

## Power. Simplicity.

In A Compact Desktop System.





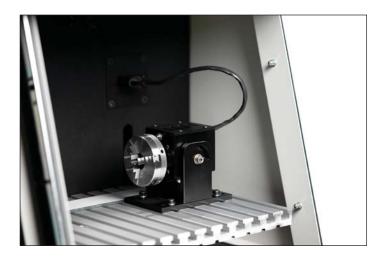
## **MLM SERIES**

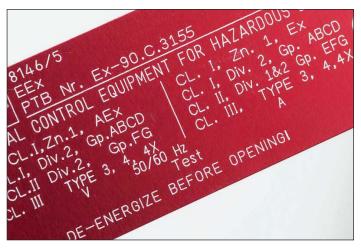
Minilase™ Manual is simple and affordable, but its powerful features will surprise you.

The MLM fiber laser system packs a powerful punch and gives users maximum application flexibility. The manual front door is lightweight and ergonomic thanks to a spring loaded retraction system. A powered part-loading table with our focus finder system makes focal adjustment easy. Machine management is simple with the front mounted operator control panel.

A USB connection to a laptop or desktop PC is all that is required to start programming with our Minilase<sup>™</sup> Pro SE laser marking software. Quickly mark text, barcodes, serial and date codes graphics and more. Utilize our micro rotary device for 360° radial part marking.

With our included Quick Start Guide, video tutorials and laser programming manual, Minilase™ Manual can be setup and marking within minutes.





## **FEATURES:**

- Air-Cooled, Maintenance Free Design for Industrial Applications
- Advanced MOPA Fiber Laser Engine from 10 to 20W with Selectable Pulse Durations
- Manual Part Loading Door
- Power Focal Height Adjustment
- Easy Focus Finder
- T-Slot Work Surface and Front Panel Status Lights
- Ideal for Marking all Metals, Most Plastics, Painted/Anodized/Coated Materials and a Variety of Other Substrates
- Comprehensive 3-Year Warranty

Technical Specifications	
System Dimensions / Weight	17"W x 34"L x 24"H / 130lbs
Standard Marking Field	160S (100mm x 100mm) (3.93" x 3.93")
Standard Max Part Size (160S Lens)	13.5"W x 9.5"L x 4.625"H (mm) 342W x 241L x 117H
Available Marking Lens Upgrade and Marking Fields	254S (140mm x 140mm, 5.5" x 5.5")
Maximum Part Height with Lens Upgrade	(254S) .625"H/15mm
Laser Type	Ytterbium Fiber
Wavelength	1062nm +/- 3nm
Wattage	10W / 20W
Frequency Range	1kHz - 500kHz (10/20W)
Pulse Duration	(10/20W) Selectable, 260ns or 40ns
Operative Ambient Temperature Range	45° F to 110° F
Cooling	Air Cooled
Input Power	Power Sensing 110-240VAC 50/60Hz
Aiming Beam	(2) Class IIM Red Diode (635nm)
PC	Laptop/Desktop PC Required
PC Connection	USB
Available Ports	Diagnostic
Warranty	36 Month Comprehensive Unlimited Hours
Documentation	USB Drive / Quick Start Guide Video Tutorials / Software Manual Safety Manual / Laser Settings Manual (Manuals Provided in Digital Copy)
Optional Accessories	<ul> <li>Micro Rotary Device (360° Marking)</li> <li>Fume Extraction</li> <li>Footswitch for Start Mark</li> </ul>

 $Minilase^{\text{TM}}\ is\ a\ Class\ 1\ laser\ product\ in\ full\ compliance\ with\ CFR\ 1040.\ The\ system\ includes\ proper\ interlocks,\ switches,\ etc.$ 

Laser interaction with materials can create fumes and/or particles. TYKMA highly recommends the use of fume extraction equipment to minimize dust, fumes or smoke that can be created during the marking, etching or engraving process.



