Sintec Optronics

ST-C2 Series 3D/2D Laser Subsurface Engraving Machines

ST-C2 series 3D/2D Laser Subsurface Engraving Machine is a wonderful laser processing equipment that combines laser technology & computer technology and integrates optics, machinery and electronics together. It can engrave 2d and 3d images into the transparent materials as you want. All images come out very verisimilitude and elegant trough laser processing.

These machines are usually used in glass decoration industry, crystal gift industry, glass gift industry, and glass and Plexiglas signs industry. It can also be used in secondary process industry of all kinds of bottles and other transparent materials. It is very popular during the artware manufacturing and processing field, even can bring you a lot of business chances at the tourist resorts and shopping mall.

Features:

- High Quality: All key components (Servo motor servo driver, axis, focus lens galvanometer etc) were imported.
- Long lifespan: Can work continuously over 20000 hours
- Stable Performance : Diode laser technology, which is prior to YAG laser technology, can ensure you a stable performance.
- Low use-cost: No consumables, no maintenance.
- Easy Operation: All the work steps form position to engrave were controlled automatically by a intellectualized engraving software.
- High efficiency: The integrative controlling technology of X-Y-Z worktable and galvanometer is adopted to improve the laser processing efficiency.

Technical data:

Model No.	ST-C2 -S1	ST-C2 -S2	ST-C2 -S3
Laser Medium	Diode-pumped solid-state laser		
Engraving Speed	70,000-90,000 dots/min	100,000-120,000 dots/min	150,000-180,000 dots/min
Engraving area	200*200*100mm		
Cooling	Air cooled		
Laser Wavelength	532nm		
Pulse Repetition Rate	2 kHz /3 kHz		
Pulse Width	7ns		
Resolution	1200 dpi		
Lifespan	About 20000 hrs		
Warranty	1 year		
Pulse Energy	1.2mJ		
Input Electricity	220VAC/110VAC, 50Hz		
Power Consumption	0.6kW		
Machine Dimension	720*600*760 mm		
Machine Weight	102Kg		

ST-C3 Series 3D/2D Laser Subsurface Engraving Machines

ST-C3 series 3D/2D Laser Subsurface Engraving Machine is a wonderful laser processing equipment that combines laser technology & computer technology and integrates optics, machinery and electronics together. It can engrave 2d and 3d images into the transparent materials as you want. All images come out very verisimilitude and elegant trough laser processing.

These machines are usually used in glass decoration industry, crystal gift industry, glass gift industry, and glass and Plexiglas signs industry. It can also be used in secondary process industry of all kinds of bottles and other transparent materials. It is very popular during the artware manufacturing and processing field, even can bring you a lot of business chances at the tourist resorts and shopping mall.

Features:

- High Quality: All key components (Servo motor servo driver, axis, focus lens galvanometer etc) were imported.
- Long lifespan: Can work continuously over 20000 hours
- Stable Performance : Diode laser technology, which is prior to YAG laser technology, can ensure you a stable performance.
- Low use-cost: No consumables, no maintenance.
- Easy Operation: All the work steps form position to engrave were controlled automatically by a intellectualized engraving software.
- High efficiency: The integrative controlling technology of X-Y-Z worktable and galvanometer is adopted to improve the laser processing efficiency.

Technical data:

Model No.	ST-C3 -S1	ST-C3-S2	ST-C3 -S3
Laser Medium	Diode-pumped solid-state laser		
Engraving Speed	70,000-90,000 dots/min	100,000-120,000 dots/min	150,000-180,000 dots/min
Engraving area	300*200*100mm		
Cooling	Air cooled		
Laser Wavelength	532nm		
Pulse Repetition Rate	2 kHz /3 kHz		
Pulse Width	7ns		
Resolution	1200 dpi		
Liftspan	About 20000 hrs		
Warranty	1 year		
Pulse Energy	1.2mJ		
Input Electricity	220VAC/110VAC, 50Hz		
Power Consumption	0.6kW		
Machine Dimension	760*660*760mm		
Machine Weight	110Kg		

ST-C4 Series 3D/2D Laser Subsurface Engraving Machines

ST-C4 series 3D/2D Laser Subsurface Engraving Machine is a wonderful laser processing equipment that combines laser technology & computer technology and integrates optics, machinery and electronics together. It can engrave 2d and 3d images into the transparent materials as you want, all images comes out very verisimilitude and elegant trough its processing.

These machines are usually used in glass decoration industry, crystal gift industry, glass gift industry, and glass and Plexiglas signs industry. It can also be used in secondary process industry of all kinds of bottles and other transparent materials. It is very popular during the artware manufacturing and processing field, even can bring you a lot of business chances at the tourist resorts and shopping mall.

Features:

- High Quality: All key components (Servo motor servo driver, axis, focus lens galvanometer etc) were imported.
- Long lifespan: Can work continuously over 20000 hours
- Stable Performance : Diode laser technology, which is better than lamp-pumped YAG laser technology, can ensure you a stable performance.
- Low use-cost: No consumables, no maintenance, no updating during its lifetime
- Easy Operation: All the work steps form position to engrave were controlled automatically by a intellectualized engraving software.
- High efficiency: The integrative controlling technology of X-Y-Z worktable and galvanometer is adopted to improve the laser processing efficiency.
- Bigger working area: Joint-block control Engraving technology of block to block enlarges the engraving area.

Technical data:

Model No.	ST-C4-S1	ST-C4-S2	ST-C4-S3
Laser Medium	Diode-pumped solid-state laser		
Engraving Speed	70,000-90,000 dots/min	100,000-120,000 dots/min	150,000-180,000 dots/min
Engraving area (mm)	400*300*100mm		
Cooling	Air cooled		
Laser Wavelength	532nm		
Pulse Repetition Rate	2 kHz /3 kHz		
Pulse Width	7ns		
Resolution	1200 dpi		
Lifespan	About 20000 hrs		
Warranty	1 year		
Pulse Energy	1.2mJ		
Input Electricity	220VAC/110VAC, 50Hz		
Power Consumption	0.6kW		
Machine Dimension	960*760*770mm		
Machine Weight	115Kg		

ST-C Series 3D Camera

Easy Editing: With one key strike to build 3D Model. Dynamically watching the result when adjusting point-cloud data effect. Finish a 3D Portrait point-cloud data for about 1 min under automatic mode.

Abundant of Functions: 3D Vision include almost all the editing functions you may need for engraving crystal arts, include 3D Portrait, 2D Photo, add text, logo and 3D decoration models.

Technical Data:

3D Camera Model	ST-Cyclops	ST-3D Mega Capturor II
People Captured	1 to 3	1 to 4
Field (mm)	700*525	895*715
Reference Distance (mm)	1150	1100
Texture (pixels)	1280*960	1280*1024
Geometry (points)	About 0.3M	1.3M
Acquisition Time (sec)	0.5	0.7
Computer	PC (Windows XP)	PC (Windows 2000, XP)
Feature:	It was designed with easy-of-use and performance in mind. “Fully automatic”, “No experience required”, “Smaller size” and “Portability easily”.	Higher resolution and higher field of view. It can take the images of up to 4 people together.

ST-Cyclops

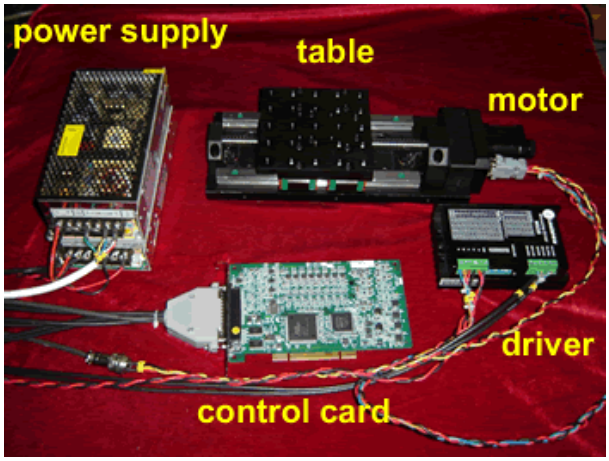
ST-3D Mega Capturor II

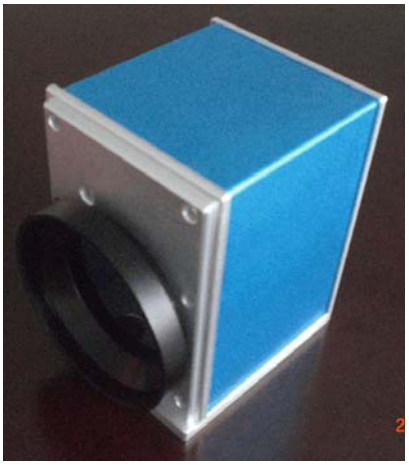
Software advantages:

- Newest joint-block control technology is developed firstly in China by us and it is applied to our machine, which harmonize the X-Y-Z worktable and the galvanometer, to engrave the big range of graphics inside the crystals with the high speed.
- Particular frequency-selecting technology assures laser-output-times/dot reaches 100%, no dot missing and dot-deviation.
- Particular power-broken protection technology assures the continuous engraving from the pausing dot when the power is connected again. It can save the pausing dot number when the power is broken for the continuous engraving later. It saves the time and money.
- Be compatible with 3D camera's output data made by Canada Inspeck Inc.

Main Parts of 3D Engraving Systems

We can provide OEMs and system integrators with a range of high performance components and sub-assemblies of 3D laser engraving systems at more attractive prices. The main parts and sub-systems include a control card, a table with driver, a 2D marking head and DC power supplies.

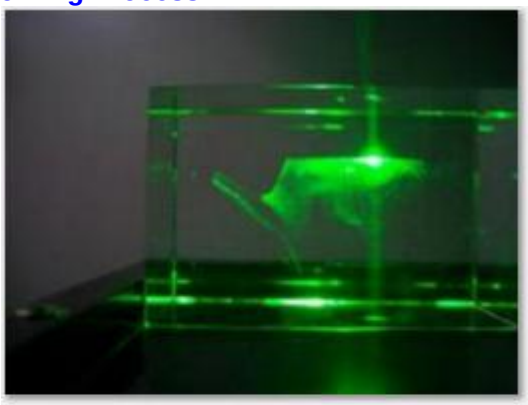


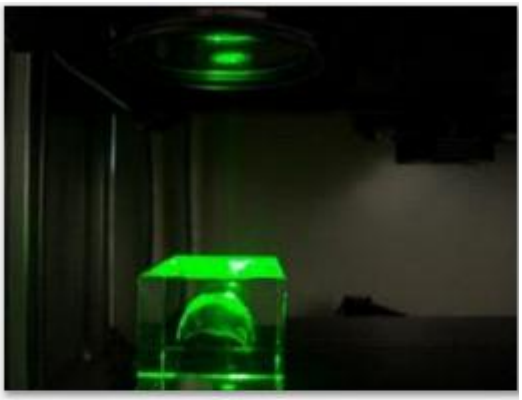


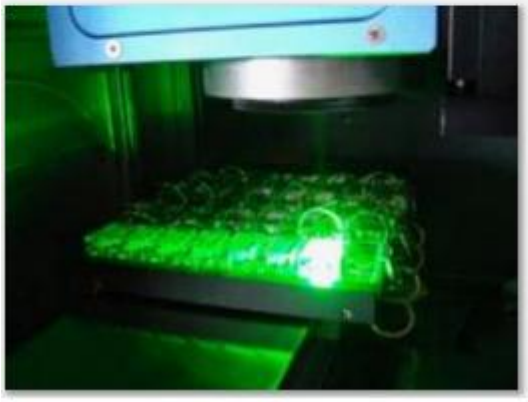
The control card is used to control the table (step motor), position limits of the table, marking head and laser beam on/off. It is inserted onto the mother board of a computer. The drive software and laser engraving software comes with the control card.

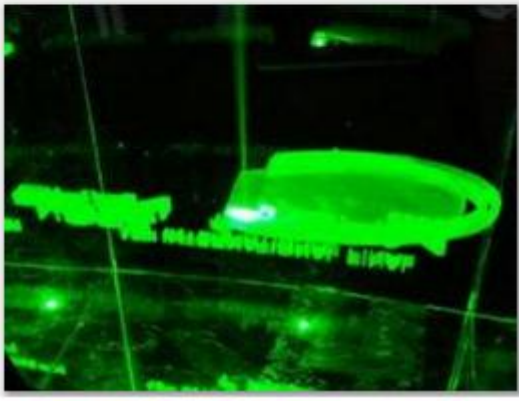
The dimension of the table is 365x120x55mm. The length of the screw is 230mm and the travel range is 120mm. There is a position limit on both ends. The signals are given via DB9

Working Process:









Engraved Samples