



**Z12**



LARGE FORMAT LASER CUTTING & ENGRAVING SYSTEMS

# Z12 - Monument Etching Laser System

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



PhotoGRAV® software will transform your photographs into a digitally dithered image that the laser can read. The material type, size and resolution can be adjusted in software so that your photographs etch beautifully onto marble, granite, travertine, slate, glass and much more.

An optional downdraft vacuum down draft table can be added and placed over the rollers. This will allow the laser system to cut materials that create smoke and fumes such as acrylic, wood and foam.

## Z12

Cut/Engrave Area	52" x 25"	52" x 50"	52" x 100"
Laser Wattages	30, 50, 100, 150, 200, 250 and 400 watts		
Footprint (W x L x H)	70" x 50" x 63"	70" x 75" x 63"	70" x 125" x 63"
*Table Height from Floor	26"	26"	26"
System Weight	2000lbs	3400lbs	4200lbs
**Positioning Accuracy	+/- .002"/ft	+/- .002"/ft	+/- .002"/ft
Repeatability	+/- .0005"/ft	+/- .0005"/ft	+/- .0005"/ft
Straightness	+/- .002"/ft	+/- .002"/ft	+/- .002"/ft
Air Assist Nozzle	Yes	Yes	Yes
Max Cutting Speed	10"/sec	10"/sec	10"/sec
Max Engraving Speed	150"/sec	150"/sec	150"/sec
*Maximum Z Clearance	12"	12"	12"
Vacuum Table	Option	Option	Option
***Metal Cutting Available	Yes	Yes	Yes

\* Custom height available upon request.

\*\* Mapped table, under controlled conditions

\*\*\* Need at least 100 watts. The X axis is decreased by 2". Top engraving speed is 130"/sec.

## Standard Features

### USA Made Laser Head

All lasers sold by Kern are designed and manufactured with pride in the USA.

### High-Speed Servo Motors

The Z12 motion package is powered by servo motors on both axes allowing for engraving at speeds up to 150"/sec with 5G's of acceleration.

### Roller Bed

The bed consists of stainless steel rollers to position the heavy stones on the tabletop.

### Stencil Cutting

Rubber can be kiss-cut leaving the Mylar backing attached for sandblasting applications.

### Computer and Laser Software

A high performance computer and monitor are provided with each laser system. Kern's state-of-the-art KCAM laser cutting and engraving software is included on every laser system. An easy to use printer driver will send your vector and raster files to the laser. Upgrades to the KCAM software are always free of charge and readily available on our website. Your choice of design software such as CorelDRAW®, AutoCAD LT® or Adobe Illustrator® is also included.

### UL / CE / CDRH

A UL certified electrical panel is placed on each laser system which turns on and shuts down components of the laser system. Z12 laser systems are CE compliant to meet European Union consumer safety, health and environmental requirements. U.S. CDRH compliance requirements are upheld on the Z12 laser system to meet specifications in 21 CFR, Subchapter J, parts 1040.10 & 1040.11.

### Chilling Unit

A closed loop chilling unit is included on all laser systems of 100 watts or greater. This chilling unit will keep your laser head cooled and running smoothly.

### Quality Bearings, Rails and Belts

A top-of-the-line motion package includes parts selected from US companies that value the idea of high tolerances, great repeatability and precision accuracy.

### Solid Steel Frame

Kern builds the Z12 laser system around a solid steel frame that has been Blanchard ground flat with all welds stress relieved in a high temperature oven. All stands are double checked at the Kern factory for precision straightness.

### Height Variations

The table height can be customized to meet your existing conveyor system.



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