

**KERN**

**ECONOMICAL / SMALL FORMAT  
LASER CUTTING & ENGRAVING SYSTEMS**

# MICRO



The small format MICRO Laser System is an entry level machine with all the same capabilities of the larger systems offered by Kern. The class IV, open bed design gives you the control and ease of use that many enclosed systems lack. The X axis features the same high-speed engraving as our HSE model and the Y axis is a moving table that increases the accuracy and speed while cutting. Like all Kern systems the MICRO is a turnkey package including the computer, software and downdraft vacuum system.



Model	MICRO24	MICRO48
Work Area	24" x 24"	48" x 24"
*Footprint (W x L x H)	70" x 36" x 56"	70" x 36" x 56"
**Part Clearance	3"	3"
System Weight	1500 lbs	1800 lbs

\* Table at back position, laser uninstalled and minor hardware removed.

\*\* Z-axis height can be customized.

## MICRO SPECIFICATIONS

Laser Classification	Class 4 CO2 Laser
Laser Wattage	100, 150, 200, 250, 400 and 650 watts
*Positioning Accuracy	+/- .002"/ft
Repeatability	+/- .0005"/ft
Max Cutting Speed	10"/sec
Max Engraving Speed	150"/sec
Electrical	230v/1ph, 230v/3ph, 415v/3ph CE, 480v/3ph
Vacuum Blower	Two Blowers, each 1500 CFM or greater
Air Assist	100 – 250 PSI (9 -17 BAR)
**Options Available	Metal Cutting, K-Vision Camera, Pipe Rotary, and Fume Extractor

\* Mapped table, under controlled conditions.

\*\* The Metal Cutting option decreases the maximum engraving speed to 130"/sec.

## STANDARD FEATURES

### Laser Source

High quality metal cavity laser sources manufactured in the USA by Kern Technologies. Liquid-cooled, metal cavity CO2 laser sources with a wide operating power range and exceptional power stability. Manufactured with pride in Minnesota, USA by Kern Technologies.

### Motion Package

High speed servo motors are installed on both axes resulting in smooth cut radiuses, quick acceleration rates and accurate part processing.

### Exhaust System

A blower package removes fumes and small debris created during laser processing. An integrated downdraft table holds material secure to the table as it is being processed. A vacuum arm elevates the gantry hoses neatly above the working table.

### Chilling Unit

A closed-loop chilling unit will properly cool the laser source, ensuring a long laser lifetime and consistent cutting and engraving results.

### Computer / Software

A high-performance computer and monitor package is included with each system. KCAM laser software, CoreIDRAW® and an easy-to-use PDF converter are pre-installed on the computer.

### Safety

A UL certified electrical panel is placed on each laser system which turns on and shuts down components of the laser system. US CDRH compliance requirements are upheld including emergency stop buttons, interlocked access points and a 5 second safety key switch.

### Steel Chassis

Kern's laser systems are built around a solid steel frame. The frame features Blanchard ground flat surfaces and high-temperature stress relieved welds. Kern technicians double check for precision tolerance at the Kern factory.

