

# **DONATONI P425**

Ceramic cutting machine

**DONATONI**  
Stone Tech Creators



**Compact.**  
**Simple.**  
**Flexible.**



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## Advantages

- Extremely **small in size**
- **Maximum flexibility and versatility** in processing terms
- **User friendly**
- **Easy and fast** to program
- Makes **very precise cuts**

## Main characteristics

- **DONATONI P425** is the result of Donatoni's 20 years of experience in manufacturing CNC bridge milling machines.
- Designed and developed for **processing ceramic (porcelain) and other synthetic and natural materials.**
- **DONATONI P425 is a bridge saw with 5 interpolated axes** that is compact, user-friendly, and also flexible; it can be **used for a wide range of operations.**
- Complete with various optionals, **it automates the whole production process, reducing processing times and increasing productivity.**
- Its monobloc frame guarantees **simple transportation and quick installation.**
- It is **perfectly safe** to work with, because all operations are done externally, with the doors closed.

# Machining

DONATONI P425 offers the possibility to carry out a wide range of machining processes, such as:



Longitudinal cuts



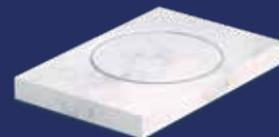
Transverse cuts



Oblique cuts



Inclined cuts 0-90°



Curved cuts



Elliptical cuts



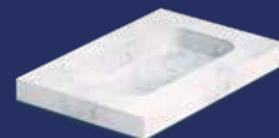
Shaping  
(only with Isocam)



Drilling



Milling



Blocks milling

# Achievements

DONATONI P425 allows the production of various types of products:



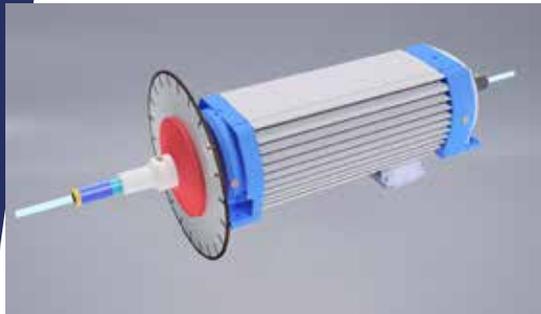
# Components



## Monobloc frame

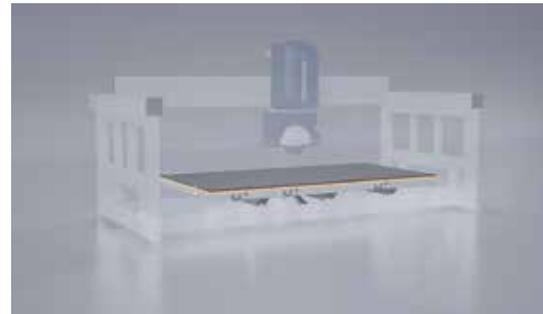
The new monobloc has a single structure that is positioned directly on-site.

The new floor positioning system with levelling feet avoids the need for drilling holes in the floor.



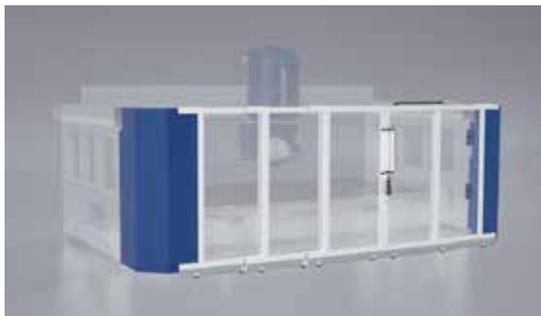
## Electrospindle

Electrospindle TOOL with inverter-controlled RPM adjustment from 0 to 6,000 RPM, equipped with  $\frac{1}{2}$ " gas thread directly in the shaft. It was sized to carry out all the processing that the machine was designed for in a way that **saves energy**.



## Fixed bench

New fixed bench, 3,500 x 1,800 mm, with mechanical stops for easy and quick slab positioning. Two solutions are provided for the working table: multilayer wood (standard) and double layer wood and rubber (optional) specifically designed for cutting ceramics. **A tilting version of the bench** can be requested.



## Front doors

Sliding front doors with a new solution developed to contain **the side bulk of the machine at best.**

The doors were designed to be read and give maximum visibility.



## Dressing station

New bench-mounted unit, designed and built for blade dressing.

The dressing cycle is **automatically managed** by the software PARAMETRIX.



## Control panel

**Newly designed** control panel, highly performing thanks to the Windows 10 PC with 18.5" touch screen.

# Optional extras



## Camera + Photoslab

New industrial camera mounted on a redesigned stand to reduce overall dimensions. Photoslab **automatically detects** the surface of the slabs positioned on the workbench by means of a camera located above the machine and thanks to the acquisition software integrated in Parametrix. This application **speeds up the machine programming phase**, allows the pieces to be positioned and the slab defects to be detected.



## TOOL+

Vertical side electrospindle, controlled by an inverter with 0-15.000 rpm, that allows the operator to use **small-diameter diamond tools** with ½" gas connections for incremental cutting / blind or through-hole drilling, as well as combined operations with the blade and milling cutter.



## Blade Presetting + Slab thickness probe

The blade presetting unit is a dedicated system for **detecting the blade diameter or the length of a tool** mounted on the main spindle or TOOL+ spindle.

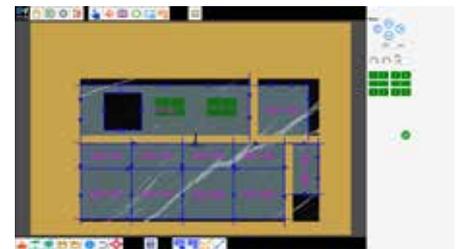
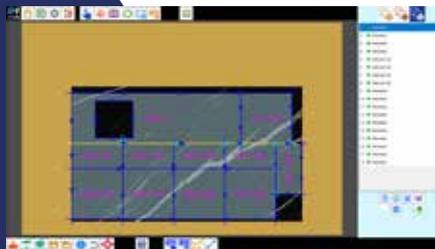
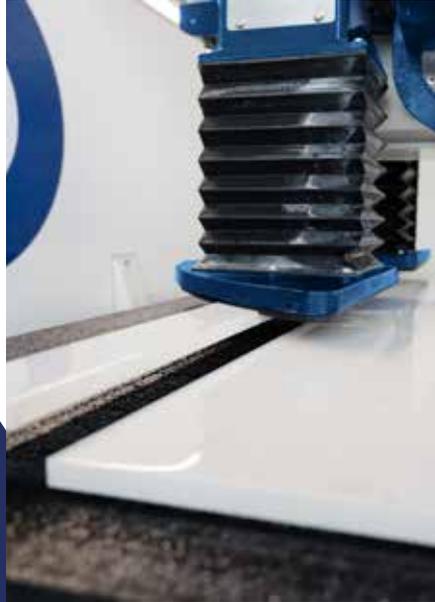
The slab thickness probe is the system that automatically detects the slab thickness, of fundamental importance for 45° cutting.

# MOVE System

**MOVE System** with 6 excludable picking-up zones for lifting even small pieces and a load capacity of up to 300 kg.

## Advantages

- It makes the most of the slab surface, reducing processing waste
- Increased efficiency and reduced downtimes
- No operator required for slab handling
- Easy to use, even for operators with no experience
- Makes the machine totally automatic

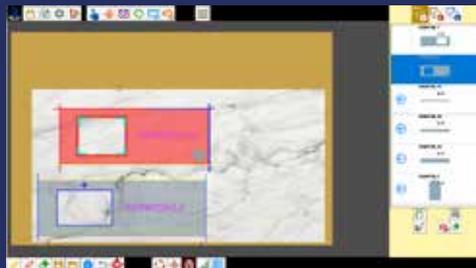


# Software

## Donatoni Digital Suite

Over the years, DONATONI has developed a network of software and platforms capable of interacting with each other and supporting customers towards **complete automation and digitalisation** of their production processes.

The intention is to harmonise the different digital tools produced over time so as to **make the daily life of those who use the machines simpler and less costly.**

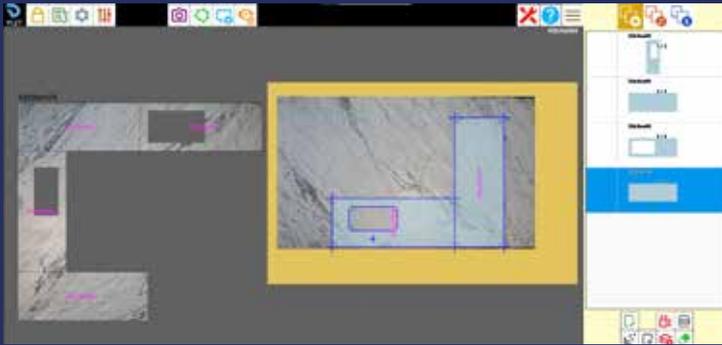


## PARAMETRIX

The **P425** is equipped with Parametrix, the software produced and developed by DONATONI, which thanks to its user-friendly interface is the most suitable solution for programming even the most complex project in just a few steps. Different functions are specifically dedicated to cutting ceramic:

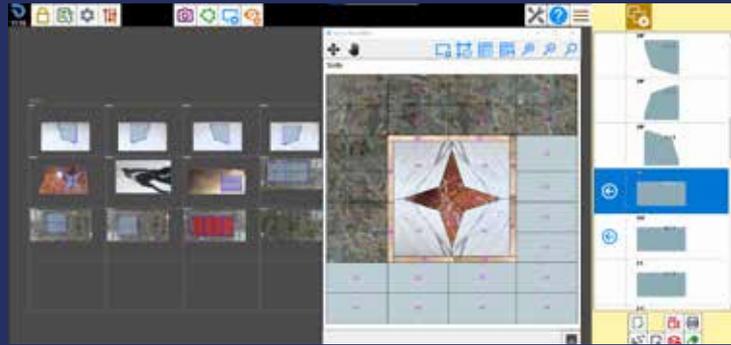
- Detensioning cuts to **reduce stress** in ceramic slabs
- Cutting speed acceleration and deceleration at workpiece entry and exit to **reduce the chance of material breakages**
- Automatic blade dressing

# Optional – Software



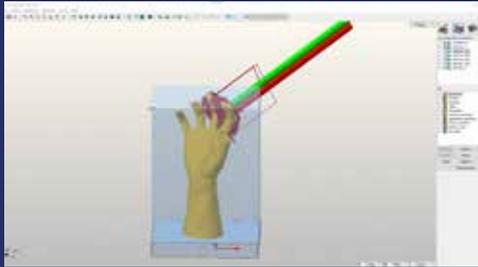
## EASY MATCH

**Easy Match** is a programming software developed by DONATONI specifically for the realisation of **simple open-book projects**. It is an extension of the PARAMETRIX software and gives a preview of the final result and slab cutting.



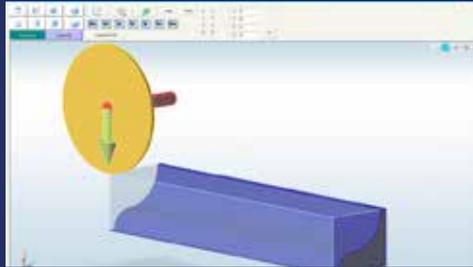
## PROJECT MATCH

**PROJECT MATCH** is a design software developed by Donatoni that allows **complex open-book projects** to be realised on several slabs simultaneously. It is a highly professional tool, ideal for all companies realising contract projects for designers and architects, where a high aesthetic component is required.



## EASYSTONE

Software CAD-CAM that can be used to design, import and execute 2D and 3D files in different formats, or to define surfaces and shapes through laser scanning. Ideal for rough **machining, drilling, profiling, emptying, and polishing with 5 axes** because it optimises the execution process.



## ISOCAM

ISOCAM is a software for the creation of files for the execution of straight-lined or concave and convex arc shapes using either a vertical or horizontal blade.



## SCAN CNC

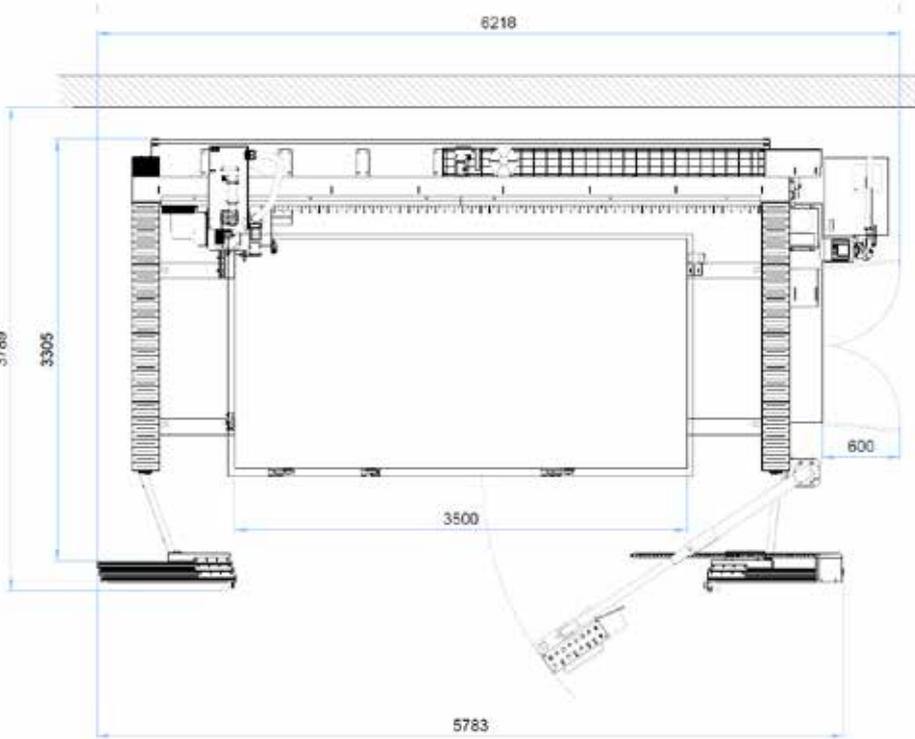
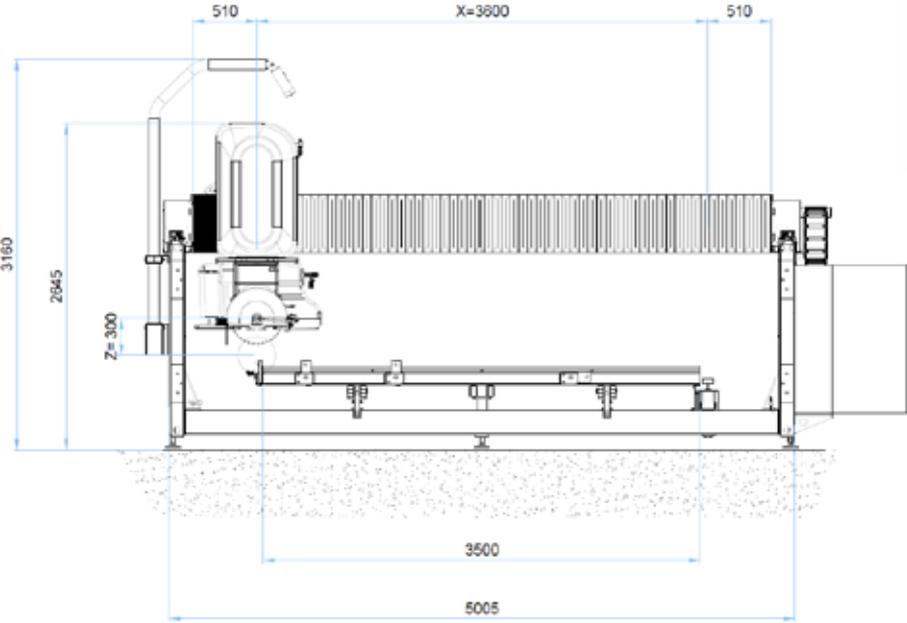
Detection system made up of a laser pointer mounted on the machine head and a software program integrated with PARAMETRIX that **identifies two-dimensional shapes**.

# Technical data sheet

<b>Interpolated axes</b>	<b>N°</b>	<b>5</b>
<b>Carriage stroke X axis</b>	<b>mm</b>	<b>3600</b>
<b>Bridge stroke Y axis</b>	<b>mm</b>	<b>1900</b>
<b>Head up / down stroke Z axis</b>	<b>mm</b>	<b>300</b>
<b>Blade-carrying head rotation C axis</b>	<b>degrees</b>	<b>-5°/365°</b>
<b>Blade tilting A axis</b>	<b>degrees</b>	<b>0°/90°</b>
<b>Slab supporting bench dimensions</b>	<b>mm</b>	<b>3500 x 1800</b>
<b>Minimum blade diameter</b>	<b>mm</b>	<b>300</b>
<b>Maximum blade</b>	<b>mm</b>	<b>425</b>
<b>Maximum cutting depth (425 mm blade)</b>	<b>mm</b>	<b>115</b>
<b>Blade motor power</b>	<b>kW</b>	<b>9,5/56</b>
<b>Tool rotation with inverter TOOL VERSION</b>	<b>Rpm</b>	<b>0/5500</b>

<b>Maximum carriage speed X axis</b>	<b>m / min</b>	<b>0 - 20</b>
<b>Maximum bridge speed Y axis</b>	<b>m / min</b>	<b>0 - 20</b>
<b>Maximum head speed Z axis</b>	<b>m / min</b>	<b>0 - 5</b>
<b>Forward cutting speed (adjustable)</b>	<b>m / min</b>	<b>0 - 20</b>
<b>Water consumption (3 bar)</b>	<b>l / min</b>	<b>35</b>
<b>Air consumption</b>	<b>l / min</b>	<b>20</b>
<b>Standard electric voltage</b>	<b>V / Hz</b>	<b>400 / 50</b>
<b>Max blade diameter with suction cups</b>	<b>mm</b>	<b>425</b>
<b>Max total weight that can be lifted with suction cups</b>	<b>kg</b>	<b>300</b>
<b>Total machine weight</b>	<b>kg</b>	<b>3650</b>

# Machine layout



# D-MES

**DONATONI MES** is the first MES system on the market that was designed and produced exclusively for marble workers. **DONATONI MES** is not just a software: it is a **complete Manufacturing Execution System (MES)** that can support your company's growth.

The company of the future is digital and connected.

## Advantages

- Production monitoring
- Real-time data
- Integration with working areas
- Improved efficiency and profits
- Reduced waste and time
- One single database for the whole company



## D-PORTAL

The **D-Portal** platform can be considered as a library for all your Donatoni machine documents and has direct channels for contacting our After Sales service directly, which means that clients can do ordinary maintenance easily and precisely.

# Donatoni Service

Donatoni service offers a wide range of consulting services to meet the different needs of customers, wherever they are.

## After-Sales Service

You can contact our **after-sales service** for any requirement. In this manner, any type of problem can be identified and solved asap, finding the fastest, **most efficient solution**.

Our telephone assistance department is available for giving support to clients on everything about machine functionality.

Telephone support is available from Monday to Friday, 7.30 a.m. to 6.30 p.m., and on Saturdays from 8 a.m. to 12 p.m. (UTC +1 CET - Central European Time).

**Tel. +39 – 045 6862899**

Donatoni support is also available by e-mail at the following addresses:

### For assistance

assistenza@donatonimacchine.eu / service@donatonimacchine.eu

**Whatsapp:** + 39 0457740052 **Telegram:** @donatonimacchine\_bot

### For spare parts

ricambi@donatonimacchine.eu / parts@donatonimacchine.eu

## Maintenance

Donatoni's routine and special maintenance service is entrusted to its own **specialist technicians** to guarantee the **reliability** and **efficiency of your machines** over time, no matter whether in Italy or the rest of the world. Our technicians are trained to recognise and fix faults promptly, helping you save as much time as possible and allowing your machines - and your systems - to last longer.

## Consultancy service

To support and enable our customers to meet the demands of the market, we offer **consultancy services** that can widen and **deepen your knowledge and skills**. Offering a complete after-sales service does not just mean solving mechanical or software problems, but also includes **finding solutions** and managing any production requirement independently.

## DONATONI MACCHINE SRL

T +39 045 686 28 99

M assistenza@donatonimacchine.eu

**Monday – Friday: 7:30 - 18:30**

**Saturday: 8:00 - 12:00**

## DONATONI AMERICA Inc.

T +1 3367905056

M service@donatoniamerica.com

**Monday – Friday: 8:00 - 17:00 (EST)**

## DONATONI DEUTSCHLAND GmbH

T +49 0821 207176-0

M service@donatonideutschland.de

**Monday – Thursday: 8:00 - 17:30**

**Friday: 8:00 - 14:00**

# Donatoni Group

The Donatoni Group was established after **long experience** in the natural stone industry, a process that began in the 50s and developed over the years. Today **Donatoni Group** is recognised as a world leader in the production of extremely high quality machines for stone working.

**Constant research, technological innovation, and customer service** are key values for the company, which employs highly qualified personnel in order to guarantee the end customer a product that best reflects their expectations in terms of quality and performance. In support of its global development, the **Donatoni Group** is present on the international markets with its agents and direct foreign branches.



# Donatoni Academy



**Donatoni Academy** supports the marble district through technical and practical training courses, conventions, events and activities aimed at developing skills and know-how for sector companies and operators.

## **About us**

We rely on qualified teachers and speakers to develop technical courses with specific content and linked to the real needs of the industry.

## **To whom**

Donatoni Academy provides services for companies in the stone industry that want to train, perfect or expand the skills of their operators. Our courses are also addressed to students and anyone wishing to update and expand their skills.

## **Where the courses are held**

Courses are held either face-to-face or remotely. We have 3 training rooms for theoretical classes and one showroom for hands-on sessions with 5 machines.



Donatoni Macchine Srl reserves the right to make any technical modification which, under its own incontestable opinion, improves its machines. As a result, all information, data or images in this catalogue are indicative and are not a contractual obligation of Donatoni Macchine Srl in any way.

REV. 09/2023

#### **Donatoni Macchine srl**

**T** +39 045 686 25 48  
**F** +39 045 688 43 47  
**M** info@donatonigroup.com

Via Napoleone, 14  
37015 Sant'Ambrogio di Valpolicella (VR)  
ITALY

#### **Donatoni America Inc**

**T** +1 3367904910  
**M** info@donatoniamerica.com

4214 Beechwood Dr, 104  
27410 Greensboro, North Carolina  
USA

#### **Donatoni Deutschland GmbH**

**T** +49 (0)821-207176-0  
**M** info@donatonideutschland.de

Am mittleren Moos, 39  
86167 Augsburg  
GERMANY

donatonigroup.com

