTES

NOTES

NOTES

NOTES

NOTES

NOTES

Member of:

CONFINDUSTRIA MARMOMACCHINE
ASSOMARMOMACCHINE

Donatoni Macchine Srl
Via Napoleone 14, 37015 Domegliara - Sant'Ambrogio di Valpolicella / Italy
Tel. +39 045 6862548
Fax +39 045 688 43 47
info@donatonimacchine.eu
www.donatonimacchine.eu

www.donatonimacchine.eu

Donatoni Macchine, founded by Vittorio Donatoni in 1959 in Domegliara, one of the main marble and granite processing districts, is recognised, thanks to their years of experience gained in the natural stone industry during this time, as one of the world leaders in manufacturing **cutting-edge machines of very high quality for working stone.**

Constant research, technological innovation and customer service are key concepts for the company and in order to pursue them the company employs highly qualified technical and commercial personnel, in order to guarantee the end customer a **product that reflects their expectations in terms of quality and performance.**

DONATONI
Stone Tech Creators