

KERN

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

EcoFlex



The EcoFlex Laser System is Kern's entry-level large format model. A wrap around gantry traverses over the cutting bed allowing for finished parts to be easily removed at all sides of the machine. The moving gantry features high speed servo motors and a flying optics beam delivery providing consistent beam power and quality over the entire work area. The EcoFlex machine is well known as a highly-productive laser system offered at an economical price.



EcoFlex with Z12 Monument Package

The optional, Z12 Monument Etching Package offers a greater level of detail than has ever been available to the stone industry. The solid steel frame and extra high gantry is designed to handle heavy stones up to 12" thick. A wrap around gantry and roller bed make loading and unloading stones quick and easy.

Model	ECO50	ECO100
Work Area	52" x 50"	52" x 100"
Footprint (W x L x H)	74" x 87" x 53"	74" x 137" x 53"
*Part Clearance	3"	3"
System Weight	3500 lbs	4700 lbs

* Z-axis height can be customized.

EcoFlex SPECIFICATIONS

Laser Classification	Class 4 CO2 Laser
Laser Wattage	100, 150, 200 and 300 watts
*Positioning Accuracy	+/- .002"/ft
Repeatability	+/- .0005"/ft
Max Cutting Speed	10"/sec
Max Engraving Speed	100"/sec
Electrical	230v/1ph, 230v/3ph, 415v/3ph CE
Vacuum Blower	Two Blowers, each 1500 CFM or greater
Air Assist	100 PSI (9 BAR)
Options Available	Z12 Monument Package, K-Vision Camera & Fume Extraction System

* Mapped table, under controlled conditions.

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

The EcoFlex is installed with compact driver-integrated servo motors on both axes. High quality ball screws and linear rails move the gantry and beam delivery accurately over the processing area.

Chilling Unit

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

Exhaust Systems

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.

Computer / Software

A high-performance computer and monitor package is included with each system. KCAM laser software, CorelDRAW® 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.

