

High-Speed 3D Laser Crystal Engraving Machine



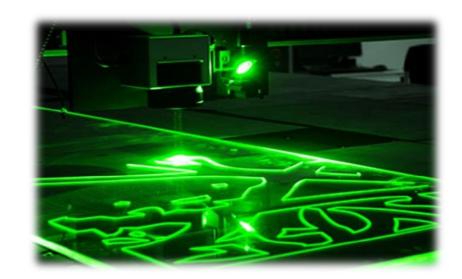
Model:HSGP-3KC

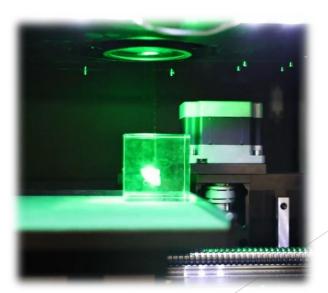


Product Description:



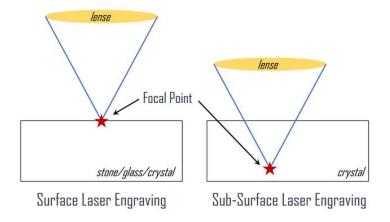
- Holy Laser technology independent research and development of HSGP series of 3d laser engraving machine, the imported laser equipment, independent design control system, fully consider the special needs of the user in different application direction, software and hardware operation efficiency, carving, equipment stability, low maintenance, especially suitable for artificial crystal, glass, acrylic transparent rigid material three dimensional laser carving, has been widely used in three-dimensional, two-dimensional crystal photo carving, personalized crystal carving gift customization, high fine crystal products batch processing, glass decoration and other business areas.
- Main functions: Engraving plane or three-dimensional patterns in transparent materials such as crystal and glass. It can engrave 2D / 3D portraits, personal footprints, trophies and other personalized gift souvenirs, and can also mass-produce 2D / 3D animals, plants, buildings, cars, ships, aircraft and other model products and 3D scene display.





Crystal Inner Engraving Principle:





- Engraving laser will be a certain wavelength of laser into the glass or crystal inside, so that the internal specific parts of the subtle burst to form bubbles, so as to outline the preset shape of the processing process, also refers to the processing out of this process. Laser "is the most useful tool for carving artificial crystals (also known as" crystal glass"). Using the laser interior carving technology, the plane or three-dimensional pattern is "carved" on the inside of the crystal glass.
- For a laser to be able to engraving glass, its energy density must be greater than a certain critical value, or threshold, to destroy the glass, and the energy density of the laser somewhere is related to the size of the spot at that point, the smaller the spot, the greater the energy density. In this way, through proper focus, can make the laser energy density before entering the glass and reach below the destruction threshold, the glass in the area of hope processing over the critical value, the laser pulse in a very short time, the energy can make the crystal heat burst in an instant, resulting in very small white spots, carved inside the glass predetermined shape, and the glass The rest of the glass or crystal remains intact. In fact, this is also the laser internal carving assisted imaging technology.

Product Features:



- Small size: adopt integrated design, small volume, light weight.
- Simple operation: friendly software interface, simple and easy to learn; integrated automatic center function, convenient crystal placement for operator.
- Strong adaptability: According to the mobile needs of the machine, the core components are equipped with shock-proof system, which effectively prevents the damage caused to the core components of the machine due to accidental impact during the transportation of equipment and use.
- Fast Engraving speed: using the vibrator laser high-speed scanning working mode, the maximum speed can reach 240000-300000 points / minute, saving carving time (300,000 points within 1 minutes).
- High stability, exquisite carving effect: using the world's advanced air-cooled high frequency narrow pulse wide pump solid-state laser technology, good beam quality, high stability, the carved point effect is exquisite. Can work steadily for a long time.
- Support a variety of data formats: equipped with HOLY LASER special software can support 3DS, DXF, OBJ, BMP, JPG and any flat and 3D format data, with good compatibility.







Machine Details:

- Laser Transport Fiber Cable Wire:
 In order to transport the laser from laser source
- 532nm YAG Diode Laser from Germany: In order to transport the laser from laser source
- Screw Road/Guide Rail/Rotary: For Z-axis with high precision
- Screw Road/Guide Rail/Rotary:
 For X-axis and Y-axis with high precision
- Motor from Japan for X,Y,Z:
 To make sure smoothly moving
- X,Y,Z Sensor is strong to protect high precision moving and engraving
 - Adopt stable aluminum material worktable specially used for engraving heavy loading with special materials on surface to make sure no scrap will on the surface of crystal and glass









Technical Parameter:

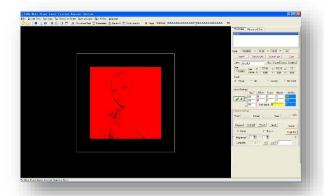
HSGP-3KC
Germany YAG Diode pump
532nm
300*400*130mm
3000 HZ
≤260,000point/min
≤±0.01mm
Crystal/Glass(Square/Ball)
7ns
M2<1.5
≤50,000 hours
≥1200DPI
40μm-80μm
0.06-0.12mm

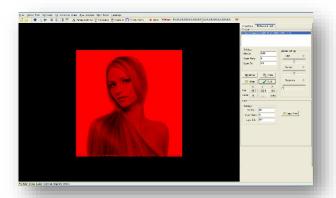


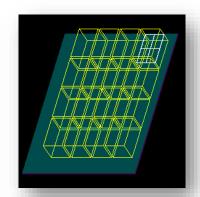
Three-axis repeat positioning accuracy	<3µm/300mm
Power Supply	220V 50HZ/110V 40HZ
Complete Machine Power Consumption	<1.5KW
Cooling Method	Air cooling
Applicable Materials	Glass, Crystal
Laser Control System	HOLY LASER
Graphic Conversion Software	Professional HOLY LASER point cloud conversion software
Software Registration Right	Provide the HOLY LASER original software patent certificate
Certification/Patent	This product has been CE, FC, a number of utility model patent certification

Software Function:





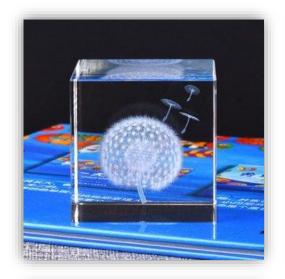




- (1) Intelligent display of engraving products and actual engraving pattern size.
- (2) Module window: display ordinary DXF; texture OBJ; photo JPG/BMP; parameters for generating point cloud and point cloud editing function.
- (3) Texture Settings/Layer Operation/Zoom Layer/Rotate Layer/Select Layer/Point Cloud Editing.
- (4) Text editing can be added in the engraving software, and the point cloud file can be saved as a separate file.
- (5) Language: 8 languages including Chinese and English.
- (6) Software support: single selection, frame selection, polygon selection, selection by multi-point forming, reverse selection, selection of unselected files to delete point cloud, deletion of unused points, restoration of deletion, block calculation, three-dimensional calculation, the simulation file is converted to a point cloud.
- (7) Layering method: common layering and embossed layering.
- (8) Adding methods include: cutting the back side; 180° on one side as a whole; 360° on both sides as a whole.
- (9) The supported format is suitable for 3D scanner files, software modeling, cameras, mobile phones and other files.
- (10) The point cloud editing software has a high-speed optimization calculation function, and can edit ultra-high-definition texture simulation data files.
- (11) Support the function of continuous engraving after power failure; photos can be directly generated point cloud by engraving software.

Samples Display:



















Samples Display:



















Samples Display:













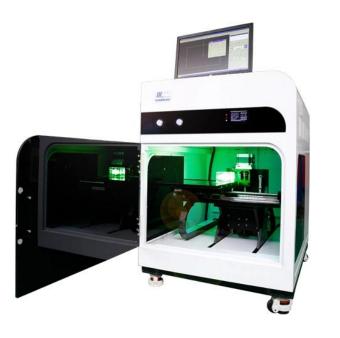




Machine Display:









Certification:















EXPRESSE?









After-Sales Service/Delivery/Packing:

Warranty & After sale service:

- 1.Two years warranty for whole machine.
- 2.After sales service:
- *When you have any questions, no matter machine or operate, you can contact us directly.
- *If any parts broken, we will replace a new one for you in free.
- *After warranty we will still supply lifetime maintenance in free. Just if parts broken, we will replace with charge.





Packing:

- 1.Delivery:
- *Machine will be finished within 7-15 working days. (after we get advanced payment)
- 2.Package:
- *Wood cases with sponge fill inside to protect machine.
- *The wood case is fumigation free. Suitable both by sea.
- *The cases wheels with lock, easy for move and fixed.



About Us:



Our company has been established since 2006, Located in Yiwu, China, famous as the International Commodity city. Many many foreigners live here and do business here. Our main products are different of laser machines, such like, 3D laser engraving machine; Fiber laser marking machine; CO2 laser marking machine, Fiber laser cutting machine, 3D printer; large size glass 3d laser inner engraving machine, UV laser sandblasting machine, and so on.....

With the development of technology we established our own independent laboratory and strong research team for laser. Because of our fast development we are well known in China in our area and also relatively reputable in abroad. We attend many Exhibitions in China and abroad, like Canton Fair, Fairs in SHANGHIA, or Beijing, and Fairs in German, India, Spain, Mexico, USA, etc.

Now we have sold our machine to more than fifty countries, covering the world.

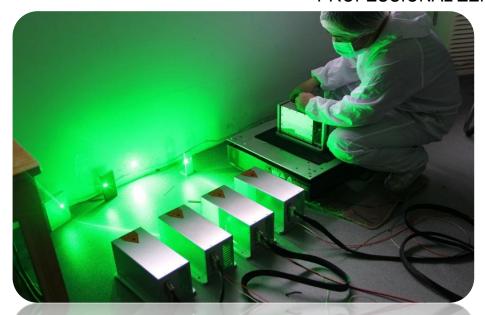
Finally, after 10 years hard work we are listed in China market.

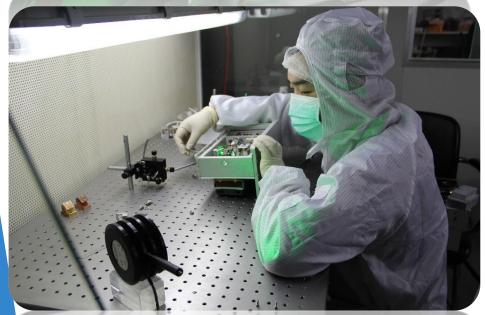
We will still work hard and will more and more hard, Customer is the first, quality is the first.

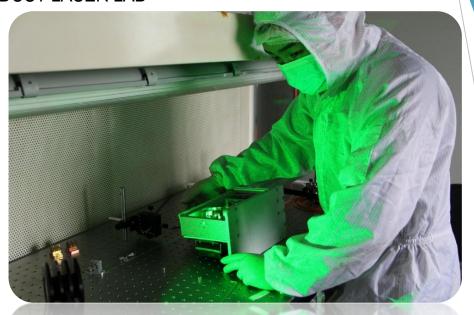


Laser Lab and Factory: PROFESSIONAL ZERO-DUST LASER LAB











Laser Lab and Factory:







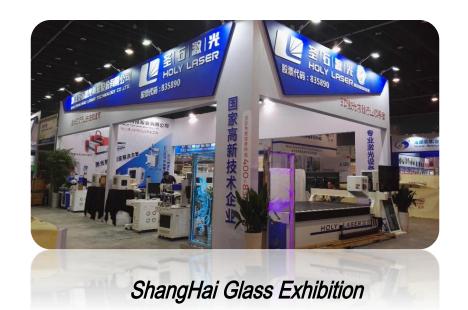




Exhibitions:









i Phone (OS-10S-HAVE)

IS-THE SHAPE

IS-THE

Global Laser Equipment Show



Your Require Our Priority

















Sincerely Waiting for Your Choose