



HELIOS

SEVEN



**ENTIRE
STRUCTURE IN
STAINLESS STEEL
RELIABLE, FAST
AND PRECISE**

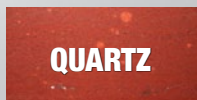
MACHINING CENTER FOR THE COUNTERTOPS FABRICATION AND THE MEMORIALS BUILDING



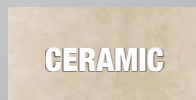
GRANITE



MARBLE



QUARTZ



CERAMIC



GLASS



**SYNTHETIC
MATERIALS**

SEVEN

Entire structure in stainless steel
RELIABLE, FAST AND PRECISE

Produced by
HELIOS AUTOMAZIONI
San Salvo (CH) Italia
www.heliosautomazioni.com

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PRODUCT DESCRIPTION

Helios Seven Total Station is a machining center of the latest generation, developed to answer the requests of the most demanding stone fabricators. The **entire stainless steel structure** has been conceived to pursue an unlimited durability over the time. The use of **recirculating ball screws and zero backlash gears** makes the machine's movement of the axes very fluid, thus guaranteeing a highly detailed finished product. Thanks to the use of **high frequency inverter**, which supplies only the necessary power for the mechanical efficiency, the maximum energy saving is ensured. The **Galaxy Stone software** manages the machining center Helios Seven and optimizes all the functions of the machine from the cut with the disk or with the tool to the edge polishing, writing, sculpturing, skene,

inlays, shallow kerfs for the rodding technique, and much more. The Galaxy Stone software can manage the multiple interpolation 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 Helios Seven without any other integrated software. **Helios Seven has been designed to satisfy several needs, that is why there are various customizations, which allow the partial or the total automation of the process.** Helios Seven can be equipped with the 3 axes head with all its features, with the 5 axes head or with both heads in the version "Total station" for a total automated process. Moreover in case of partial setting up, it is possible to add the other components over the time.

EXCLUSIVE FEATURES

- **Entire stainless steel structure**, from the base to the lateral supports, bolts included.
- **Big working area**, which allows to load big slabs or several pieces for multiple processes.
- **5-axis head and 3-axis head** on the same bridge, both of them with automatic tool change to manage cuts, engravings, profiling, and polishing without moving the piece, thus avoiding manual intervention of the operator.
- **Only one integrated software.** The **Galaxy Stone** software manages all the stone processes and the interpolation of multiple axes without any other software. It can import projects in the most common graphic formats.
- **System of assisted handling of slabs**, which produces an air buffer between the slab and the suction cups that makes its movement very smooth.
- **Modular arrangement of the machine**, which allows to set up the machining center Helios Seven according to the working needs and make future configurations/ customizations possible without changing its structure.

THE ADDED VALUE OF THE HELIOS SEVEN CNC

Helios Seven has been developed to go beyond the manual intervention that normally occurs during the several processes.

In the kitchen tops production for example, many activities are required to complete the process:

- Perimetral cut of the slab;
- Mitering for the veils;
- Cut for the sink holes;
- Cut out of the inner corners and drilling for the mixer faucet insertion;
- Polished drainboard recessed drainer;
- Drain gutters, polishing included;
- Profiling and polishing both of the external and inner edge.

In a modern workshop, several machines would be necessary to complete these processes, on the contrary, Helios Seven can make all the machining with a unique positioning of the slab.

In its potentialities, Helios Seven can fulfil several functions of a 5-axis bridge saw, a 5-axis edge polisher, a mono head polishing machine and a machining center.



LAVORAZIONI
ESEGUIBILI

LUCIDATURA
DELLA COSTA

LUCIDATURA A 45°
DELLA COSTA

LUCIDATURA
DEL PIANO

PROFILATURA

INCISIONE

BASSO RILIEVO

KITCHEN
TOPS

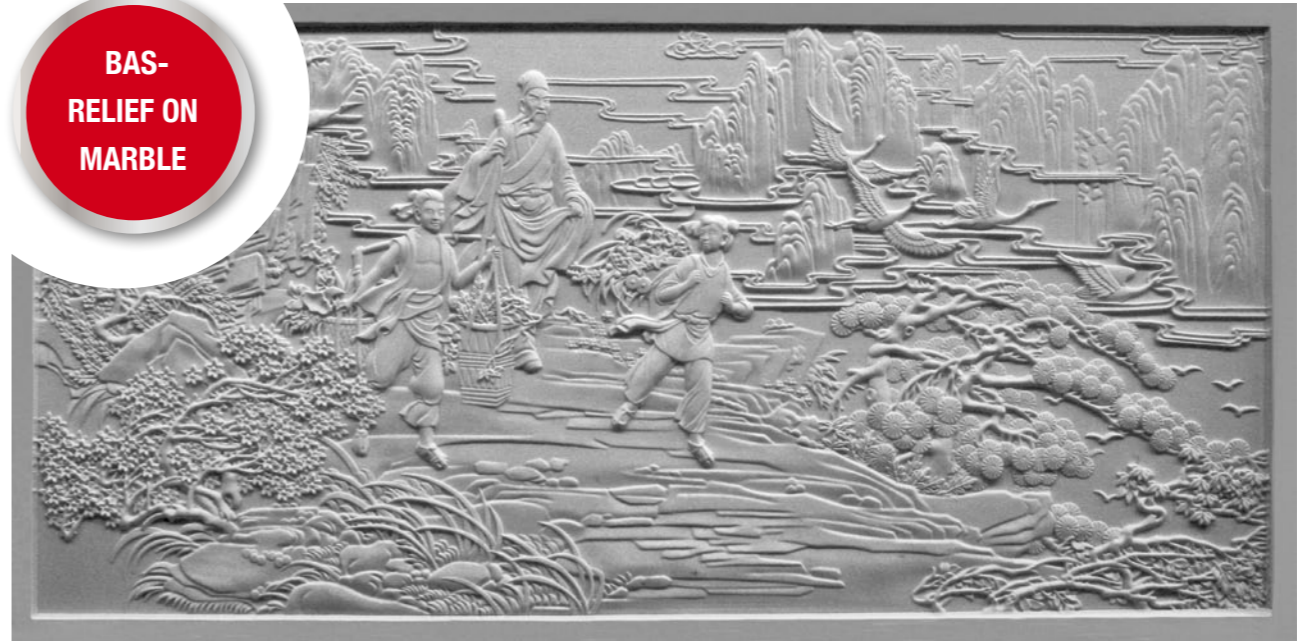


DECORATIVE WALLS

OTHER POSSIBLE EXAMPLES PRODUCED BY HELIOS SEVEN



BAS-RELIEF ON MARBLE



INLAYS



ENGRAVING AND 3D SCULPTURES ON GRANITE



SINKS AND SHOWER TRAYS



3D SCULPTURES ON MARBLE



THE GALAXY STONE SOFTWARE



The **Galaxy Stone** software allows the operators to face easily and intuitively several stone processes, that are normally complex to achieve.

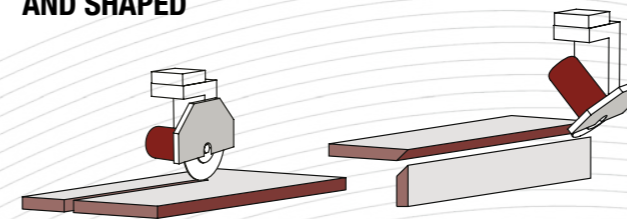
It has been developed closely to the stone fabricators, observing and reading into their needs. The Galaxy Stone software manages the machine, that ideally repeats the movement of the artisan hands adding the necessary precision for a quality finished product.

Some exclusive devices, like Helios PhotoScan or other, make the use of the machining center Helios Seven much more immediate.

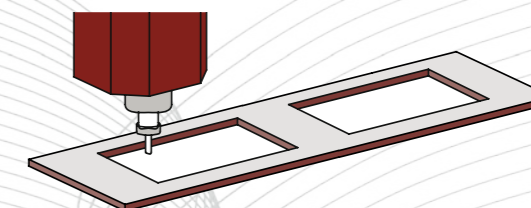


PROCESSES MANAGED BY THE GALAXY STONE SOFTWARE

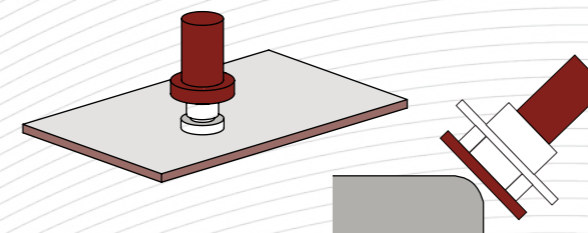
CUT WITH DISK: LINEAR, INCLINED AND SHAPED



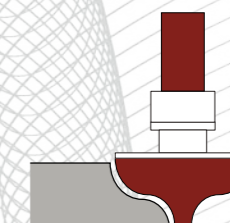
CUT, PROFILING, DRILLING WITH MILLING TOOL OR CORE DRILL.



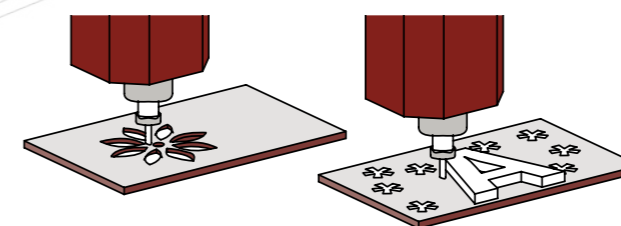
POLISHING OF THE TOP AND OF THE EDGE WITH POLISHING PADS



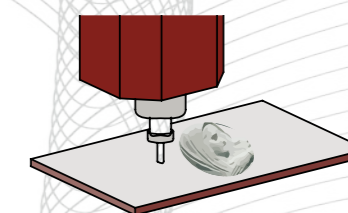
POLISHING OF SPECIAL PROFILES WITH SHAPED TOOLS



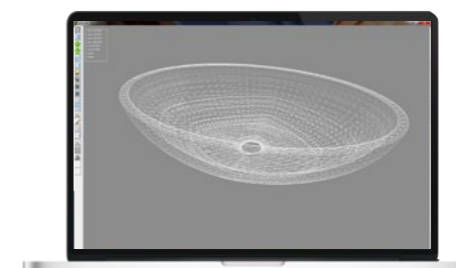
3D ENGRAVING OF DRAWINGS AND DECORATIONS



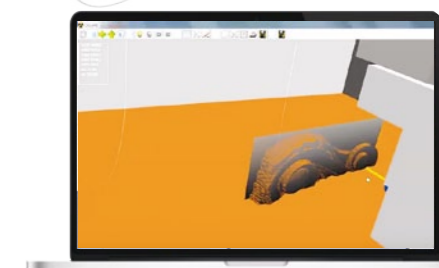
3D SCULPTURES AND 3D BAS-RELIEFS DETECTED BY THE DIGITIZER OR DESIGNED BY CAD



IMPORT OF 3D FILES FROM SEVERAL GRAPHIC FORMATS



3D GRAPHIC SIMULATOR MANAGEMENT FOR TIME EVALUATION AND COSTS OF PRODUCTION



STANDARD CONFIGURATION

- **Computer with touch screen monitor, keyboard, and mouse.**
- **Galaxy Stone software.**
- **3-Axis head** with electrospindle 7,5 HP ISO 40
- **5-Axis head** equipped with the disk (max diameter 7,87 in and with the polishing pads holder with automatic tool change H7 and dynamic control of the pressure. The Helios Seven 5-axis head group can switch from the maximum rigidity necessary for the cut with the disk up to the dynamic control of the pressure required for the use of the polishing pads. The small dimensions of the head allow to enter the sink hole for the corners cut out and for the polishing of the 90° sharp edge.
- **Tool magazine** for ISO 40 and H7 cones up to 30 positions in order to face all processes automatically.
- **Vacuum pump kit and n° 12 suction cups.**
- **Laser marker for the suction cups positioning** to show with the maximum precision the exact points to place the suction cups, required in the slab fixing for countertops production. Moreover it can fulfil the function of the program simulation.

OPTIONALS

- **Flatness control device** to work on not perfectly flat slabs. The movement of the tool follows the profiles and the surfaces where it is working on.
- **Explorer Laser 3D digitizer** for the detection of 3D models. It transforms the solid model into digital for the following machining in real dimension or on scale.
- **Helios PhotoScan** with Run-touch 1.0 software is the exclusive system of slab detection, which makes easy the cutting process. It takes one picture of the slab and the cutting process can start without any hand measurement. Among many features, Helios Photoscan can read the templates on the slab and in a few easy steps start the machining.

TECHNICAL FEATURES

Dimensioni d'ingombro Overall dimensions	6600 x 4350 x H2500 mm 259,84 x 171,25 x H98,42 in
Corsa assi (versione total station) Axis stroke (total station version)	X3370 - Y3000 - Z325 mm X132,67 - Y118,11 - Z12,79 in
Aria compressa Compressed air	Min. 7 bar Min. 7 bar
Alimentazione Power supply	400 V (3P+N+GND) 50/60 Hz 400 V (3P+N+GND) 50/60 Hz
Potenza installata Installed power	16 kW 16 kW
Velocità rotazione mandrino Spindle rotation speed	0 ÷ 9.000 rpm 0 ÷ 9.000 rpm
Attacco utensile Tool holder	ISO BT 40 - 1/2" GAS - H7 ISO BT 40 - 1/2" GAS - H7
Potenza elettromandrino Spindle power	7,5 HP - 3 HP 7,5 HP - 3 HP
Magazzino utensili Tool magazine	30 postazioni 30 positions
Max velocità di lavoro Max working speed	35.000 mm/min 1377,95 in/min
Passaggio ponte Bridge passing	535 mm - 1000 mm 21,06 in - 39,37 in
Consumo d'acqua Water consumption	40 L/min 40 L/min
Peso netto Net weight	4500 kg 9920,80 lb

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SERVICE AND WARRANTY

The use of high quality raw materials, from the structures to the mechanical and electronic components, and to a rigorous control of the productive cycle steps, guarantees the perfect functioning of the machine over the time.

Helios Automazioni, always leader in customer service, offers a **2 years warranty** for mechanical and electronic parts and includes, when required, the Safety Box system, which allows to speed its service, suppressing the shipment times of the tools in case of eventual anomalies.

The **Safety Box system** is a stock of tools ready to be used, they are available at customer's premises for a precautionary purpose because in case of eventual anomalies, it prevents downtime.

To complete the range of services, Helios Automazioni guarantees an efficient service of **remote diagnostics**, which allows a prompt resolution of any possible anomaly.



REMOTE
DIAGNOSTICS



#ASKTHEM

Our customers are reliable testimonials of the quality of our machines and post-sales service. We work every day to make more efficient our service and to make our customers more and more competitive.

STADTSILHOUETTE by Max Dudler designer manufactured by Tortuga Design Group composed of 40 stone fabricators using Helios Automazioni 5-axis machines.



“ *The creativity of the designer, the potentialities of the software and the precision of the machine open unexplored frontiers onto new stone processing technologies. The substance takes its shape and lightness thanks to a surgical removal of the surplus material.* ”



CONVERSATION ON STONE

Per: **Marco Piva**
Compagnia: **Helios Automazioni**
Materiali: **Bianco di Carrara**

CONVERSATION ON STONE by Marco Piva designer for Helios Automazioni



HELIOS

Helios Automazioni produces a complete range of equipment, cnc machines, and software to process marble, granite, and synthetic materials: cut, polishing, milling, profiling, sculpturing, etching, engraving, sandblasting, inlay and much more.

Ask for a demo, we will be glad to have you as our special guest!

heliosautomazioni.com

