



Laserator™

3D Laser Work Station

Discover
the potential



Made in Turkey



ISO9001:2015



TUWANA

www.laserator.com

Laser Machine Design Team

- X:430mm, Y:350mm, Z:235mm Axial Travels
- Work Table Dimensions: 380X513mm
- Unique & Novel 3D Marking Head
- A Strengthful Combination of Steel, Granite and Sheet Metal Construction
- Mobility by Its Heavy Duty Caster Wheels
- 1100kgs in Weight
- Granite Work table, Columns & Gantry Bridge
- Automatic 3-Piece Sectional Door with a 1064nm Protective Glass at the Front and Manual Doors at Sides
- Powerful Emission & Filtration System for Dust & Smoke
- Hand Protection Sensors at the Front Door
- 3rd Optical-Axis-Driven Very Fast Focal Length Adjustment of Laser Beam for Real 3D Engraving Jobs;
- Optical Z Travel Interval: ± 53 mm , Work Area: 94X94mm

- @ Z=-53mm & FL=144mm, 138X138mm @ Z= +53mm & FL=244mm and 116X116mm @Z=0 & FL=191mm (Different Work Areas are Also Possible with Optional Optics)
- Mechanical Z-Axis-Driven Focal Length Adjustment of Laser Beam for 3D Engraving Jobs (Indexing)
- User Defined Many Types of Laser Sanding Operations
- 4608X3288 Pixel, 1,4 μ X1,4 μ Each-Pixel-Dimensioned Monochrome Camera
- 2592X1944 Pixel, 2,2 μ X2,2 μ Each-Pixel-Dimensioned Color Camera Along The Beam Axis
- Unique Camera Software for Laser Engraving Process Inspections & Repositionings of any Graphics Reused
- Inner-Enclosure Day-Light LED-Illumination Lamps
- Red & White LED-Light Local Illumination Rings
- 50W, 70W & 100W Fiber Laser Power Options to Chose From

SERMATEK
MAKINA SAN ve DIS TIC. LTD. STI.

Karacaoglan Mah. 6157/1 Sok. 19/3, 35070 Isikkent,
Bornova, Izmir, TURKEY
Phone: +90 (232) 472 23 43, Fax: +90 (232) 472 23 45
E-Mail: info@laserator.com URL: www.laserator.com



Laserator3D, A Talented Laser Software for 3D Processing

Laserator3D laser marking and engraving software enables any operator to mark on any surface of an 3D shaped part by using the unique and novel Laserator 3D scan head we designed. After the operator imports an STL extended 3D drawing to the desktop of the Laserator3D, he can easily place that drawing on the model of that 3D work piece that is positioned correctly at the correct angle in the software. The rest is to position the work piece at the right angle and the right place and start the lasing operation after he makes the parametric adjustments. The Laserator3D software not only imports to the desktop any STL extended files to be processed but also imports 3D DXF extended files to be used as pre-defined surfaces. During the lasing process, the operator can follow up the operation layer by layer in both 2D and 3D view mode of the software. The operator can also assign different parameters to the different layers to be processed. Lasing process can be completed either using the mechanic Z-axis as a focal length changer or fast and accurate focal length optics in the 3D scan head of the TUWANA.





Main Specifications

- STL Extended 3D Model Import
- Adjustable STL Slice Thickness
- Specific Parameter Assignment to Each Slice
- 2D & 3D Viewing on the Screen
- User-Friendly Software Interface
- Creating a 2D Marking Content with the Laserator Software Tools & Coating that 2D design over a 3D Model
- Concurrent Lasing Process Follow-up & the Capability of WYSIWYG
- Automatic Process Control
- X, Y & Z-Axis Automation
- Full Marking Capabilities
- Capability of Engraving a 3D Model on a 3D Work Piece

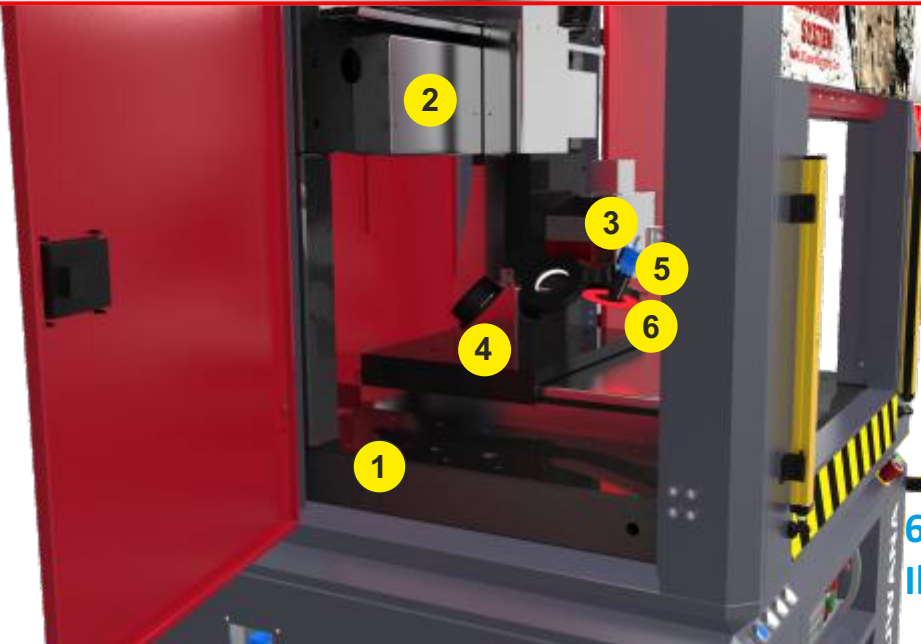
Industries

- **Automotive Industry** - Surface Texturing & Plastic Welding Operations
- **Mold Industry** - 3D Engraving, 2.5D Engraving, Deep Engraving, Shoe Sole Mold Texturing & Deep Engraving
- **Watch & Jewellery Industry** - 3D Mold Processing, 2.5D Mold Processing, 3D Mold Marking, 3D Mold Sanding, 2D Surface Sanding, Micro Character Type Engraving, 2D

& 3D Marking, Gold & Silver Cutting Operations

- **Coin Mold Manufacturing Industry** - 3D Engraving, 2.5D Engraving, 2D & 3D Sanding, Surface Texturing
- **Tools Manufacturing Industry** - 3D Marking
- **Fire Arms Industry** - 2D & 3D Marking, 2.5D & 3D Engraving
- **Medical Industry** - 2D & 3D Marking

TUWANA Enclosure



- 1- Granite Body
- 2 - Liner X, Y & Z Guides
- 3 - 3D Laser Scan Head
- 4 - Large Work Table for Big Parts
- 5 - High Resolution Cameras
- 6 - Red & White Lasing Process Illumination Rings for Easy Follow-Ups

Machine Dimensions

