

TOOL AND LABEL MARKING MADE EASY

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Easy to use and easy to maintain, a Universal laser system combines precision and programmability with speed and efficiency.

Bar Codes and Text on Labels



Avoid Die-Cutting Costs

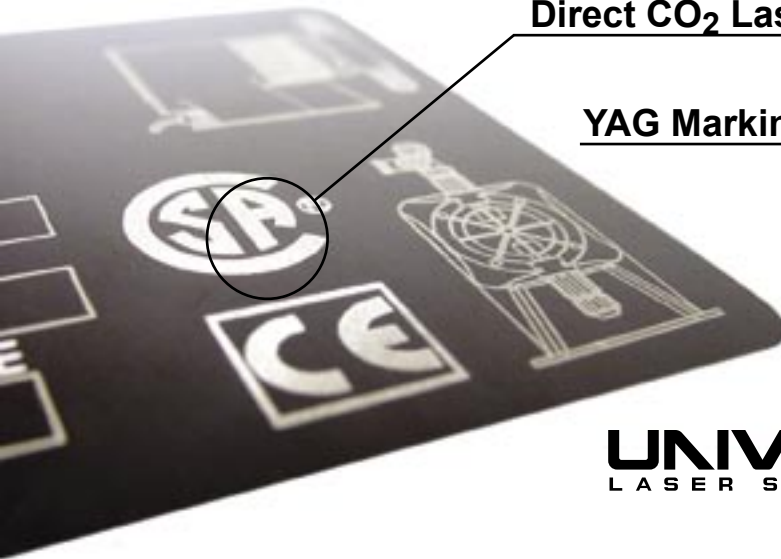
Universal Laser Systems, Inc. builds CO₂ and YAG laser systems that function like a printer from Windows-based programs like CorelDRAW® or AutoCAD®. Our CO₂ laser systems are computer-controlled and can accommodate a wide variety of materials, including metals using marking compounds, anodized aluminum, plastics and much more. Our Yag laser can directly mark bare steel, aluminum, brass and other metals. Laser systems are ideal for volume production of identification plates/tags, bar coding, serialization and date coding.

CO₂ Laser Marking on Tools Using Metal Marking Compound

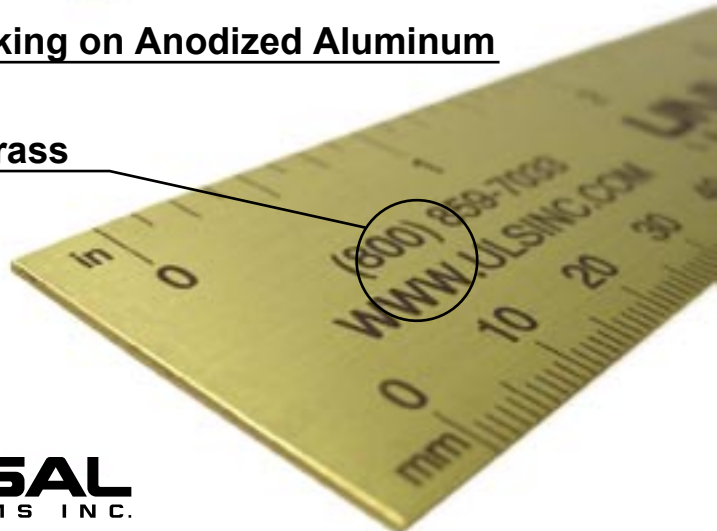
Reduce Inventory Costs



Direct CO₂ Laser Marking on Anodized Aluminum



YAG Marking on Brass



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Tool & Label Marking Guide

MATERIAL	MARKING TECHNIQUE	CO ₂			YAG
		30 WATTS	40 WATTS	50 WATTS	
Bare Metals					
Steel and Chrome-Plated Steel, Aluminum	Use Metal Marking Compound (MMC)	✓	✓	✓	✓
Brass, Copper	MMC			✓	✓
Coated Metals					
Anodized Aluminum, Oxide Coatings, Painted Metal	Mark directly on bare material	✓	✓	✓	✓
Carbide	Bare material with YAG, MMC with CO ₂	✓	✓	✓	✓
Ceramic	Bare material or MMC to darken mark	✓	✓	✓	✓
Composites, Glass, Wood, Plastics, Rubber and Other Materials	Bare material, can mark and cut	✓	✓	✓	

Setting Up Your System: The VersaLaser operates like a printer from Windows XP; ULS M, V, X or X2 Platforms operate from Windows 98/2000/XP. You can use conventional graphics, CAD or layout software - no proprietary application software is needed. A ULS print driver links the laser to your computer. Power is 110 or 220 volts from a wall plug. Fume ventilation is required. An external ventilator may be used, or for the VersaLaser a Computer Controlled Air Cleaner Cart option is available.

Marking Method: A CO₂ laser engraving system can mark directly onto bare plastics, anodized aluminum, painted surfaces, rubber and many other materials. For bare metals, a Metal Marking Compound is required to make an indelible, permanent mark. Metal Marking Compound is a substance that is applied to the metal surface. The laser beam fuses compounds with the metal surface, leaving a dark mark (almost black) that does not rub off and is not affected by cleaners or solvents. Leftover metal marking compound can be washed off with water.

Positioning Tools for Marking: The laser marks according to your design and page layout from your graphics software. The laser does not exert pressure on parts being marked. Tools may be manually registered by simply placing them on the work table. The laser has a red dot pointer that serves as an alignment aid for manual registration. The laser may also be used to create templates or fixtures from materials, such as wood, plastic, foam, acrylic, etc., for repetitive or high-accuracy marking. A Rotary Fixture option is available for marking on cylindrical objects.

Below are just some of the applications for a Universal laser system...

- Permanent, indelible marking on metals, plastics, label materials
- Batch or one-off production of pre-cut labels and tags
- Custom-cut labels, tags, identification plates
- Mark numbers, text, logos, patterns
- Mark tools and parts for identification and traceability
- Etch serial numbers, date codes

To learn how your business can benefit from Universal technology, call 1.800.859.7033 or go to www.ulsinc.com.