

## Maximum Flexibility Multi-Axis Control





## EMS400

## With the ability to run up to four axes, EMS400 is ideal for large tray and part marking.

EMS400 features an automated 600mm x 600mm XY stage, ideal for marking trays of parts or large components in multiple locations. A front vertical pneumatically actuated door maximizes operator ergonomics. Programmable Z-Axis capability as a standard option allows for quick and easy changeover between components. Utilize a rotary device in conjunction with the XY stage to mark around the circumference of parts. A choice of laser power and a variety of large focal lenses provide the ability to solve any application.

EMS400<sup>™</sup> features an onboard PC and a gas assisted swing arm with monitor, keyboard and mouse allowing operators to easily design, edit and select laser etching programs. The system can be controlled without a PC as well using the included operator handheld control pendant.

Programming with our Evolution software enables you to easily create axis motion and mark text, barcodes, serial and date codes, graphics and more.





## FEATURES:

- Air-Cooled, Maintenance Free Design for Industrial Applications
- Powerful Fiber Laser Engine from 20 to 100W with Selectable Pulse Durations
- Front Vertical Pneumatically Actuated Part Loading Door
- Programmable Focal Height Adjustment
- 600mm x 600mm Automated XY Stage
- Integrated PC with Monitor/Keyboard/Mouse on Ergonomic Gas Assisted Swing Arm
- Removable Side Panels for Large and Long Component Marking
- Available with a Variety of Focal Lenses from 160mm to 420mm
- Ideal for Marking all Metals, Carbide, Painted/ Anodized Materials & Most Plastics
- Comprehensive 3-Year Warranty

System Specifications				
System Dimensions / Weight	(mm) 1,504W x 1,672L x 2,026H / Approx. 650kgs 59"W x 66"L x 80"H / Approx. 500lbs			
Standard Marking Field (160L Lens)	(100mm x 100mm) (3.93" x 3.93")			
Standard Max Part Size (Marking) (160L Lens)	(mm) 600W x 600L x 490H 23.6"W x 23.6"L x 19.3"H			
Available Marking Lens Upgrade and Marking Fields	254S (140mm x 140mm, 5.5" x 5.5") 254L (165mm x 165mm, 6.5" x 6.5") 330L (200mm x 200mm, 7.87" x 7.87") 420L (260mm x 260mm, 10.2" x 10.2")			
Maximum Part Height with Lens Upgrade	(254L) 273mm/10.75" (330L) 164mm/6.45" (420L) 84mm/3.3"			
Operative Ambient Temperature Range	45° F to 97° F			
Cooling	Air Cooled			
Input Power	Power Sensing 110-240VAC 50/60Hz			
PC	Integrated Windows PC w/Monitor, Keyboard, Mouse			
Available Ports	USB/Ethernet			
Warranty	36 Month Comprehensive Unlimited Hours			
Optional Accessories	<ul><li>Rotary Device (360° Marking)</li><li>Fume Extraction</li></ul>			

Laser Specifications	20W (2 Waveform)	20W (8 Waveform)	50W	100W
Laser Type	Ytterbium Fiber			
Wavelength	1064nm (nominal)			
Pulse Duration	Selectable, 30 or 100ns	Selectable from 4, 8, 14, 20, 30, 50, 100 and 200ns	100ns	120ns
Frequency Range	10-500kHz (30ns) 2-200kHz (100ns)	1.6-1,000kHz	2-200kHz	50-200kHz
Aiming Beam	(2) Class IIM Red Diode (635nm)			
Fiber Cable Length	3m	2m	3m	3m

 $\mathsf{EMS400^m}$  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 Electrox 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.

ELECTROX

TYKMA Electrox follows a policy of continuous product improvement. Specifications are subject to change without notice.

