

## Laser Marking System

Laser marking is the practice of using lasers to engrave or mark an object. The technique does not involve tool bits which contact the engraving surface and wear out. This is considered an advantage over alternative engraving technologies where bit heads have to be replaced regularly.

The impact of laser engraving has been more pronounced for specially-designed "laserable" materials. These include polymer and novel metal alloys.

## Advantages

Permanent & almost Indelible Marking Process

**Non-Contact Type:** Doesn't produce stress or changed physical properties of material Clean & Safe Process: Chemical-proof, Water-proof, Oil, Grease and Fuel-proof. Internationally accepted as quality marking standard.

**No Pre or Post Processing:** Can be done on finished products.

**Automated:** Can be integrated with existing production or packaging line, controlled by computer.

**Flexible:** Mark texts, Logos, Alphanumeric, graphics, images, 2D data matrix code etc. Least Set up Time: No tooling to wear direct physical contact with work piece Hardness: Doesn't affect quality of marking.

**Cost Effective:** Virtually no consumables.

**Enhances the aesthetical & monetary Value of products Counterfeit & forgery prevention, product tracking & identification and so on...**

## Laser Marker Applications:

AUTOMOBILE INDUSTRIES, AUTO ANCILLARIES, ENGINEERING INDUSTRIES, ELECTRICAL & ELECTRONICS INDUSTRIES, INDUSTRIAL TOOLINGS, SURGICAL TOOLS / BODY IMPLANTS MEDICAL, JEWELRY, BATH FITTINGS AND GIFTWARE INDUSTRIES.

## Features

1. High laser quality, good stability, small machine size, red beam indication.
2. Automatic Parameter according to laser power.
3. Long term maintenance free operation.
4. Windows XP/ VISTA/ Windows 7 Compatible.
5. Serial Number / Circular Marking.
6. PLT, DXF, JPG, TIFF, BMP can be marked.
7. Automation can be integrated with existing production line.
8. The average using time more than 100000 hours.
9. Internationally accepted as quality marking standard.
10. Flexible-mark texts, alphanumeric, logos, bar codes, graphics, images, 2D data matrix code etc.
11. Energy Consumption is lesser than ordinary laser machine.
12. No water cooling system is required.



Can be Customized As per Customers needs.

Fiber Laser Marker – 10W/20W/30w/40w

## Technical Specification

|                        |  |
|------------------------|--|
| Laser Source           | Multi-Diode Pumped Fiber Laser                   |
| Laser power            | 10W/20W  |
| Wavelength             | 1064 ± 5 nm                                      |
| Beam quality           | M2 < 1.5   |
| Peak to Peak Stability | 5%   |
| Diode Life             | Approximate 100000 hours                         |
| Repeat Rate            | 20000Hz to 100000 Hz (up to 500000 Hz Optional ) |
| Repeatability          | 0.030mm  |
| Marking Area(in mm)    | 110 x 110 (150 x 150, 200 x 200 Optional)        |
| Marking Speed          | Up to 7000 mm/sec. Min line width 0.008mm        |
| Electrical Connection  | 220V±10% V AC/50Hz/ 3A                           |
| Power Consumption      | <1.8 KVA   |
| Ambient Temperature    | 10 °c to 35°c                                    |
| Cooling                | Air cooling                                      |
| Weight                 | Approximate 25 Kg                                |
| Size ( in mm )         | Approximate 535 x 435 x 710                      |

### The services offered for Laser Machine:

Leasing of Laser Marker

AMC (Annual Maintenance Contract) and Servicing of all brand of Laser Markers

Spare parts, Accessories and Consumables for Laser Markers

### Applications :

Marking Alphanumeric, Serial Numbers, Part Numbers.

Marking of Logos, Schematics, Complex Graphics, Images and Pictures. Bar-coding, 2D Data Matrix Codes, Lot Codes, Date Codes.

UID Marking (Unique Identification). Deep Engraving.

Paint Removal from Plastic and Metal Surfaces. Hologram marking

### Automotive

Backlit, Bearing, Brake, Cam Shaft, Clutch, Crank Shaft, Engine ID Plates, Filter, Gear, Gasket, Hose, Injector, Mirror, Nozzle, Piston, Piston Ring, Shafts, Spark Plugs, Tag, Turbine, Valve.

### Electrical

Battery, Cable, Connector, Electric Motor, Light Bulb, Plug, Regulator, Relay, Solenoid, Switches, Wire.

### Electronics

Backlit, Cable, Chip Capacitors, Computer Keyboard Switch, Fuse Block, IC, Mobile & Computer Accessories, Mobile Battery Charger, Mobile Keypad, PCB, USB Drive.

### Tools & Tooling

Cutting Tools, Carbide, Chucks, Dies, Diamond Tools, Drills, Gauges, Hammer, Hardened Steel Tools, Holding Device, Housing, HSS, Measuring Instruments, Milling Cutter, Pliers, Punch, PVC Pipe/Joints , Saw, Saw Blade, Screwdriver – Blades & Handles, Socket, Tungsten, Wrenches.

### Medical/Surgical

Blade, Bit, Catheter, Implant, Needle, Scissor, Screw, Stent, Surgical Instruments.

### Jewelry & Fashion accessories

It is our constant endeavor to achieve major market share in the metal marking application by providing identification and traceability solution.

### Kitchenware & bath fittings

Bath Hook, Bathroom Taps, Cookware Set, Door Handle, Door Stopper, Faucets, Fork, Hardware, Hand Shower, Handrail & Baluster, Hanger Rod, Knife, Lemon Squeezer, Lock, Shower Trays, Shower Valves, Sign Plate, Spoon.

### Giftware

Awards, Key Chains, Pen, Trophy.