

Vereo™ 3D

laser marking system



Mark Contoured Surfaces and Create Detailed Engravings

Vereo 3D is a versatile 3 axis laser marking system designed to deliver an aggressive beam profile while enabling 3D laser contour marking and 3D laser engraving. With the use of a high speed dynamic focusing optic, Vereo 3D offers 40mm of Z-Axis dynamic focus within a 165mm x 165mm marking field. The need for mechanical focal height adjustment when marking variable height components is eliminated. In addition, loss of focus and marking distortion is eliminated when marking uneven surfaces.

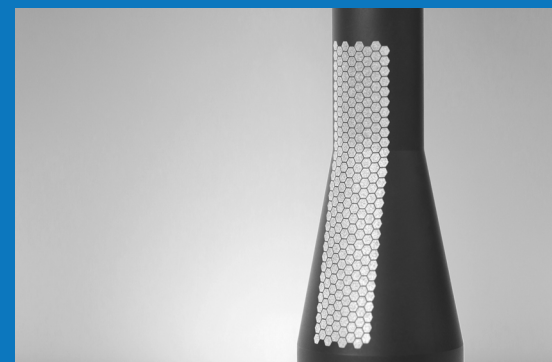


20W or 50W MOPA Fiber

Ideal for engraving and marking a variety of materials including all metals, most plastics and other substrates.

Applications

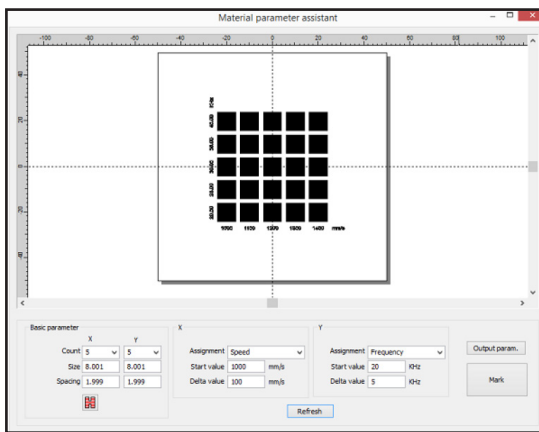
- Fast adjustment of laser focus between two various surface heights
- Marking of convex and concave surfaces
- Marking around the outside diameter of components without distortion or focal loss
- Contour marking of uneven surfaces or complex shapes
- Decorative marking of complex shapes
- Deep engraving of firearms, jewelry, knives and a variety of other components
- Reverse deep engraving of molds for plastic injection molding



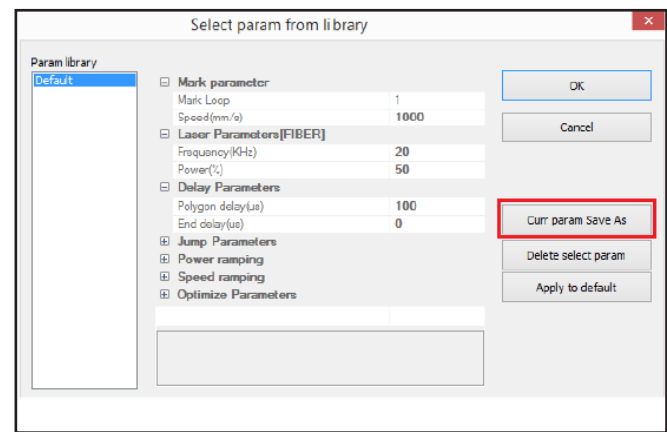
Minilase™ Pro 3 Software

Our most powerful software suite is loaded with user friendly features and options.

- True Type Fonts
- Vector Graphics Inc. DXF, PLT, AI, SVG and More
- Barcodes and 2D Codes, UDI Compliant Codes
- Basic Shapes and Complex CAD Tools with Node Editing Capability
- Date Coding and Automated Serialization
- Automated 4 Axis Control (requires axis expansion controller option)
- Complex Editing and Alignment Tools
- Detailed Hatch Patterns
- Color Coded Laser Parameters



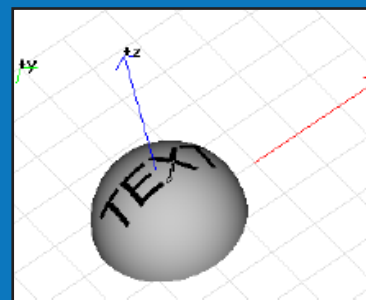
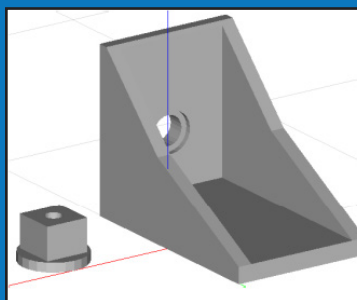
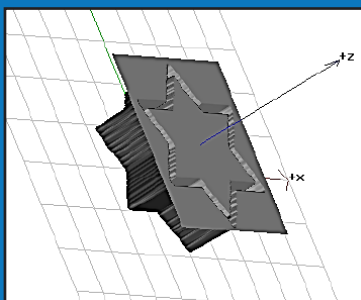
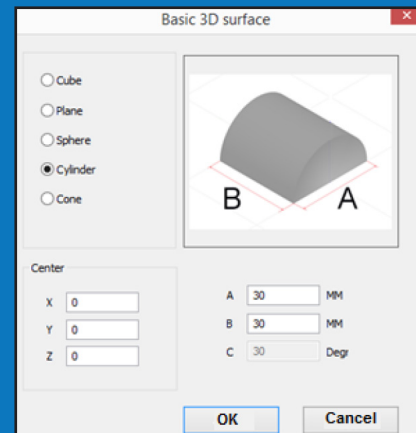
Find the best laser parameters using the built-in assistant.



An advanced parameter library is available which includes the storage of laser hatch settings, allowing for one-click programming of laser parameters and hatching.

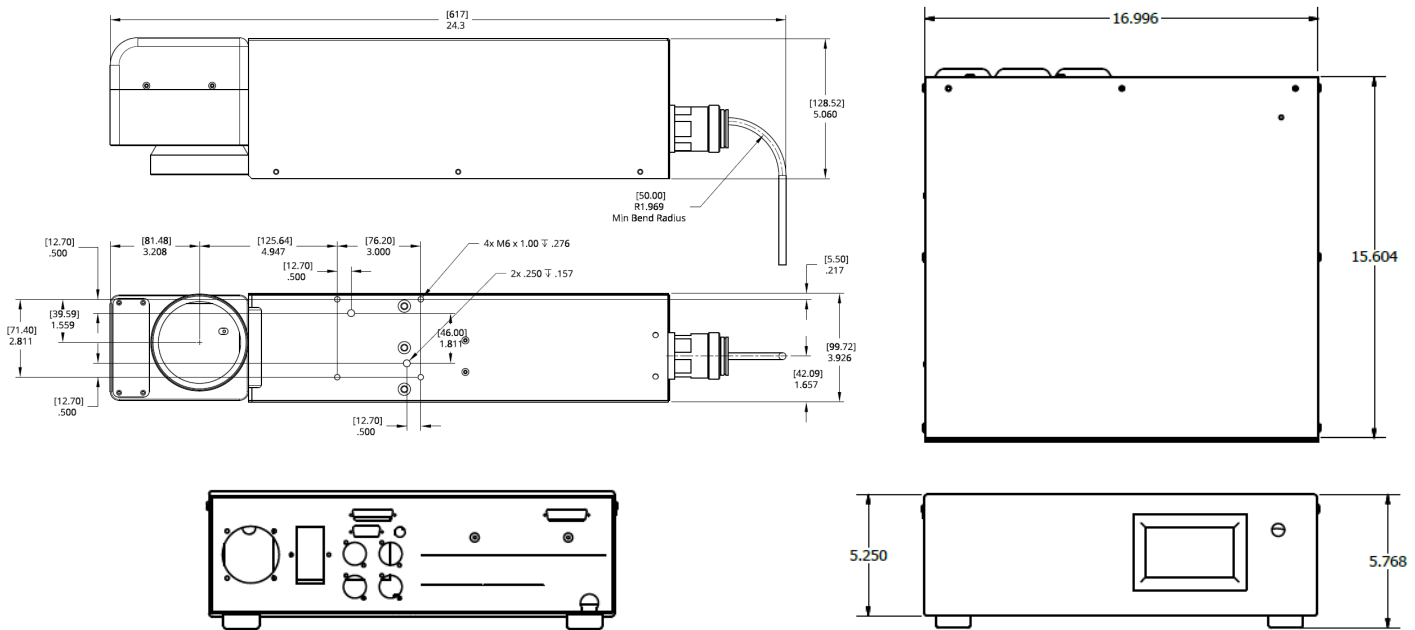
3D Programming

- Create Basic and Common 3D Shapes Instantly
- Import STL Files of Your Components
- Wrap Text, Vector Graphics and More to 3D Shapes and Components (BMP/JPEG Not Supported for 3D)
- Splice 3D Images Into Layers with Contoured Features and Extrude Text and Shapes for Deep Engraving



Technical Specifications

System Dimensions (mm)	(Head) 24.3"L x 5"W x 5.5"H / 11lbs mm 617L x 140W x 128.5H / 4.9kg (Rack) 16.6"L x 23.5"W x 5.2"H / 37.5lbs mm 421L x 596W x 133H / 17kg
Standard Marking Field	250L Focal Lens 6.5" x 6.5" / 165mm x 165mm
3D Z-Axis Dynamic Focus Range	1.57" / 40mm
Laser Type	Ytterbium Fiber
Wavelength	1062nm +/- 3nm
Wattage	20W / 50W
Frequency Range	1 - 500kHz
Pulse Duration	Selectable, 260ns or 40ns
Operative Ambient Temperature Range	7° - 36° C / 45° - 97° F
Cooling	Air Cooled
Fiber Cable Length	3M
Input Power	Power Sensing 110-240VAC 50/60Hz
Aiming Beam	(1) Class II Red Diode (635nm)
PC	Windows 10 PC/Laptop Required with Minimum i7 Processor/8GB RAM
PC Connection	USB
Available Ports	USB (2)/Diagnostic/Discrete IO/ External Axes/Hardware Interlock
Warranty	36 Month Comprehensive, Unlimited Hours
Documentation (Provided in Digital Format via USB Drive)	System & Software Manuals Laser Settings Guide / Safety Manual
Included Accessories	Power & USB Cable / USB Drive / E-Stop Jumper



Full Drawings Available Upon Request



With more than 55 years experience, TYKMA™ ElectroX celebrates a rich history in the development of industrial laser systems with a focus in laser marking, etching, and engraving systems.

With headquarters in the U.S.A. and a global network of distributors, we provide unrivaled industrial laser solutions to customers around the world.

TYKMA™ ElectroX pledges to provide every customer with laser systems of the highest quality and reliability. We're dedicated to providing long-term customer problem resolution and training to ensure your system operates effectively for years to come.

- 24/7, 365 days a year emergency support phone line
- Online remote programming and troubleshooting assistance via Citrix™ secured software
- Application and programming assistance
- Preventive maintenance and critical response agreements
- Loaner and rental laser systems

“The lasers we have purchased from TYKMA are very well engineered and nicely finished products. They require little maintenance and are very easy to use. The sales and service support are excellent. The few issues we have had were resolved online in minutes with a TYKMA technician. They make it easy.”

Arthur Jones, Director of Manufacturing, Royal Products

Global Presence

With facilities and distributors in more than 25 countries, TYKMA™ ElectroX is dedicated to providing exceptional service and support to our clients around the world. To learn more about our products and services, visit us online at www.permanentmarking.com.



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TYKMA™  **ELECTROX**

Industrial Laser Systems

North America, Headquarters

370 Gateway Drive

Chillicothe, OH 45601, U.S.A.

Phone +1 (740) 779-9918

sales@permanentmarking.com

www.permanentmarking.com