DONATONI D825 Q

BRIDGE SAW CNC

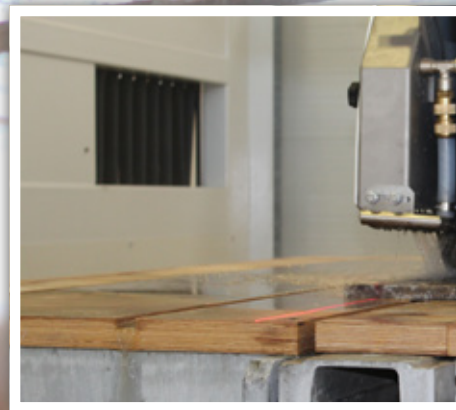
DONATONI
Stone Tech Creators

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

CONTENTS

MECHANICAL PERFECTION, TECHNOLOGICAL PRECISION

BRIDGE SAW CNC



QUALITY AND FINISH WITHOUT PREDECESSORS

The **DONATONI D825 Q** is a **5/6 axis interpolated** bridge milling machine particularly flexible, suitable for the production of different types of products such as kitchen tops, bathroom tops, shower trays, engravings, bas-reliefs and various coatings for the building industry.
It is a machine that allows a wide range of processes, from cutting, to milling, drilling, shaping and, thanks to the countless accessories, it is possible to carry out these operations simultaneously without moving the piece from the bench or prolonged machine stops.

Thanks to the sliding of the X and Y axes that occur on linear guides with recirculating balls and racks both with oil bath lubrication and with the new structure of the bridge and the steel carriage, the **DONATONI D825 Q** allows to obtain products with extremely fine finishes precise.
DONATONI D825 Q is suitable for those in need of power, high output and small footprint. The different levels of customization of the machine make it possible to satisfy the most demanding customer requirements and this is made possible by the wide range of accessories available.

HIGH QUALITY OF THE MATERIALS USED

EXTREMELY FLEXIBLE

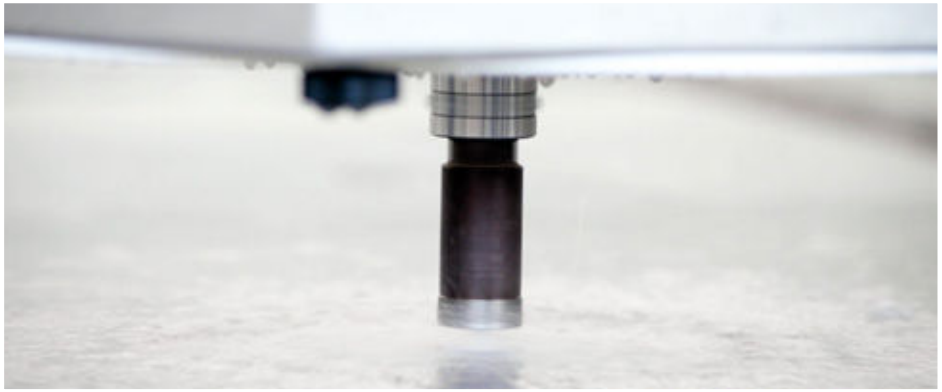
WIDE RANGE OF ACCESSORIES AND CONFIGURATIONS

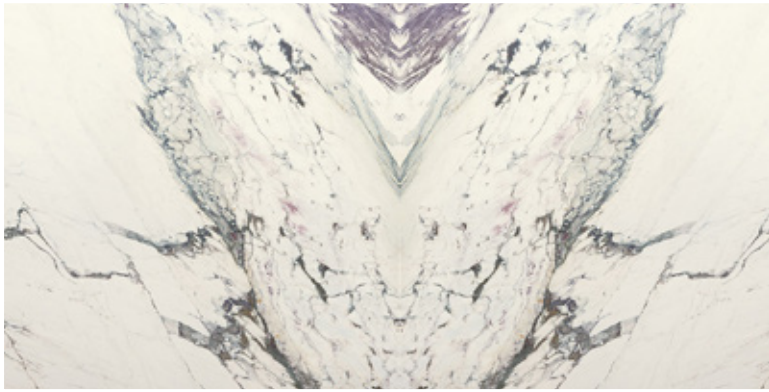
PRECISE FOR A PERFECT RESULT

SIMPLE AND QUICK TO PROGRAM

WIDE RANGE OF PROCESSES

REDUCED DIMENSIONS





HIGH QUALITY COMPONENTS FOR A PERFECT RESULT

EFFICIENCY AND FLEXIBILITY

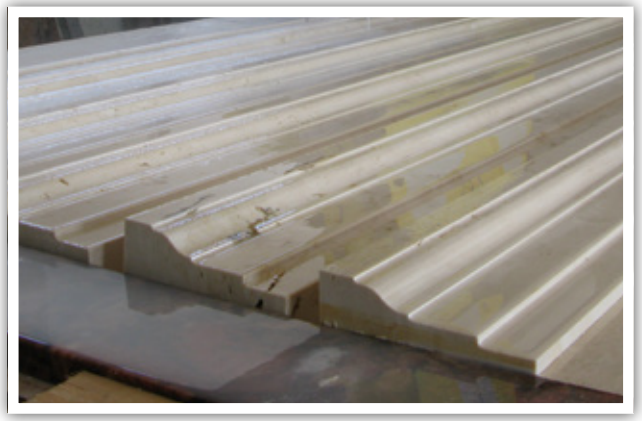
PROCESSING

Kitchen tops, bathroom tops, floors, panels for exterior and interior cladding, stair steps, window frames, shower trays, building products, artefacts for funerary art.



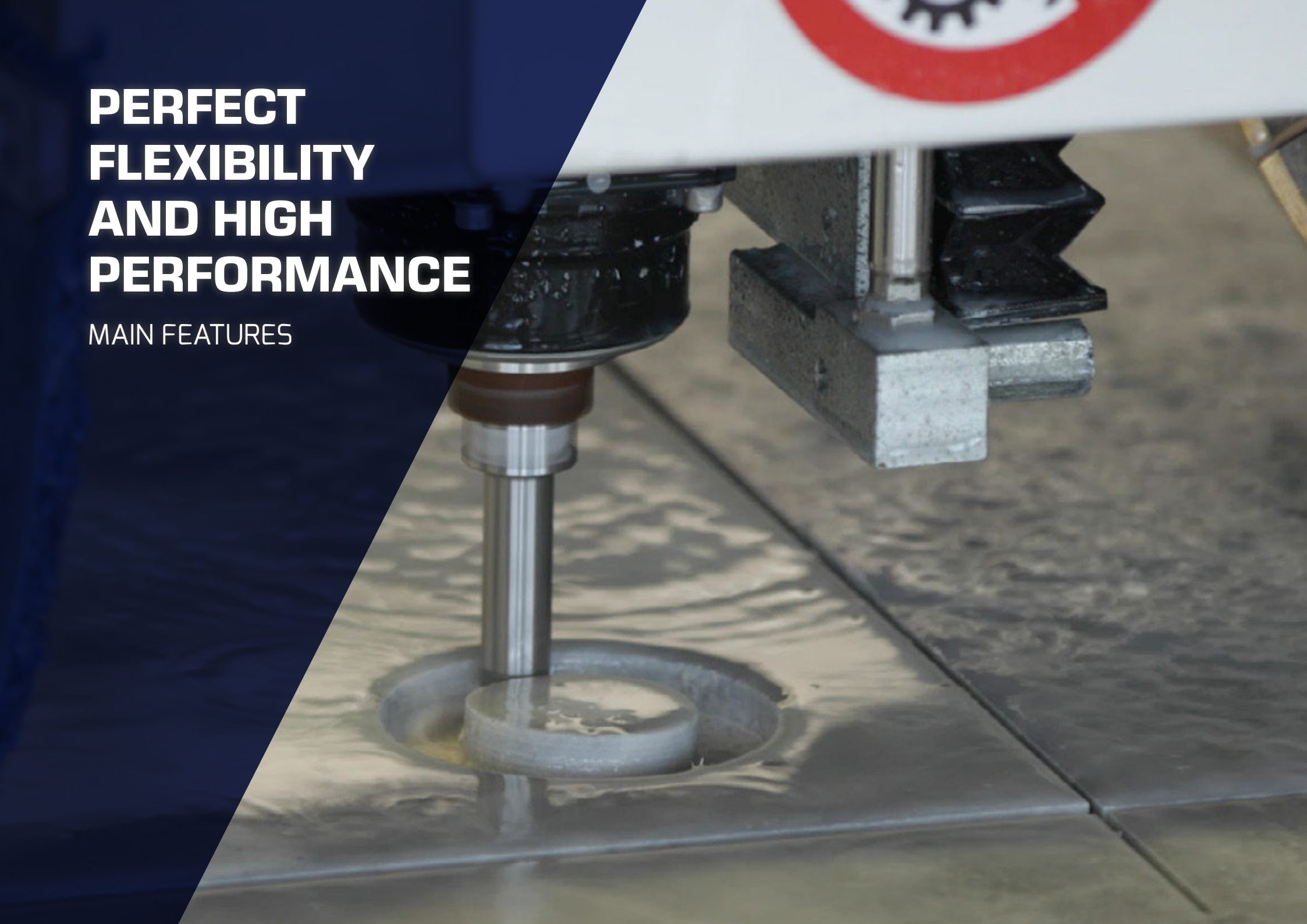




PERFECT FLEXIBILITY AND HIGH PERFORMANCE

MAIN FEATURES



- 5/6 INTERPOLATED AXES
- Z-AXIS STROKE: 800 MM
- DIAMETER MIN / MAX DISKS: 350-825 MM
- MAXIMUM CUTTING DEPTH: 300 MM
- STEEL BRIDGE WITH NEW REINFORCED STRUCTURE FOR GREATER STABILITY
- SUCTION HANDLING SYSTEM
- MAXIMUM LIFTING WEIGHT WITH SUCTION CUPS: 600 KG
- OIL BATH SLIDING GUIDES LUBRICATION
- BRUSHLESS MOTORS AND HIGH-PRECISION GEARBOXES CONTROLLED BY INVERTER FOR X-Y-Z AXIS SLIDING

TYPES OF WORKINGS

LONGITUDINAL CUTS

0-90 ° INCLINED CUTS

ELLIPTICAL CUTS

CROSS CUTS

ORTHOGONAL CUTS UP TO 250 mm

STRAIGHT, CONCAVE, CONVEX, ARCHED, ELLIPTICAL SHAPES

OBLIQUE CUTS

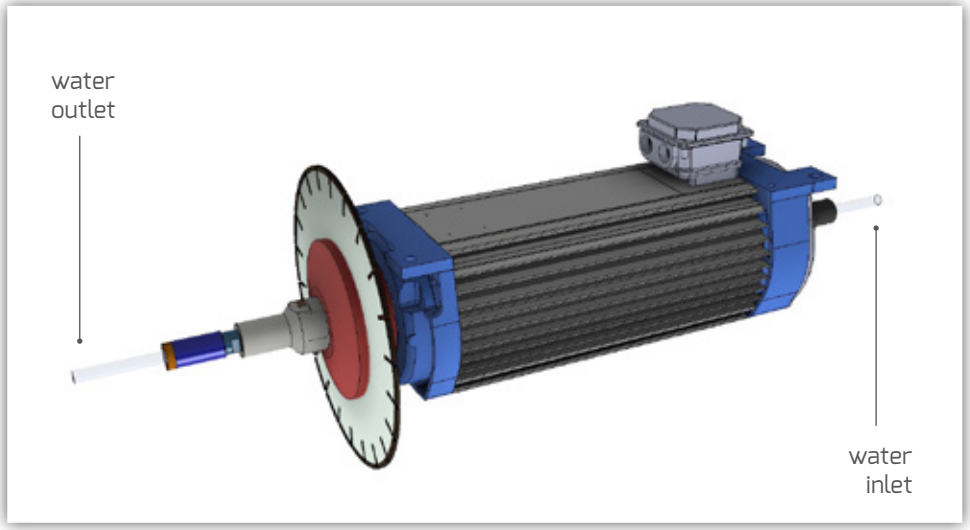
CIRCULAR CUTS

EXCAVATION OF TWO-DIMENSIONAL AND THREE-DIMENSIONAL SECTION BLOCKS

INNOVATION IS STANDARD

MAIN COMPONENTS

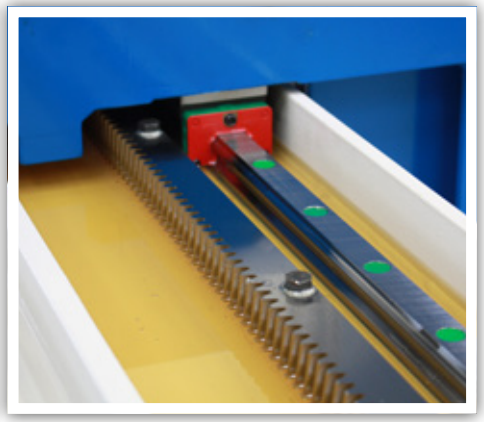
High quality Electro-spindles controlled by an inverter allowing the adjustment of the nr. of revolutions from 0 to 5500/7500 rpm, so granting the use of blade and diamond tools such as a core drill or milling cutter. The tool change is of automatic or manual type.



Electric panel cooled by air conditioner to keep the temperature constant during hot periods or in areas where temperatures are always high.

Ball recirculating sliding crosspieces and helical toothed racks for sliding the Y axis, with oil bath lubrication and protected by bellows with labyrinth closure.

Bridge: special profile in steel structure with increased section, normalized, sandblasted and painted in triple layer, with hardened and ground toothed pinions and racks with helical toothing, brushless motor and high precision gearbox.

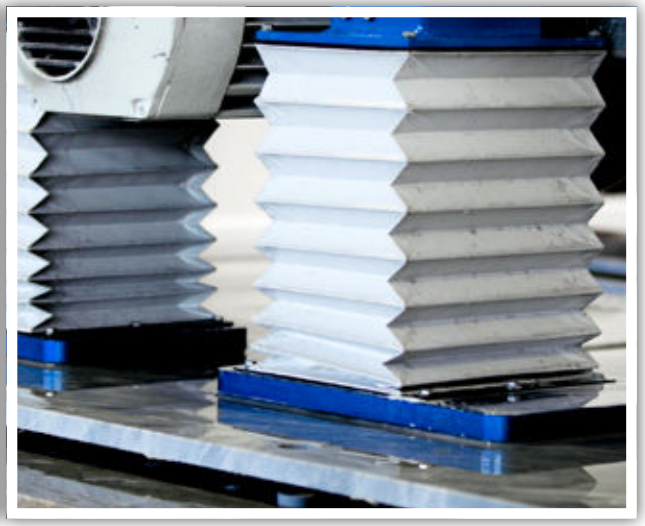


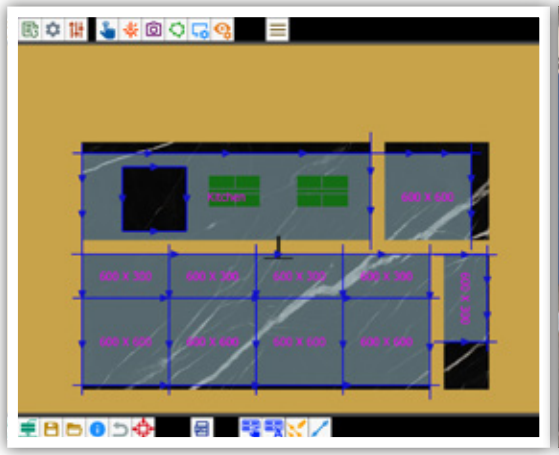
ACCESSORIES AND MECHANICAL COMPONENTS

OPTIONALS

MOVE-SYSTEM

Suction cups system for the automatic lifting and positioning of cut-to-size pieces granting processing times with minimum waste. The 2 aluminum suction cups are equipped with sectors of various sizes allowing lifting operation of large and small pieces, up to a maximum of 600 kg. it can be used with blade up to 725 mm diameter.





The Move-System allows to work **at the same time and in automatic** mode both with a tool and blade, by moving pieces on the bench through the suction cups, with no need to switch off the machine.

- > easy to use even for operators with no experience
- > it makes the machine totally automatic
- > piece motion without operator intervention
- > makes full use of the slab's surface
- > increase the efficiency
- > reduction of downtimes

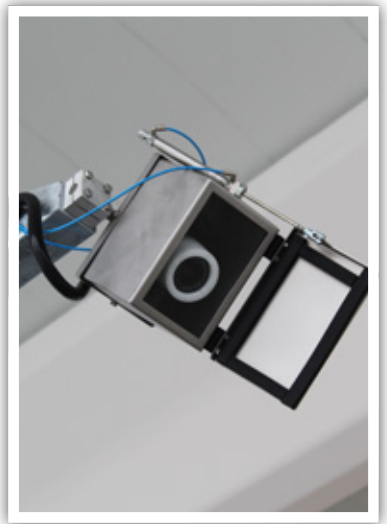
MOVE-SYSTEM / BLADE / TOOL

Workbench available in different models, sizes and surfaces, based on the selected accessories and customer needs.

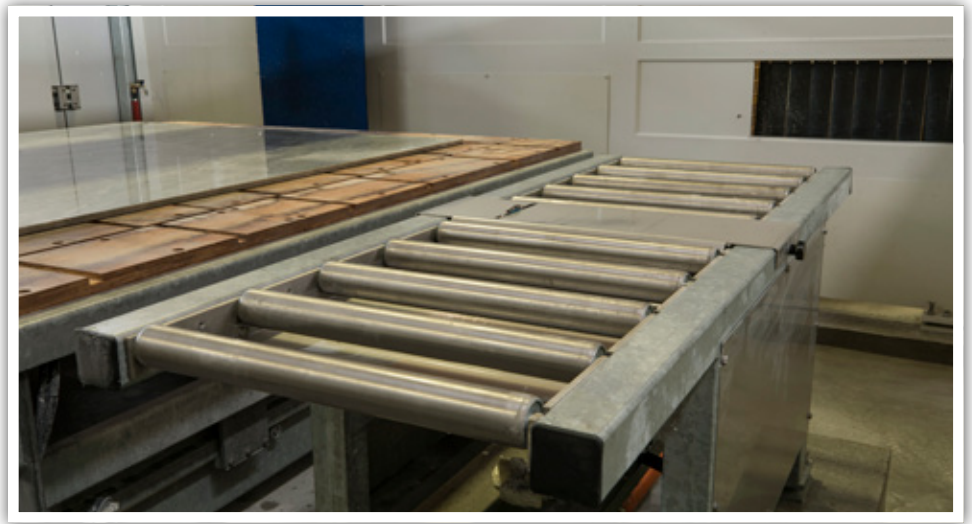
Disk presetting unit: measurement system of blade diameter

Slab thickness detector: system for automatic detection of slab thickness.

Photoslab: Plate detection system, with camera positioned above the workbench and image acquisition software. The application allows to speed up the machine programming, pieces positioning and slabs defects detection.



Lower-Cut Group: cutting system for inserting reinforcement bars in the lower part of the kitchen tops. (the optional needs the increase of Y axis stroke length).



Tool+: Vertical lateral electrospindle, allows the operator the use of small diameter diamond tools with ½ "gas connection for incremental cutting / blind or through hole drilling and the execution of combined operations with disk and milling cutter.

Sliding front safety guards with locking system: have a small footprint and allow maximum visibility of the work area, while guaranteeing high safety standards.

Linear tools storage: with 20 stations for ISO 40 cones of max. 600 mm, complete with pneumatic lifting stainless steel cover (only for ATC Electrospindle).

Lathe Lathe for the execution of columns, capitals and elements with circular cross-section or complex shapes (the optional needs the increase of Y axis stroke length). Max. diagonal is equal to 850 mm.

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

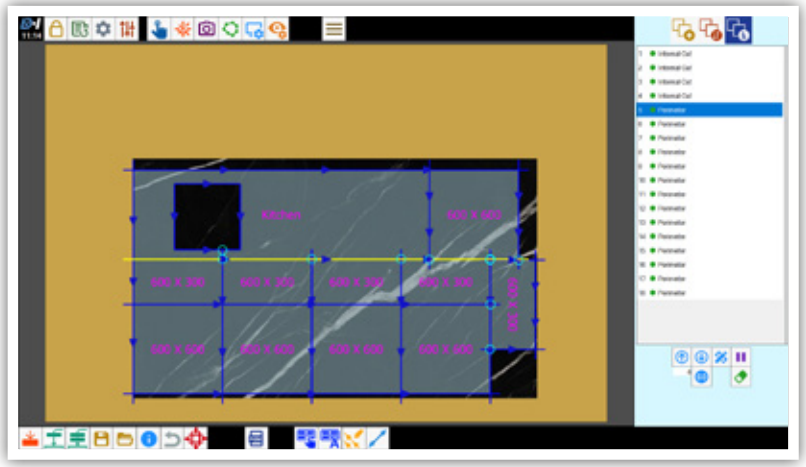
INCLUDED

Parametrix is the **simple and user-friendly software** developed by Donatoni Macchine and conceived to **optimise the management of cutting different shaped pieces from slabs.**

It is a programme which allows you to manage cutting processes with disks, **it enables input of rectilinear shapes as well as curvilinear shapes** (steps, kitchen work-tops, rectangles, covers) using pre-defined shapes in the programme or imported from DXF files. Depending on the surface available it is possible to automatically set the position of the pieces and the sequence of cuts, optimising the times and reducing material waste.

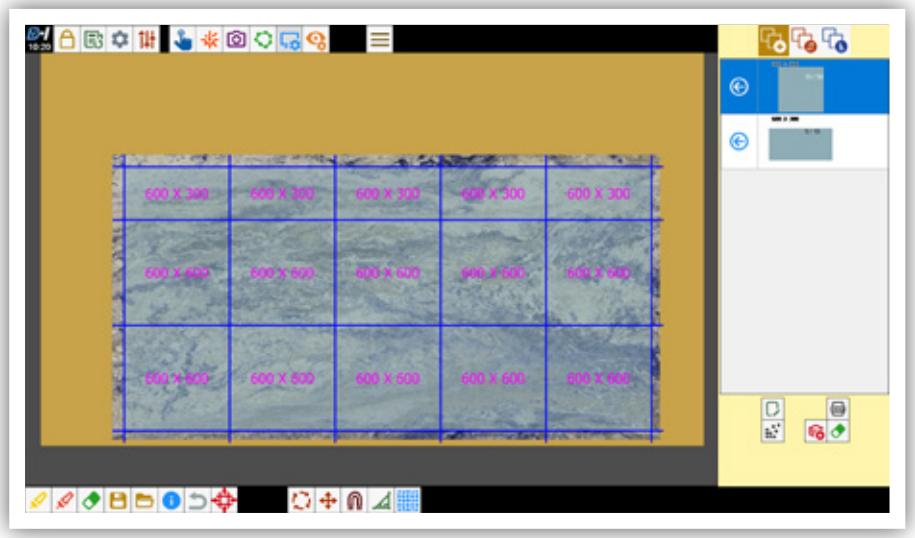
Included in the software are functions **for anti-collision of pieces, manual and automatic piece nesting, book matching, managing statistics, production and orders, rendering pieces and holes.**

Parametrix can be combined with Photoslab and Move-System, which allow automatic detection of the slab and movement, via a suction cups system, of the cut pieces **reducing operator intervention to a minimum.**



Nesting (included)

Automatically inserts squared or rectangular pieces in the working area optimizing the exploitation of the slab and automatically avoiding highlighted defects.



Drilling and processing with milling cutter (included)

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 processing with blade, such as "L-shaped" internal corners, or to make reductions for recesses. The change from disk to core during processing is automatically managed by the program.
(only for machines version tools, top, mtc, atc, and with tool+ accessory).

Positioning of the pieces on the slab (included)

With the manual nesting program it is possible to preview any collisions between parts so making easier the piece best positioning. The "magnet" function helps the operator to align the pieces one next to the other in order to reduce the number of cuts.

Managing and changing of cuts (included)

After positioning the pieces, cuts can be modified: it is possible lengthen it, to change order of cuts, to disable it, to add pauses; other types of modification before pressing the start button to process the cuts can be made.

Book matching (optional)

Starting from a project in DXF format, it allows to have a 2D image of the parts to be cut and therefore to appreciate before the cut the aesthetic result obtained by the combination of the pieces, evaluating overall and in full the "bookmatching" type processing.

Piece unloading Module (optional)

The program allows to unload the piece in a predefined area; the operator can select on the screen the cut pieces to be unloaded with the Move System of the machine (the software needs the increase of Y axis stroke length).

DM_TL (optional)

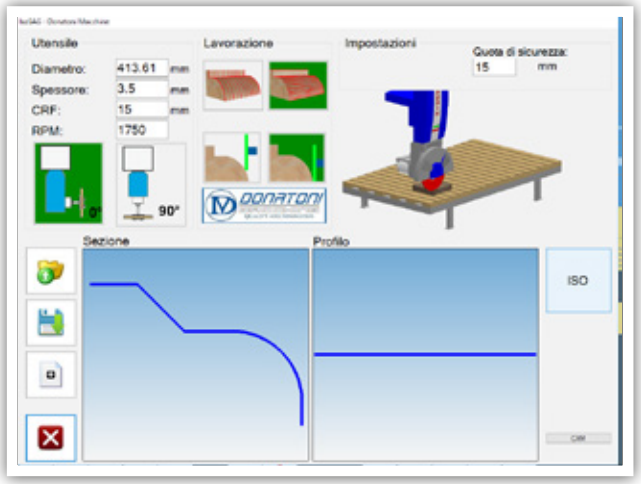
Program for slabs smoothing / polishing / brushing by means of plate carrying FRANKFURT abrasives.

ISOSAG

INCLUDED

ISOSAG is the software allowing to create files for the performance of rectilinear or concave shapes and convex arc both with vertical and horizontal blade. The shaping process can be performed both in roughing (combing) and finishing (brushing) or in combined mode.

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



SCAN-CNC

OPTIONAL

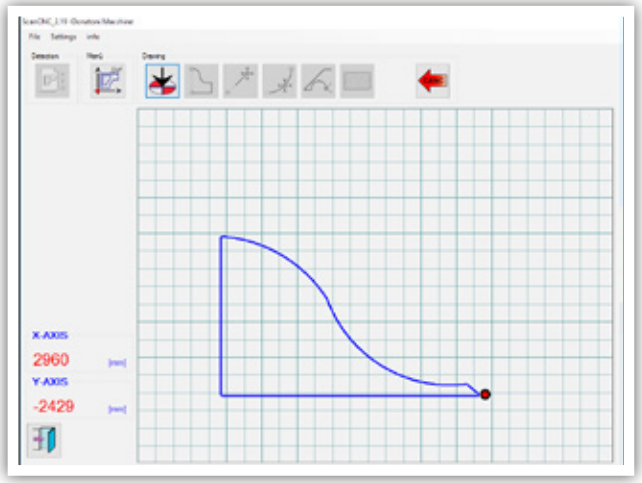
Detection system composed of a laser pointer mounted on the machine head, allowing to detect two-dimensional profiles with linear or curvilinear shape. In real time the software creates the drawing (file dxf) on the machine monitor.

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

· Process the template on the touch screen of the machine using the optional Parametrix or Easycut, Easystone Basic or Premium.

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

· Store the file on an external PC, using a USB key, to create possible processing and association with other files by using external CAD CAM software.



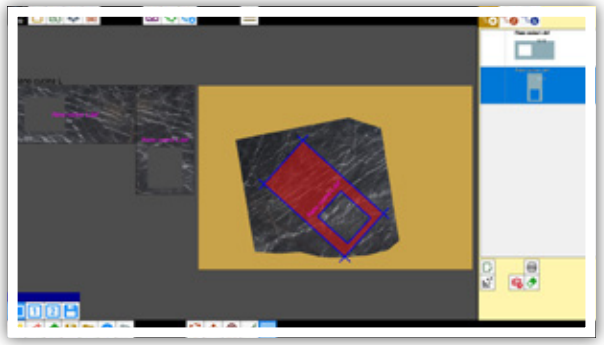
PHOTOSLAB

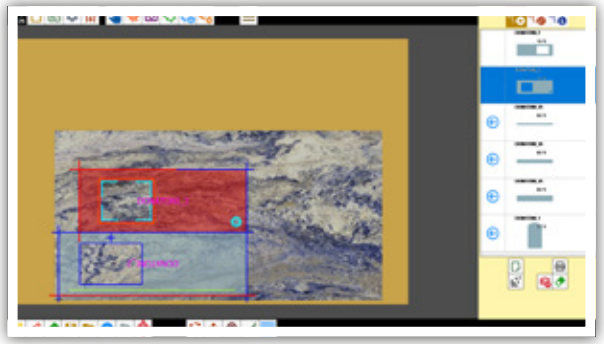
SUPPLIED WITH CAMERA FOR SLAB "OPTIONAL"

By means of a camera placed above the machine and the related record software, the slab being cut is automatically detected.

The system allows the optimization and the exploitation of the slab dimensions, the speeding of pieces positioning, avoiding possible defects or enabling to perform cuts by following the veins of the material.

The software is automaticlly enabled with installation of “camera for slabs”.





CAD-CAM

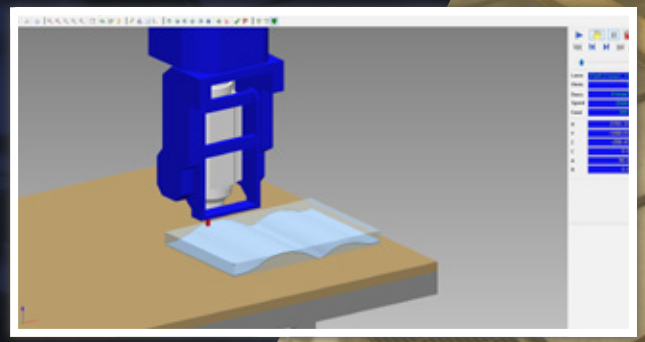
OPTIONAL

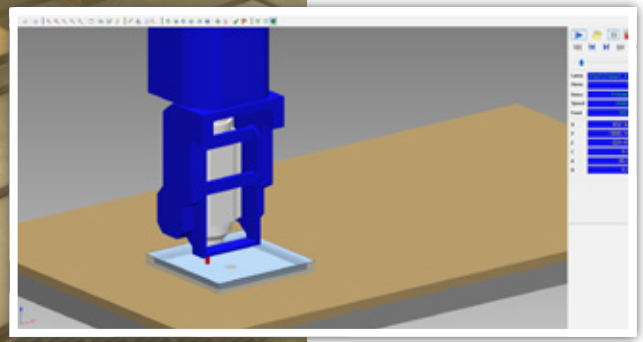
The software allows to design, import and execute 2D and 3D files in DXF, IGES, STL, PNT, STEP and RHINO formats and to define surfaces and shapes through laser scanning.
Multiple processes can be set: roughing, drilling, profiling, emptying and polishing, which can be carried out by optimizing the execution process.

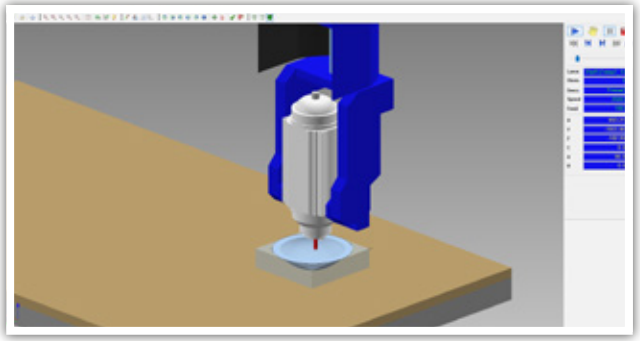
After the import, the software optimizes processing paths, performs roughing / finishing taking into account the raw material resulting after processing.

With CAD-CAM it is possible to display the processing 3D image with virtual milling and to modify it if required. The 3D simulation of the processing, including free displacements, is realistic as it is based on the Customer's machine model and shows the three-dimensional model of the working center, of the bench, of the motors, the tools, the sub-pieces and the pieces .

Once the design phase is completed, CAD-CAM generates the piece-programs and sends it directly to the Customer's working center. Finally, it calculates times, lengths and processing costs, allowing accurate reporting 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.

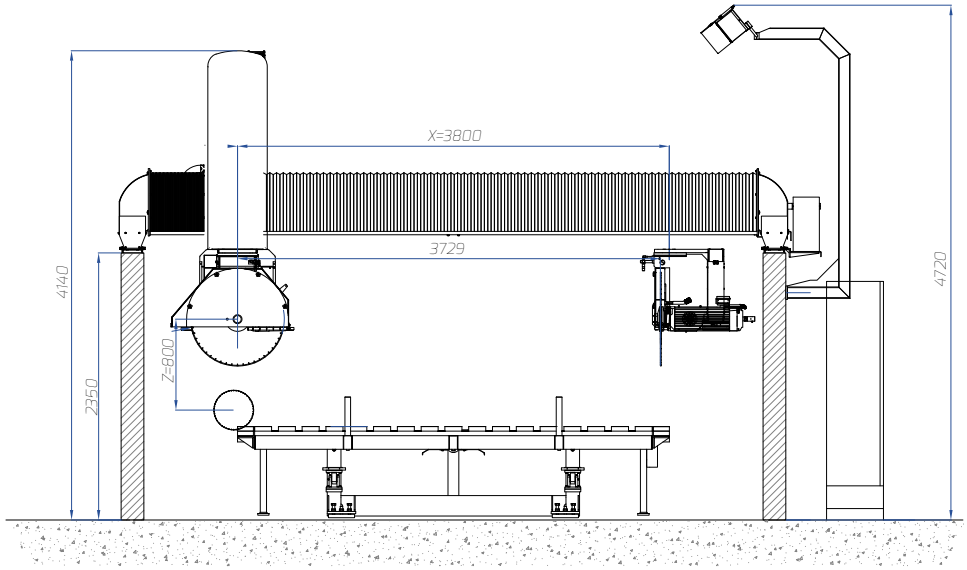
CAD-CAM TECHNICAL ADVICE

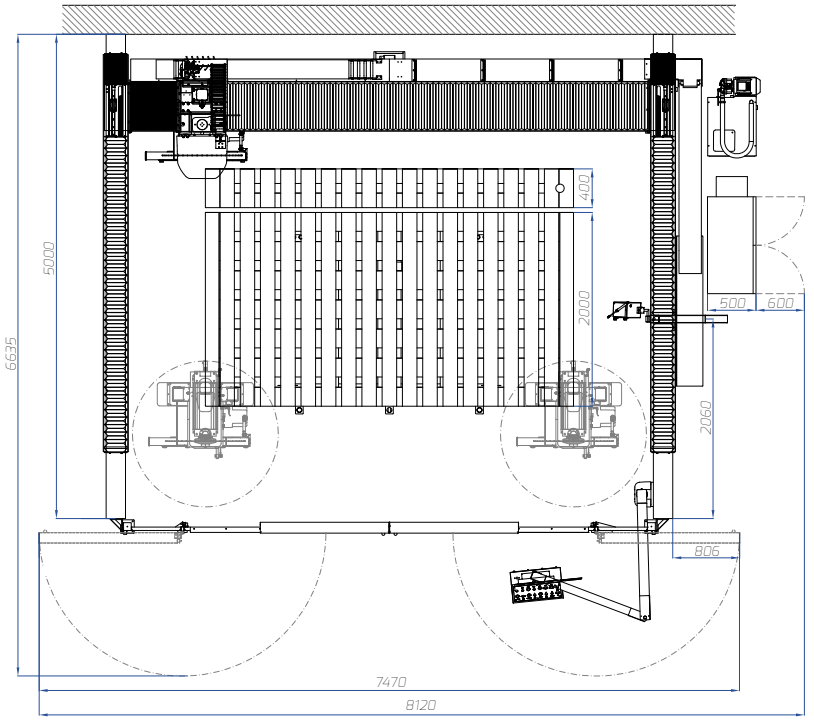
we help our customers in creating and designing projects and objects.

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 D825 Q

Max number of interpolated axes	N°	5/6
Carriage stroke axis X	mm in	3800 149,6
Bridge stroke axis Y	mm in	2450 96,5 2950 (with Move-System) 116,2
Vertical stroke of the head axis Z	mm in	800 31,5
Disk head rotation (axis C)	degrees	-5° / +365°
Disk head tilting movement (axis A)	degrees	0° / 90°
Working table dimensions	mm in	2000 x 3500 78,7 x 137,8 2400x3800 (with Move-System) 94,5 x 149,6
Minimum disk diameter	mm in	350 13,8
Maximum disk diameter	mm in	825 32.5
Max cutting depth	mm in	300 11.8
Disk motor power	kW	22 / S6 17 / S6 (models MTC and ATC)

Tool rotation with inverter (vs ST)	RPM	0 / 2400
Tool rotation with inverter (vs Tools / Top) (vs MTC / ATC)	RPM	0 / 5500 0 / 7500
Spindle shaft diameter	mm in	50 - 65 (optional) 2 - 2,5
Max speed axis X	m / min ft / min	0 – 45 0 – 147,6
Max speed axis Y	m / min ft / min	0 – 45 0 – 147,6
Max speed axis Z	m / min ft / min	0 – 6 0 – 19,7
Max speed of axes X Y	m / min ft / min	0 – 45 0 – 147,6
Water consumption	l / min gal / min	50 13,2
Air consumption	l / min gal / min	20 5,3
Standard voltage	Volt / Hz	400 / 50
Max Disk with suction cups (stroke 295 mm)	mm in	725 28,5
Total weight max lifting with suction cups	Kg lb	600 1322
Approx total weight of the machine	Kg lb	4800 10582,1

NOTE

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NOTE

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Member of:

CONFINDUSTRIA MARMOMACCHINE
ASSOMARMOMACCHINE

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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.**

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