INFION LASER

Enabling Value Engineering

ADVANCED LASER MACHINES FOR MATERIAL PROCESSING



LASER MARKING
LASER CUTTING
LASER WELDING
& OTHER LASER APPLICATIONS

INFION – INFINITE PASSION FOR INNOVATION

INFION ADVANCED LASER SYSTEMS PVT LTD, is a professional Laser Company, focused on Design and Manufacture of Advanced Laser Systems and solutions. The company was established by a team of experienced engineers with decades of experience in laser system engineering and a passion for innovation. Team Infion - Designs and Manufactures both standard models and customized Laser machines for a wide range of material processing applications including Laser Marking, Laser Cutting, Laser Welding, Laser Cladding, Laser Hardening etc.

Located at the KIADB Industrial Area (Karnataka Industrial Area development Board) at Hoskote in the outskirts of Bangalore, Karnataka India, with a 10,000 Sq Feet of built up area for Manufacturing and about 10,000 additional area for further expansion, Team Infion is technically strong and well equipped to design and manufacture Advanced Laser Machines for a wide range of applications. Additionally, a separate R&D team works on Engineering and Development of Machines for next Gen manufacturing applications including Laser Sintering, 3D Printing, Remote Welding and other Value engineering solutions.

Infion Engineers have vast experience in Laser Machine design, Laser Application Engineering, Robotics & Automation, Vision Systems and software development. Thus we are able to offer turnkey solutions encompassing multiple domains. Our customers include major Automotive OEMs, Tier 1, Tier 2 companies, Large engineering companies and various other medium and small enterprises.

Infion is also equipped with an in-house Laser Application Lab to conduct trials on customer products /parts in order to optimize and prove application using different types of Lasers and Laser parameters, thereby helping customers select the best and ideal laser machine configuration for a specific application. In addition Team Infion, assists customers in their component Design using ideal "design for Laser principles" thus enabling true VALUE ENGINEERING.

Systems & Solutions

- Laser Marking
- Laser Cutting
- Laser Welding
- Laser Hardening
- Laser Cladding
- Laser Sintering
- Automation solutions
- Robotic systems
- Vision Systems
- Metrology & Inspection
- Traceability Solutions
- Software Development

INFIMARK - LASER MARKING SYSTEM

MODEL : ILM-XX-YYY

The Infion Fiber Laser Marking System is a Robust Industrial Grade, Fully Enclosed workstation for Non-contact, permanent marking and engraving of different types of materials. The compact integrated design ensures that all additional equipments like the Computer, UPS, Isolation transformer etc. is fully integrated in the work station which is a completely enclosed unit for safety, with interlocked front door. All major system functions and status is displayed on the front panel and on the Monitor provided.

Main Features :

- Extruded Aluminum Industrial Grade Frame.
- Lift off Hinged manual Front door with Laser Safe Viewing Window.
- Lift Off Hinged door or fixed panel on the sides with Lock.
- 500 x 500 mm working area (Illuminated) with option to open on 3 sides.
- User Friendly Marking Software with advanced features
- 100 x 100 mm Marking Area (Other options available)
- Manual Z axis (Optional Automatic / Motorised Z axis available)
- PC internal or External configuration as per customer request
- Compact footprint : 600(w) x 1000(d) x 1500 (ht)
- Fume Extraction System / Fume Killer system
- Interlocked front door. Key Locked side doors.
- Display / Indications : Power On, Laser On, Mark in Progress, Interlock, Alarm, Emergency.
- Easily configurable / ungradable to other optional features like Rotary Marking, Multi-station Indexing work table, Auto loading & Unloading, Conveyor, Marking on the Fly etc. with no change in the mechanical configuration of the Basic Machine

Basic Standard Model



Laser Options :

- 10 W, 0.5 mJ Pulsed Fiber Laser
- 20 W, 1.0 mJ Pulsed Fiber Laser
- 30 W, 1.0 mJ Pulsed Fiber Laser
- 50 W, 1.0 mJ Pulsed Fiber Laser
- Other models / Types of Lasers can be integrated as per application requirement

Types of Marks:

- Alphanumeric
- Logos / Images
- Serial Numbers – Incremental
- Batch Numbers / Date Codes
- Bar Codes /2D data matrix / QR codes
- And Much more

Marking Area:

- 100 x 100 mm
- 170 x 170 mm
- 250 x 250 mm
- Larger Marking area can also be supplied

Materials:

- Metals: Steel, Aluminum, Tool Steel, Stainless Steel, Titanium etc.
- Plastics: ABS, PP, other Plastics etc.
- Paper: Coated / printed Paper etc., and much more.

Compact Table Top Model



Multistation Indexing Model



Conveyor Model



Note : Other Standard and CustomisedMarking SystemsAvailable. Please contact for detailed Specifications

INFIWELD : LASER WELDING SYSTEM

MODEL : ILW-XX-YYY

The Infion INFIWELD, Laser welding system is a versatile welding cell for welding of various types of parts/components. The cell can be configured with different options of Lasers and Multi-Axis movement as per application requirement. Linear Welding, Mulit Axis with Interpolation or Circular welding can be configured in the system. The cell itself is a Robust Industrial Grade, Fully Enclosed workstation with Automatic Pneumatic controlled Door with Interlock. All major system functions and status is displayed on the front panel and on the Monitor provided.

Main Features :

- Welded Steel Frame. Fully Enclosed structure.
- Automatic Pneumatic Front door with Laser Safe Viewing Window.
- Fixed Side Panels with optional Auto Doors for Auto load / unload.
- 750 x 750 mm working area in basic model. Other sizes available
- Servo / CNC Controlled Linear motion for X axis, Y axis and Z axis
- Servo / CNC Controlled Rotary motion for C axis and W axis.
- Can be configured with different Welding or Cutting Heads.
- Can be configured with different types and powers of Lasers
- Chiller, Fume Extraction, Process Gas controller etc Standard.
- Inbuilt Machine Controllers, Drives, PLC& HMI with Panel AC.
- Display / Indications: Power On, Laser On, Machine Ready, Weld in Progress, Interlock, Alarm, Emergency.
- Easily configurable / upgradable to other optional features like Rotary Welding, Hybrid welding, Multi-station Indexing work table, Auto loading & Unloading, Conveyor etc. with no change in the mechanical configuration of the Basic Machine.

Power Train/ Gear Welding system



Laser Option:

- CW Laser : 100 W – 10 KW
- QCW Laser : 150 W, 300 W & 600 W
- Pulsed Laser : upto 1000 W
- Other models / types of Lasers as per application requirement

Types of Welds :

- Linear Welding
- Circular Welding
- Multi-Axis 2 D welding
- 3D Welding
- Deep Penetration Welding
- Other types of Welding as per requirement

Working Area:

- 750 x 750 mm
- 1000 x 1000 mm
- 1500 x 1500 mm
- Larger Welding Area can also be supplied

Materials:

- Mild Steel
- High Carbon Steel
- Stainless Steel
- Aluminum
- Other materials

Welding system with Index Table



Remote Scanner Welding



Robotic 3D Welding



Note : Other Standard and Customised Welding Systems Available. Please contact for detailed Specifications.

INFICUT - LASER CUTTING SYSTEM

MODEL : ILC-XX-YYY

The INFICUT is a versatile cutting cell which can be customized for different cutting applications. The system can be configured for standard sheet metal 2D cutting or for customized application for cutting of different types of parts/components. The cell can be configured with different options of Lasers and Multi-Axis movement as per application requirement. Standard 2D cutting, Robotic 3D cutting , Tube Cutting or Micro-cutting application can be addressed with this model. The cell itself is a Robust Industrial Grade, Fully Enclosed workstation with Automatic Pneumatic controlled Door with Interlock. All major system functions and status is displayed on the front panel and on the Monitor provided.

Main Features :

- Welded / Cast Iron Frame. Fully Enclosed structure.
- Can be configured as with multi axis interpolation upto 6 axis depending on the application requirement.
- Automatic door with Laser Safe Viewing Window.
- Pallet Change for Loading and unloading.
- 750 x 750 mm working area in basic model.
- Servo / CNC Controlled Linear motion for X, Y and Z axis
- Servo / CNC Controlled Rotary motion for C axis and W axis.
- Can be configured with different types of Cutting Heads.
- Can be configured with different types/ powers of Lasers
- Inbuilt Machine Controllers, Drives, PLC & HMI with Panel AC.
- Display / Indications: Power On, Laser On, Machine Ready, Cutting in Progress, Interlock, Alarm, Emergency.
- Easily configurable / upgradeable to other optional features like Indexing work table, Auto loading & Unloading, Conveyor etc..

Gantry type – 2D cutting system



Laser Options :

- CW Laser : 100 W – 10 KW
- QCW Laser : 150 W, 300 W & 600 W
- Pulsed Laser : upto 1000 W
- Other models / types of Lasers as per application requirement

Types of Systems:

- Gantry Based – 2D cutting
- Robotic – 3D cutting
- Tube Cutting with Auto Feeder
- Micro Cutting system
- Other customised cutting systems

Cutting Area:

- 750 x 750 mm
- 1500 x 1500 mm
- 1500 x 3000 mm
- Larger Cutting Area can also be supplied

Materials:

- Mild Steel
- Stainless Steel
- Aluminum
- Copper
- Other materials

Micro Cutting System



Robotic 3D Cutting System



Tube Cutting System



Note : Other Standard and Customised Cutting Systems Available. Please contact for detailed Specifications.

INFION LASER

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