

## COUNTERTOPS FABRICATION



quality  
needs  
quality

For over 18 years, Helios Automazioni Srl has been designing, manufacturing, selling, and supporting solutions for the stone industry. With a complete range of equipment and software to process marble, granite, and synthetic materials, Helios Automazioni offers a cutting-edge technology to change the business strategies of the most demanding countertops fabricators. Over the years, there has been a great transformation in stone fabrication

evolving into a fully digital fabrication shop. Some changes need to happen along the path to digital fabrication, and these steps are less daunting than one may think.

It is a path that leads to alleviating labor shortage pains and increasing the general efficiency of the workshop. For the stone fabricator, this transformation will help to work smarter and safer.





# The stainless steel

The whole stainless steel structure of the machines guarantees durability over time and excellent performances.



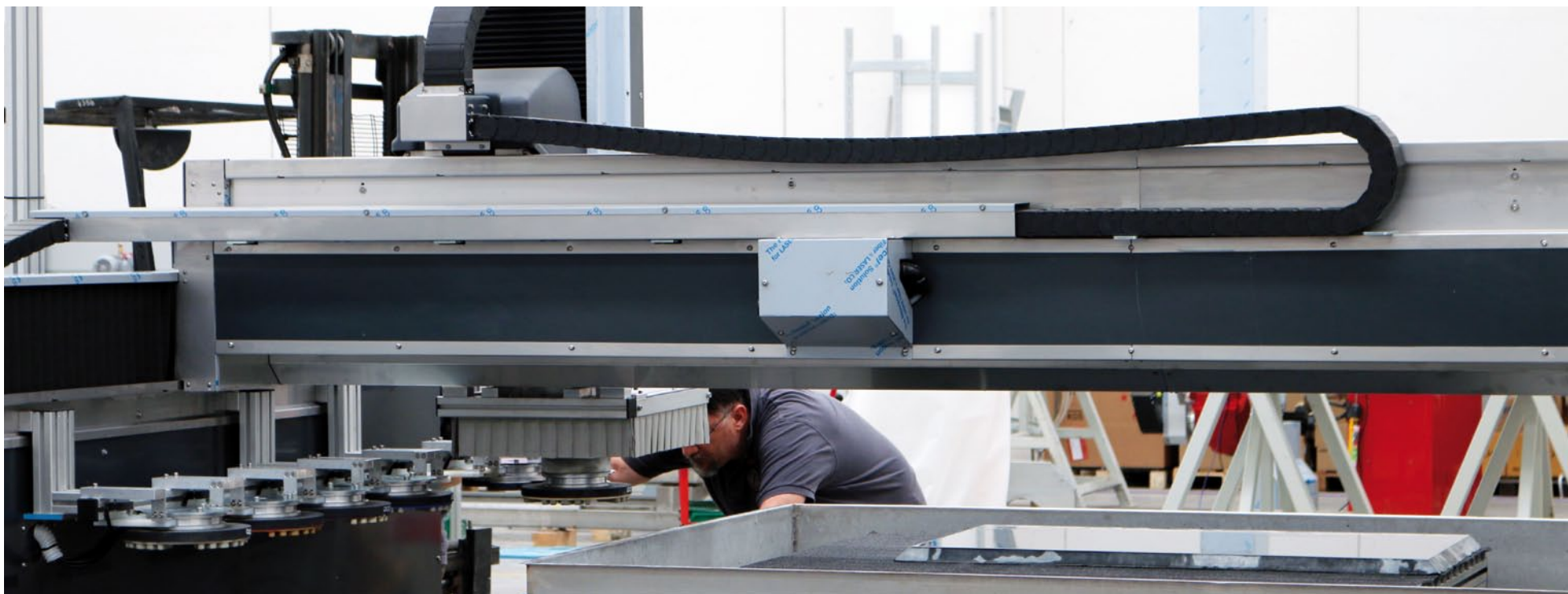


# THE RANGE OF PRODUCTS FOR COUNTERTOPS FABRICATION

## Cut 500: 5-axis bridge saw

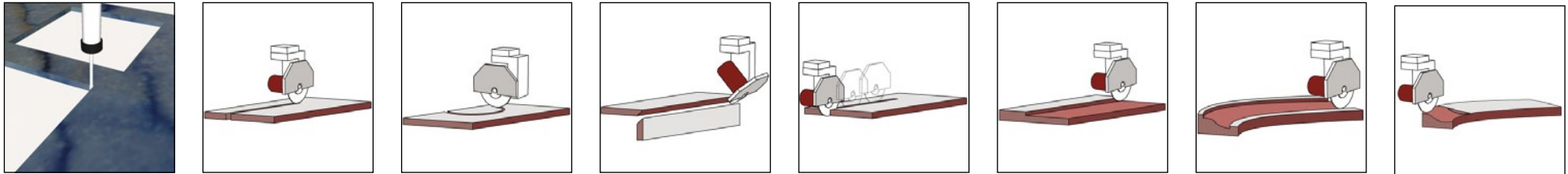
Helios Cut 500 is a fast and performing 5 interpolated axes bridge saw. It has been developed for high precision cutting processes on ceramics, quartzites, synthetic materials, as well as marbles and granites. Cut 500 can have both manual and total automated functions thanks to the advanced levels of the Helios Xtouch software, which allows to process easily a lot of jobs such as multiple linear cuts, perpendicular linear cuts, mitering, cut of kitchen/

bath tops, calibration, decorative walls, shaping, inclined cuts, net and clean cuts, roughing, scraping, fan-shaped stairs, template reading, and much more. The integrated Helios Xtouch software is user-friendly and intuitive, it can be combined to the Helios Photoscan system, which is the slabs scanner, measuring system, and template reader. Together with the bridge saw it can start the cutting process just a click away.

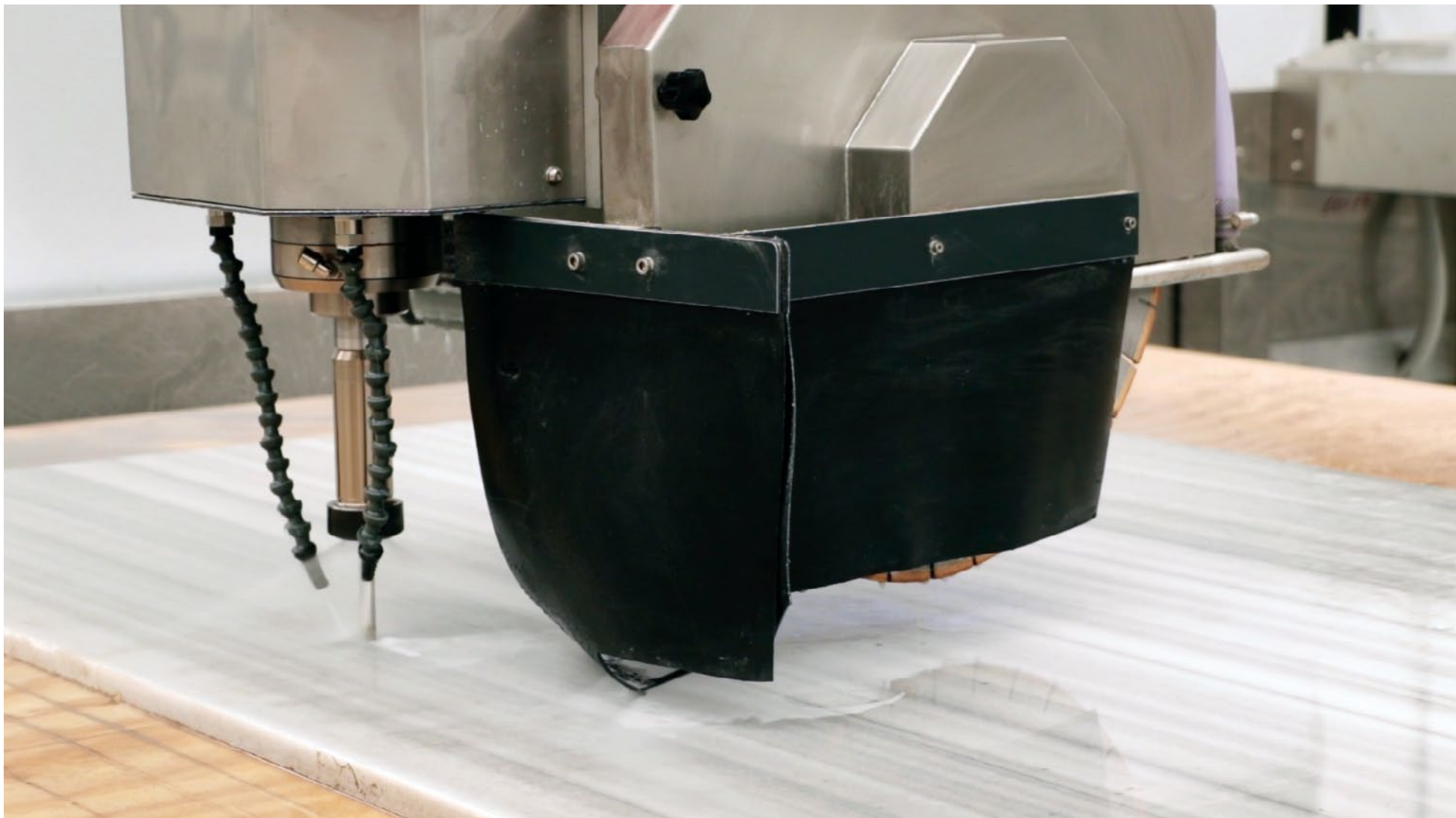


## Helios Service

Every day, the specialized team of technicians is at complete customer service disposal to manage all kind of requests for assistance.







# Focus on the CNC carving solution

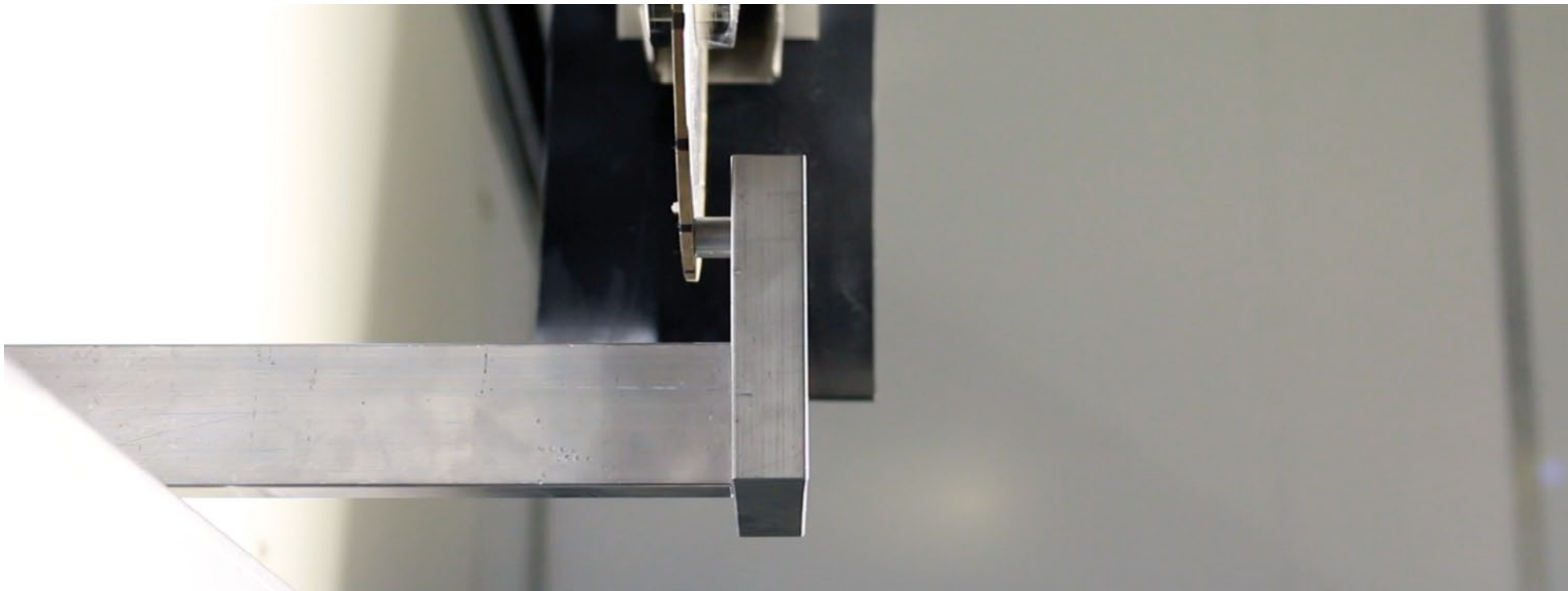
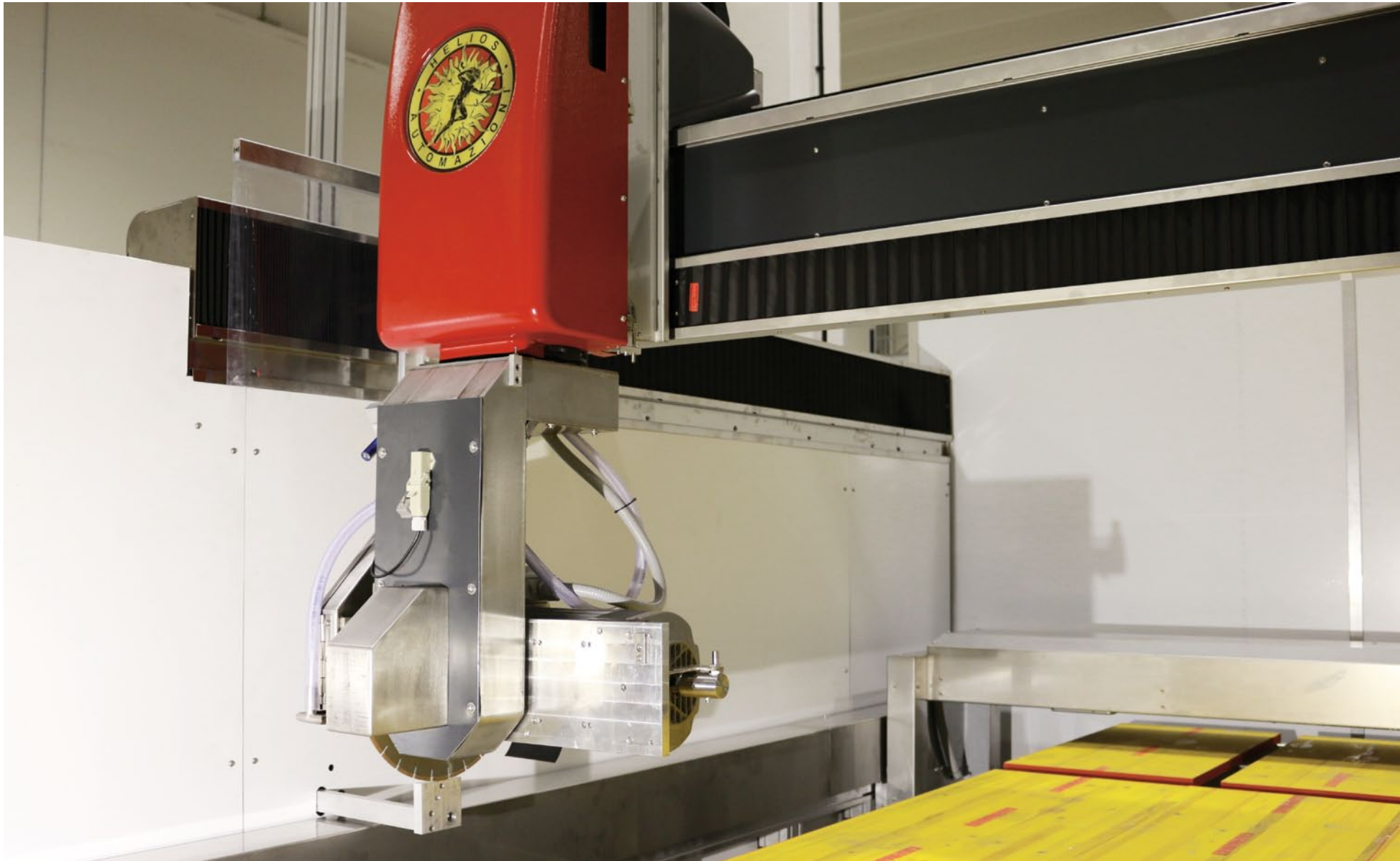


The carving solution on the 5-axis bridge saw Helios Cut 500 is the great goal to make stone fabrication easier and more efficient. Besides all the 5-axis cutting functions, the second head for carving and CNC jobs offers effective solutions in all the processes, where it is needed, such as the sinks cut out. The bridge saw Helios Cut 500 with the second spindle can boast a superior accuracy and lower costs of management compared to

the combined saws waterjet. The two heads interpolate each other, the disk stops when the carving tool is needed, that is a great advantage in terms of time, precision, and costs. In terms of power, the cutting head (disk), with the inverter, runs from 0÷4500 rpm, and the carving head, always with the inverter, from 0÷12000 rpm. The whole process is set up before starting the machine, easily and fast with the integrated Xtouch software.



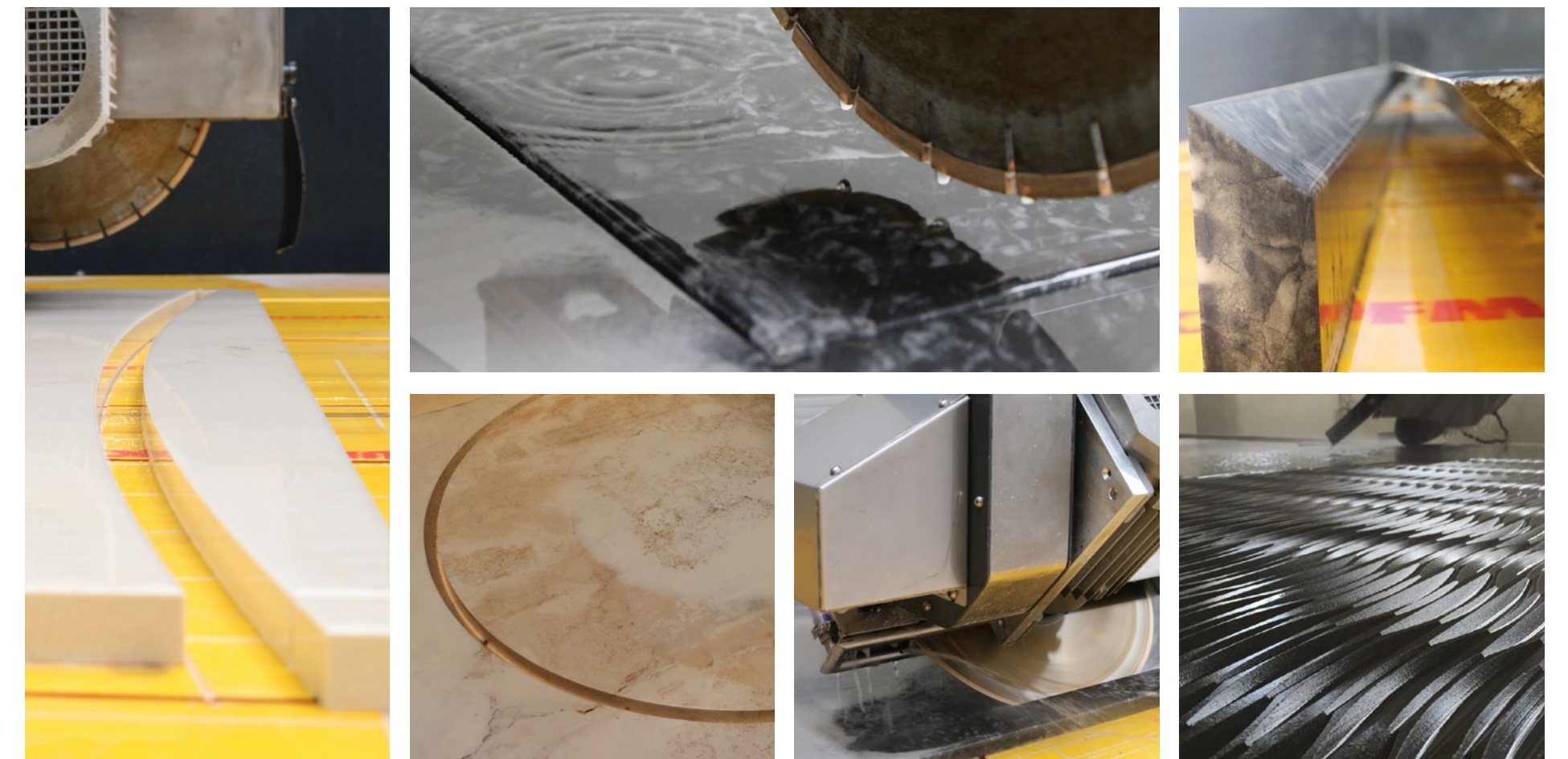




**Disk presetting**  
The disk Presetting device allows the automatic measurement of the disk diameter and thickness.

Technical features

Overall dimensions	262,59 x 151,57 x H114,96 in
Working area	X133,85 - Y94,48 - Z12,60 in
W axis rotation	0° ÷ Unlimited
A axis rotation	45° ÷ 90° (optional 0° ÷ 90°)
Spindle power	11,8 kW (disk) - 3 kW (tool)
Spindle rotation speed	0 ÷ 4500 rpm
Table dimensions	X129,92 - Y78,74 in
Power supply	400 V (3P + N + GND) 50/60 Hz
Installed power	18 kW
Disk diameter	min. 13,78 in - max. 19,68 in (optional 24,60 in)
Max. cutting depth	5,12 in (19,68 in disk)
Disk hole diameter	1,96 in

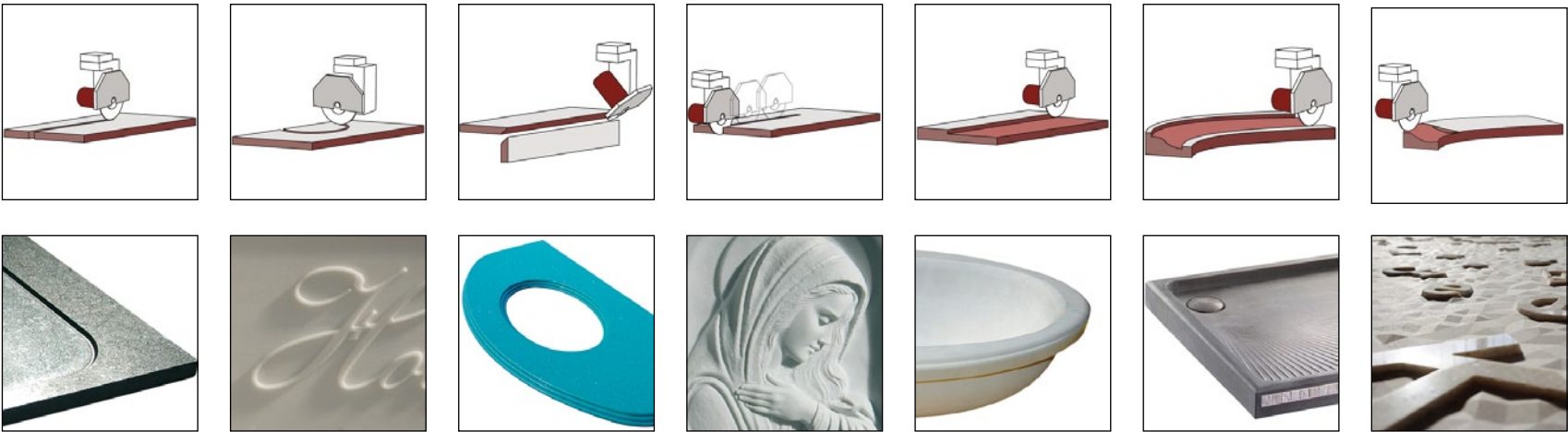
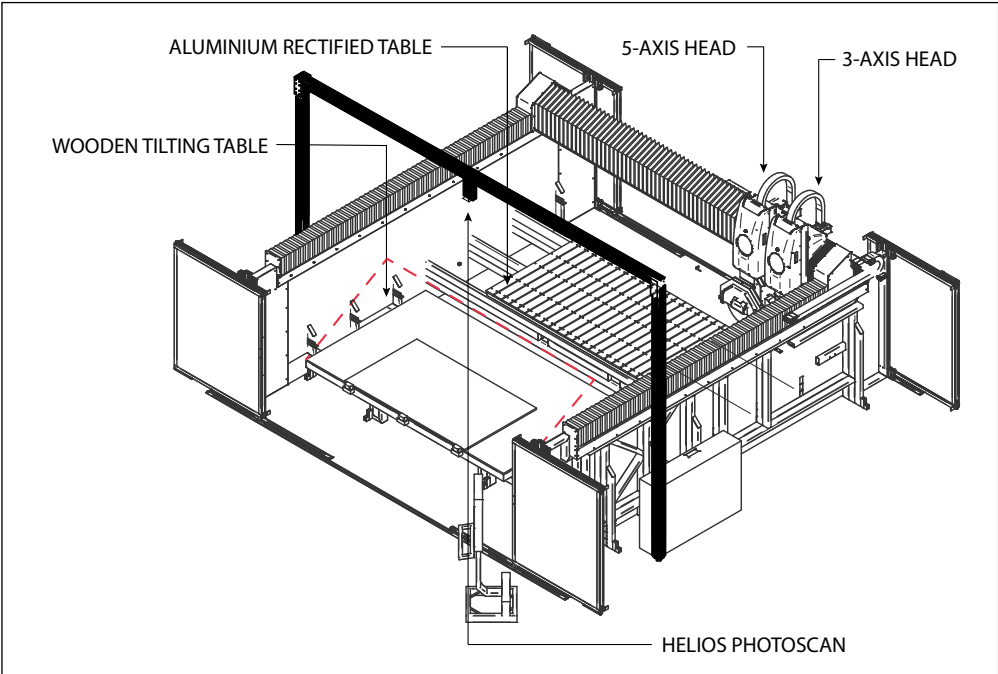




# BravoCut: 5-axis bridge saw and machining center

The BravoCut system is composed of two heads: a 5-axis saw and a 3-axis machining center. Each machine works independently with its own software. The integrated Xtouch software manages all the cutting processes of the 5-axis bridge saw: multiple linear cuts, perpendicular linear cuts, mitering, cut of kitchen/ bath tops, calibration, decorative

walls, shaping, inclined cuts, net and clean cuts, roughing, scraping, fan-shaped stairs, and much more. In the case of the 3-axis machining center, the integrated Galaxy Stone software manages the fabrication processes of bath and kitchen tops with profiling, inlaid / relief / engraved lettering using all certified Windows fonts, bas-reliefs, frames, 3D floors, and so on.



## Technical features

Overall dimensions	228,35 x 228,35 x H98,42 in
Working area	X132,67 - Y118,11 - Z12,79 in
Compressed air	Min. 7 bar
Power supply	400 V (3P+N+GND) 50/60 Hz
Spindle power	11,8 kW (disk) - 5,8 kW (tool)
Installed power	25 kW
Spindle rotation speed	0 ÷ 9000 rpm - 0 ÷ 4500 rpm
Max working speed	1377,95 in/min
Bridge passing	21,06 in - 39,37 in
Water consumption	40 L/min





# Seven: 3+5 axes Fab center

Helios Seven is a fab center of the latest generation, developed to answer the requests of the most demanding countertops fabricators. The fab center has two different functions in a unique machine. With the automatic tool change and a big magazine, it can manage all the 3-axis processes of profiling with tools as well as writing, sculpturing, skene, inlays, drilling, and much more. The 5-axis H7 head, equipped with the polishing pads, runs all the processes of the edge polishing and finishing. This system, with pressure control,

guarantees a perfect quality and a remarkable money saving on tools, compared to the traditional systems working with diamonds tools. The small head can even work inside the sink cutouts. The integrated Galaxy Stone Software manages the fab center Helios Seven and optimizes all the functions of the multiple interpolations of the axes, the tool change, the flatness control of the slabs, the template reading from the camera, and all the devices, which can be equipped on the Helios Seven without any other integrated software.



## Technical features

Overall dimensions	259,84 x 171,25 x H98,42 in
Working area	X132,67 - Y118,11 - Z12,79 in
Compressed air	Min. 7 bar
Power supply	400 V (3P+N+GND) 50/60 Hz
Installed power	16 kW
Spindle rotation speed	0 ÷ 9000 rpm
Tool holder	ISO BT 40 - 1/2" GAS - H7
Spindle power	7,5 HP - 3 HP
Tool magazine	30 positions
Max working speed	1377,95 in/min
Bridge passing	21,06 in - 39,37 in
Water consumption	40 L/min





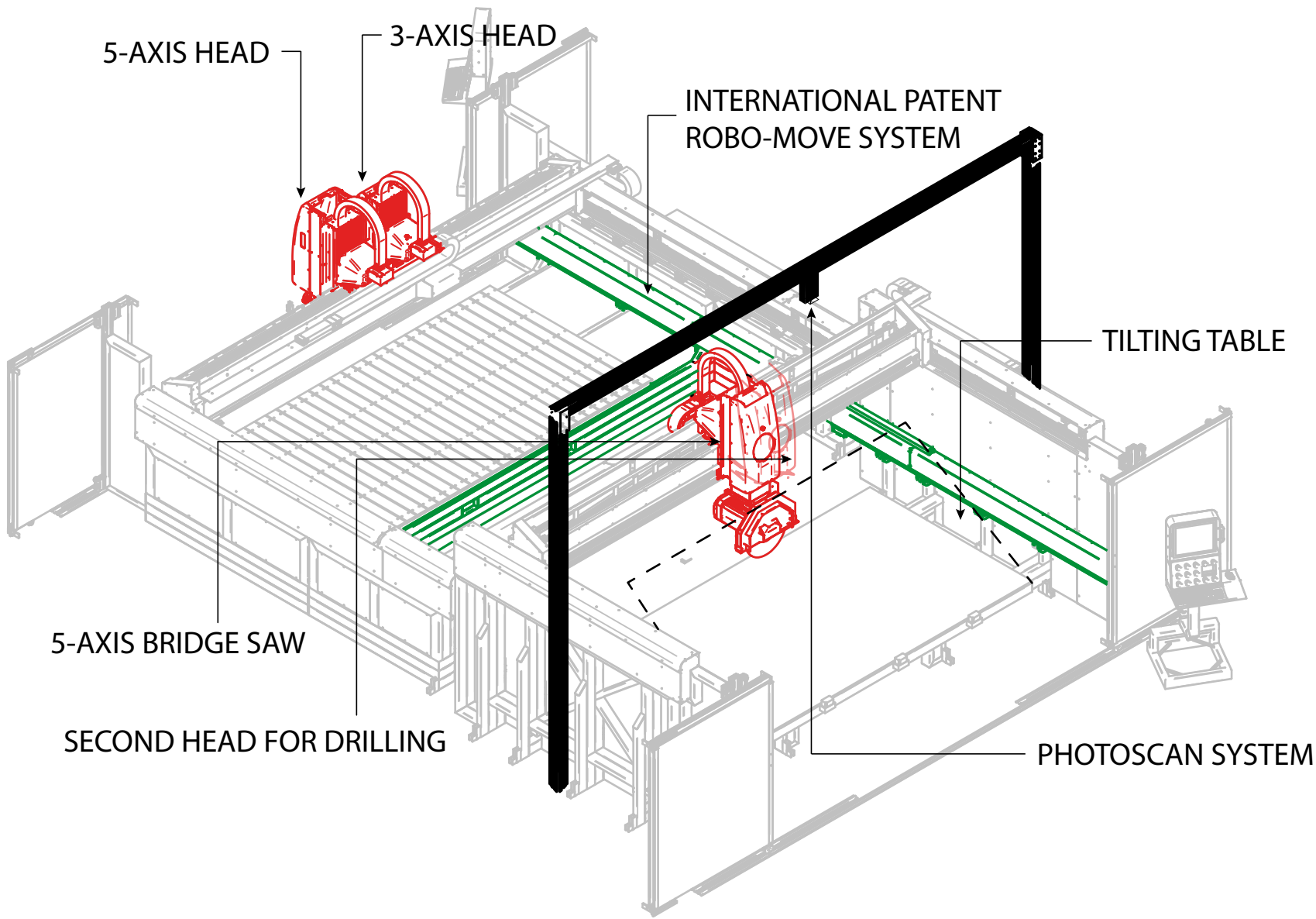
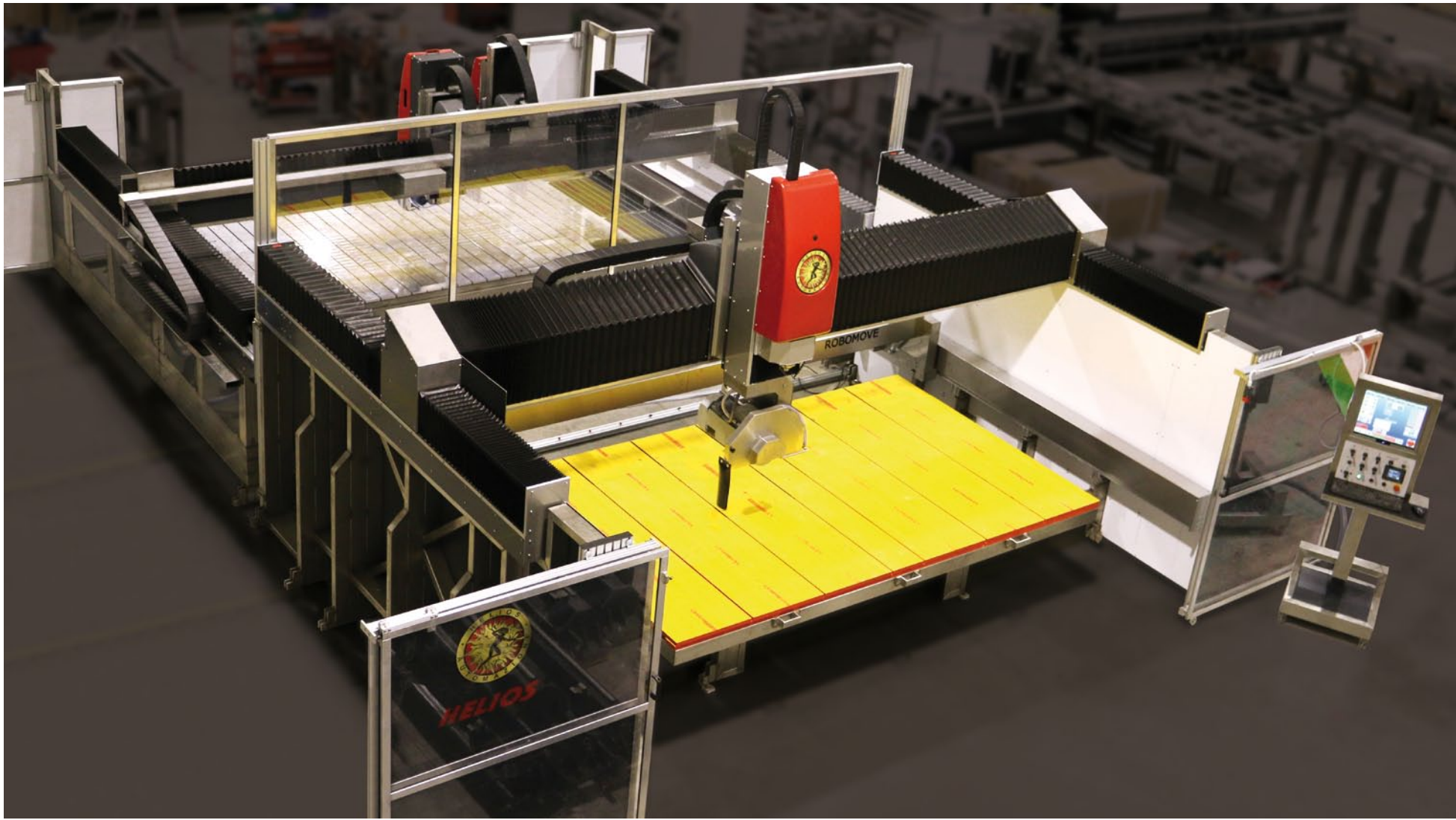
# Integrated System 4.0

**ALL IN ONE MACHINE:**  
*from the slab to the finished countertop*

The Integrated System 4.0 is a fully automated equipment that changes the traditional concept of the stone workshop, thanks to the complete digitalization of the productive cycle. It is composed of three stainless steel machines that simultaneously interchange data each other in total safety and without any manual

intervention from the fabricator. All in one system:

- 5-Axis bridge saw + CNC carving head
- Patented system for the slabs handling: Robo-Move
- 3 + 5 Axes fab center with automatic tool change.



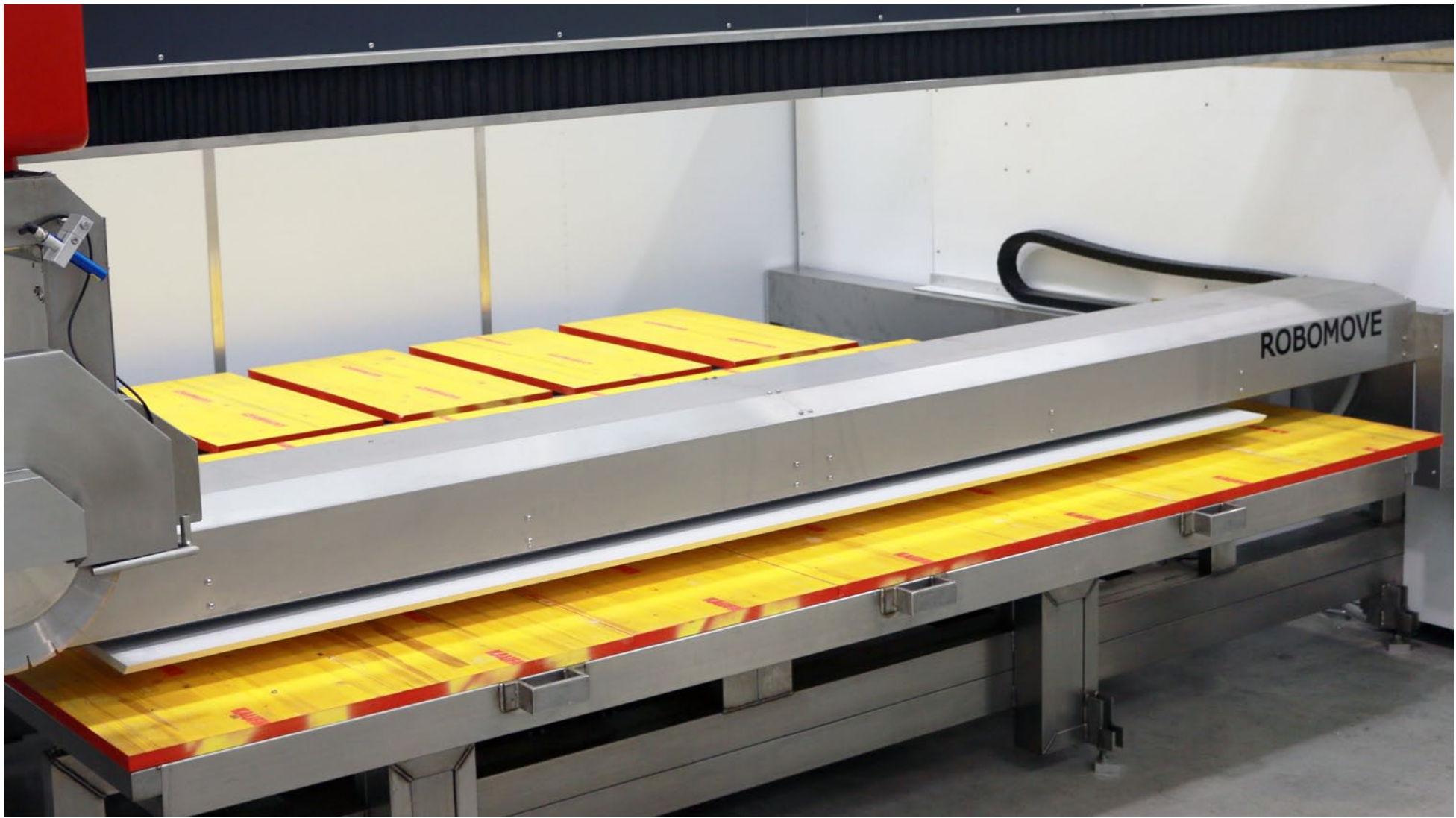
# 5- Axis bridge saw + CNC carving head

Like all the other Helios bridge saws, the 5-axis cutting machine of the Integrated System 4.0 is fast and performing. It has been conceived for high precision cutting processes on ceramics, quartzites, synthetic materials, as well as on marbles and granites. The CNC carving head uses

tools or core drills for holes and for the finishing of the closed cuts, corners or on small radius cuts. The main feature of this bridge saw is the mechanical precision, guaranteed by recirculating ball screws and zero backlash gears (Harmonic drive).



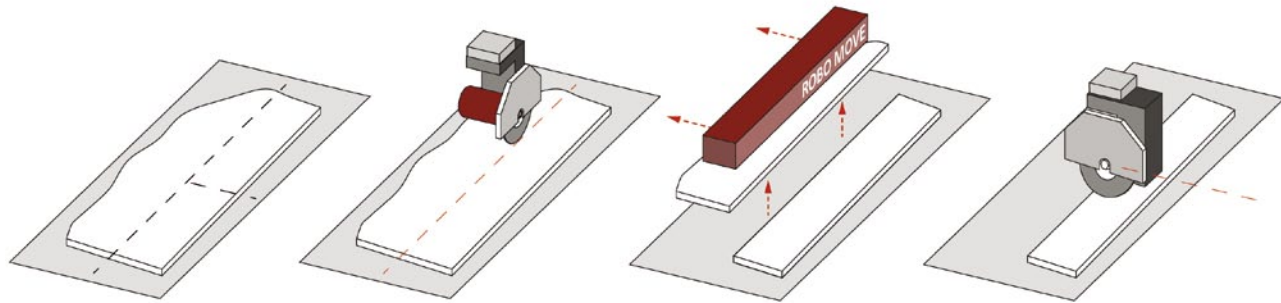




# Patented system for the slabs handling: Robo-Move

Unique in the stone industry. The patented Robo-Move system is a cnc handling girder that works independently inside the working area of the whole Integrated System 4.0. It moves the pieces of the cut slabs

to avoid the intersection, interacts with the cutting head, and moves the countertop to the table of the machining center for the final process of polishing and job conclusion.



**Patent  
#0001419746**



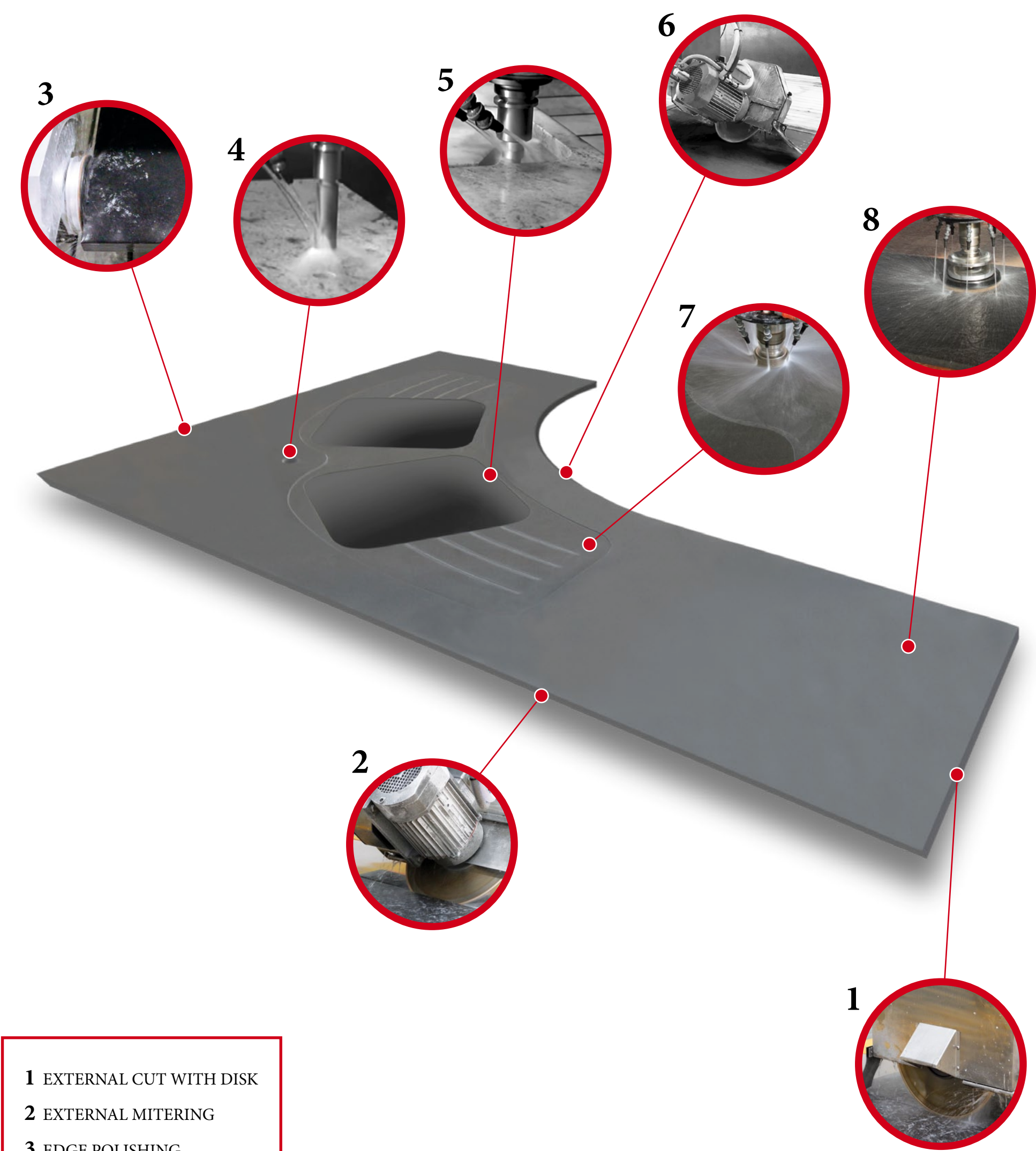
# 3+5 axes fab center with automatic tool change

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compared to the traditional systems. The small head can even work inside the sink cutouts. The integrated Galaxy Stone Software manages the fab center and optimizes all the functions of the multiple interpolations of the axes, the tool change, the flatness control of the slabs, the template reading from the camera, and all the devices, which can be equipped on it without any other integrated software.







- 1 EXTERNAL CUT WITH DISK
- 2 EXTERNAL MITERING
- 3 EDGE POLISHING
- 4 SINK HOLE
- 5 INNER CUT WITH TOOL
- 6 CURVED CUT WITH DISK
- 7 LOWERING
- 8 SLAB POLISHING

Technical features

Overall dimensions	280,31 x 333,97 x H116,02 in
Power supply	400 V (3P+N+GND) 50/60 Hz
Number of controlled axes	16
Compressed air	Min. 7 bar
Water requirements	80 L/min
Installed power	34 kW
Net weight	19841,6 lb



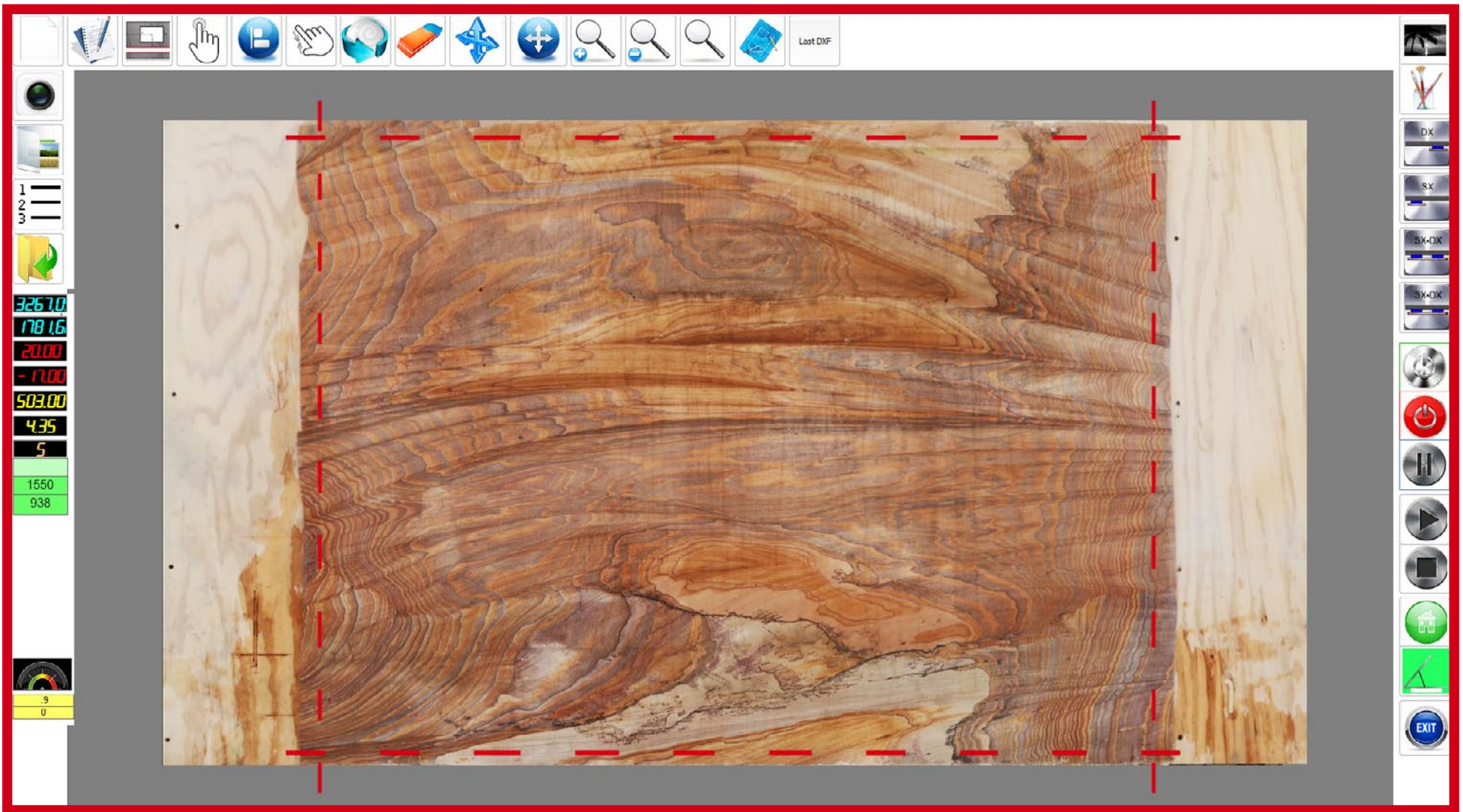


# THE PHOTOSCAN SYSTEM IS MORE THAN AN OPTIONAL



The Photoscan system is the digital camera over the Helios machines. With the integrated Run-touch 1.0 software, the precision Photoscan system digitizes and measures the slab just with one picture. It manages the cutting processes with the macros, improves the arrangement and

management of a slab warehouse (scraps and remnants included), and works also as a template reader. Moreover, it has the Vein-Matching App for the complex layouts that need to follow the natural flow of the material.



## In-House book matching software





WHAT  
DESIGN  
WOULD  
BE  
WITHOUT  
TECHNOLOGY?







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