



LASER TECH
SYSTEMS AND SOLUTIONS

SERVICE BEFORE SALES

QuickWeld Series

Die Mould Laser Welding Machine

COMPANY PROFILE:

Laser Tech Systems and Solutions was founded by Mr. Rajiv Kumar with a group of Technocrats in 2021, with the idea of creating a large umbrella organization to assist and serve the growing Indian Laser Industry and to help the market with its years of experience in the field of Lasers and its applications.

We represent many global manufactures, covering a wide range of solutions Laser Marking, Laser Welding, 2D Laser Cutting, 3D Laser Cutting, Laser Cladding, Laser Hardening. Our Laser Solutions can process a wide range of materials like Metal, Paper, Acrylic, Wood, Textile, Leather, Plastic and many more.

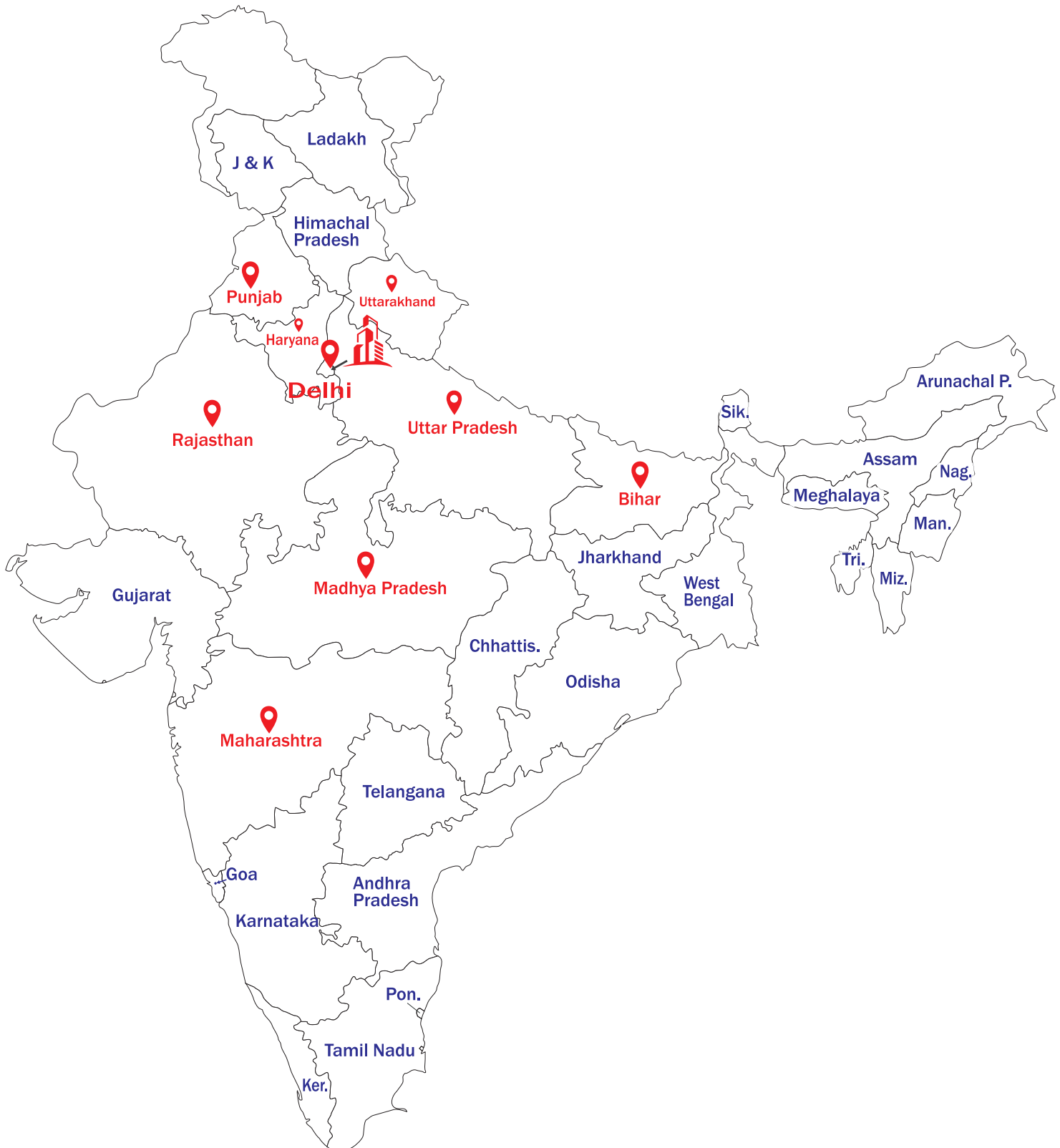
Our main aim is to serve our customers with cost effective and innovative solutions with our utmost know how of Applications and help them to fulfill their objectives.

Our aim is to provide the best solutions to all our customers with best systems and economical prices. We believe in **SERVICE BEFORE SALES**...We provide industrial solutions for Laser for Metals, non-metal laser cutting/engraving machines, Galvo based solutions, Laser Marking, Laser welding, 2D laser cutting, 3D laser cutting, Laser cladding etc.

LTSS Service and Support:

Laser Tech Systems and Solutions supports installation, commissioning, and training for its customers. Dedicated Laser Systems available for in-house demonstration, applications and software training. Specialized engineers are available to provide online and telephonic support.

*We proudly say that because of our team's dedicated efforts and our motto "**SERVICE BEFORE SALES**" we have a chain of happy customers related to various industries using our Laser machines in India.*



Die Mould Repair Laser Welding Machine



Product Description of Laser Welding Machines

A die mold laser welding machine is designed specifically for repairing and modifying molds, dies, and tooling used in various manufacturing processes. This machine employs advanced laser technology to perform precise welding operations on damaged or worn-out areas of molds and dies, effectively restoring their functionality and extending their life span. The machine is typically equipped with precision controls and computer software that enable operators to accurately manipulate the laser beam, ensuring precise welds with minimal heat-affected zones. This level of precision is critical for maintaining the intricate geometries and tight tolerances required for molds and dies used in industries such as automotive, aerospace, electronics, and plastics manufacturing. Furthermore, die mold laser welding machines offer versatility in welding dissimilar materials, making them suitable for a wide range of applications where molds and dies are made from different alloys or materials. Overall, these machines play a crucial role in minimizing downtime, reducing costs, and extending the service life of critical tooling components in manufacturing operations.

QuickWeld Series

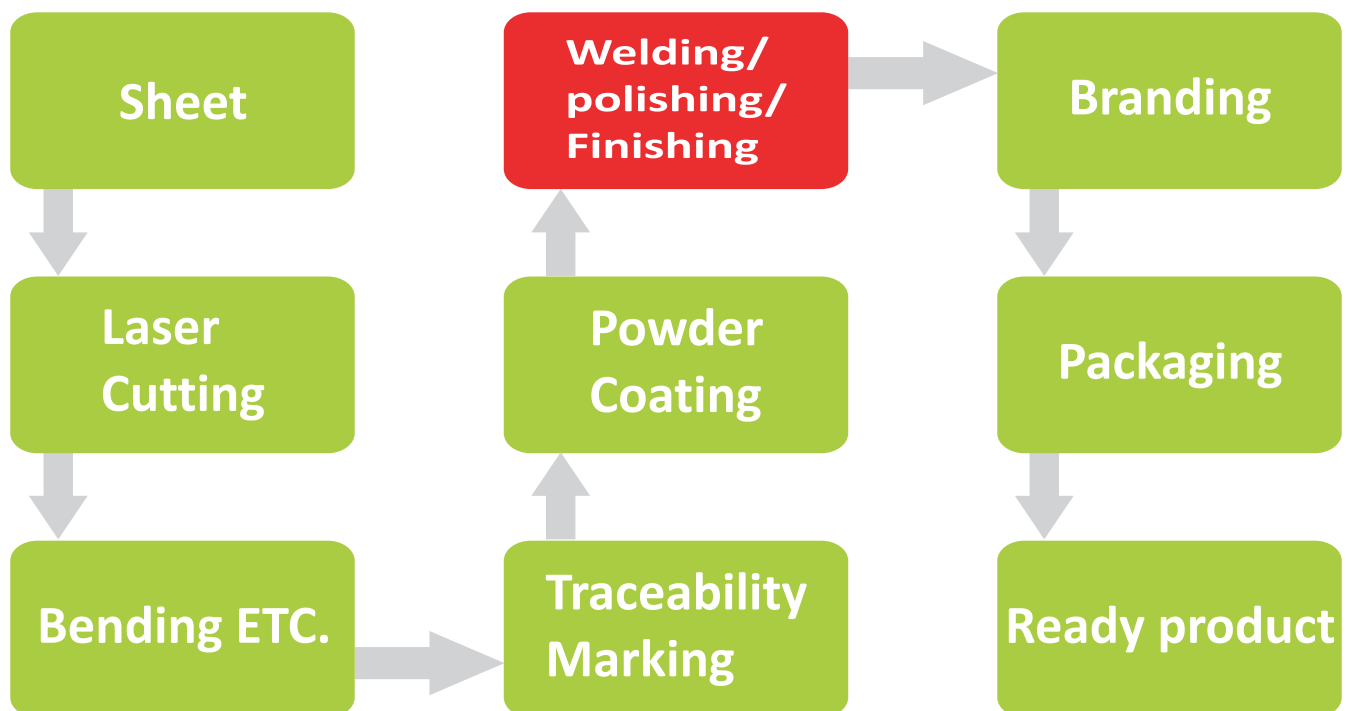
Die Mold Repair Laser Welding Machine

Main Features of Laser Die Mould Welding Machines

- * Adopt imported ceramic concentrated cavity, resistant to corrosion and high temperature, with cavity life of 8-10 years and xenon lamp life of more than 8 million times.
- * Adopt advanced automatic shading technology to eliminate eye irritation at work.
- * The laser head can rotate 360 degrees, and the whole part can rotate 360 degrees. It can move forward, backward, upward, and left and right.
- * The working table can be moved up and down by electric motor and move in three dimensions.
- * The photoelectric size can be adjusted electrically.

So, what's the Bottle Neck

Thin sheet manufacturing is used in a plethora of industries from kitchenware to furniture and from metro coaches to storage racks etc. Here are the various processing stages



To make process faster and productive must identify the bottleneck and for thin sheet metal fabricators always struggling with the welding, they have Laser -smooth cutting, fast but the welding conventional TIG or WIG.

Laser is the answers to all problems with Conventional Welding for Thin sheets??

The advantage of Laser Welding

Cost effective	Fast	Non-contact repair methods
Significantly less rework	Very low heat impact – minimum distortion	Very less structural changes in the base material

Mode	Product
SW-W400IV (400W)	Cranetype Laser Mould Repair System with YAG Laser and Cantilever Movement. Cooling System(Chiller)

Configuration

Brand	QuickWeld
Laser power	200 / 400W
Max Energy per Pulse	120J
Laser Wavelength	1064nm
Laser Welding Depth	0.1 to 1.6mm
Pulse Width	0.5-20ms
Continuous Welding Frequency	.5–100Hz
Spot Size Range	0.2–2.0 mm
Cooling water flow	10L/min
Power Consumption	≤ 12KW
Electrical Connection	380V/50Hz-60Hz/40A (3 Phase)
Max. height	165cm
Travel of cantilever (LxWxH)	100mmx 100mmx900mm
Load-bearing of worktable	less than 150KG
Focal distance	90mm/120mm optional
Diameter of welding wire	0.1mm-0.8mm
Weight	400kg
Hazard Class	Class 4

Advantages of Die Mould Laser Welding Machine

Precision Welding

Die mold laser welding machines provide exceptionally precise welding capabilities, allowing for targeted repair of damaged or worn-out areas on molds and dies. This precision ensures that the repaired areas meet the exact specifications required for seamless integration into manufacturing processes.

Versatility in Material Compatibility

They have the ability to weld a wide range of materials commonly used in mold and die manufacturing, including metals like steel, aluminum, and copper alloys. This versatility enables operators to repair molds and dies made from different materials without the need for multiple welding processes.

Enhanced Efficiency and Productivity

Die mold laser welding machines contribute to enhanced efficiency and productivity in manufacturing operations. The ability to quickly repair damaged molds and dies on-site eliminates the need for costly and time-consuming replacements or outsourcing of repair work.

Cost-Effectiveness and Long-Term Savings

They offer substantial long-term savings for all businesses.

By enabling in-house repair of molds and dies, these machines eliminate the need for outsourcing repair work to specialized service providers, reducing repair costs and turnaround times. Additionally, the extended service life of repaired molds and dies translates to lower replacement costs and reduced production interruptions over time.

Increased Design Flexibility

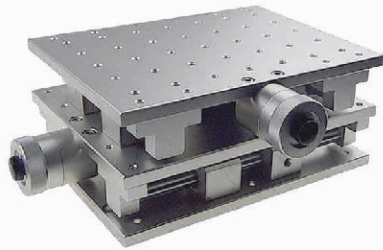
Die mold laser welding machines offer increased design flexibility by enabling precise modifications and customization of molds and dies. This flexibility enhances the agility and adaptability of manufacturing processes, empowering manufacturers to innovate and stay competitive in dynamic market environments.



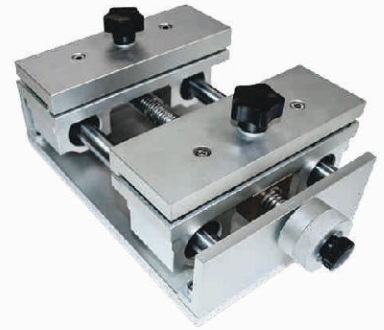
OPTIONAL ACCESSORIES



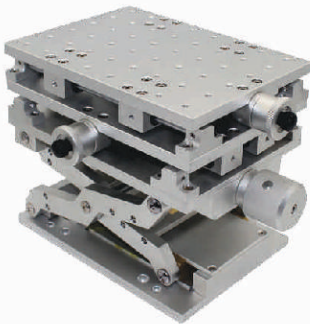
Induction Table



2D Marking Moving Table



Metal Cutting Fixture



3D Marking Moving Table



Rotary-Attachment



Conveyor Table



Enclosure Systems



Industrial Fume Extractor



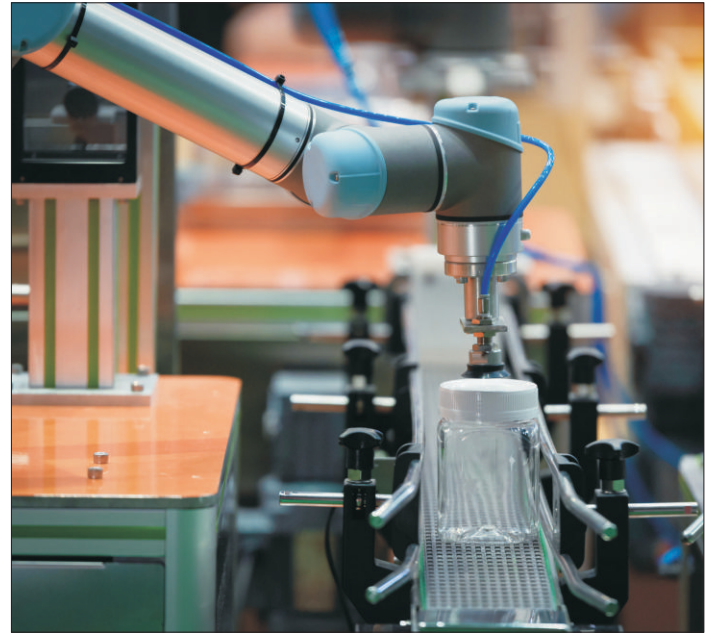
2D Electric Moving Table

APPLICABLE INDUSTRY

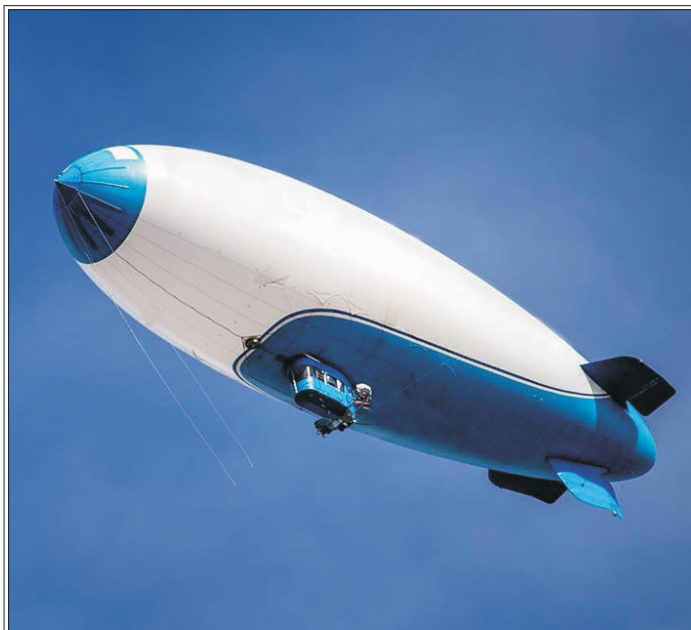
Applicable industry, railings of stairs and elevator, shelves oven stainless steel guardrail distribution box, stainless steel home supplies etc.



AUTO PARTS



PACKAGING INDUSTRIES



AIRSHIP



PLASTIC INDUSTRIES



MEDICAL INDUSTRIES



FOOTWEAR INDUSTRIES

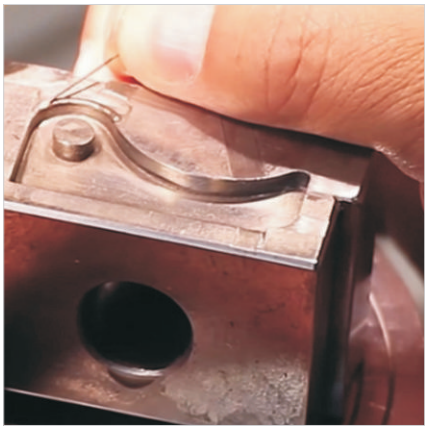
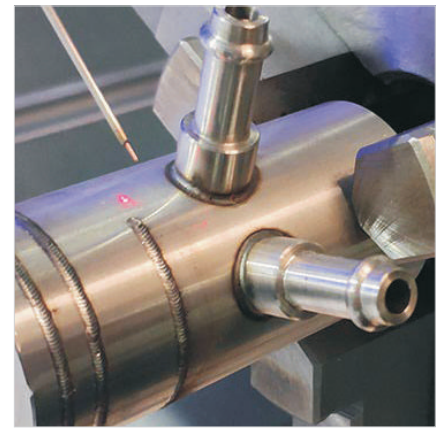
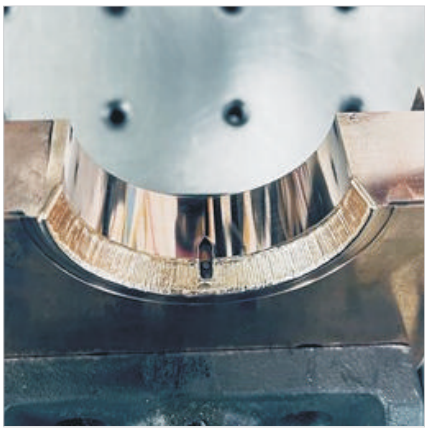
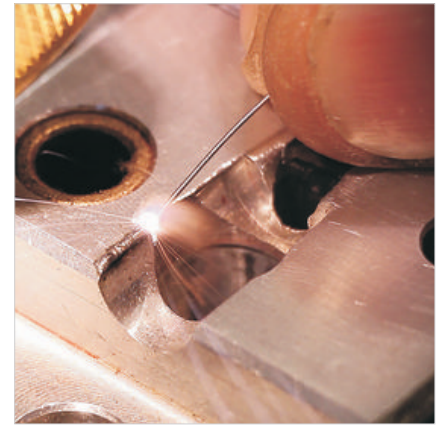
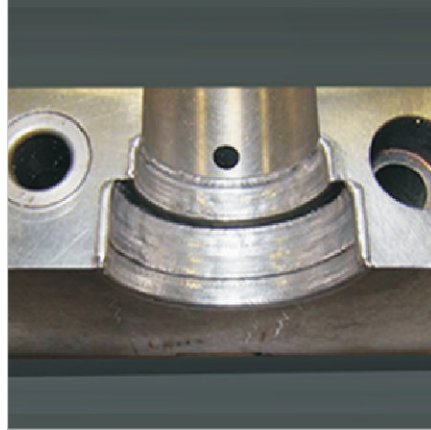


MARINE INDUSTRIES



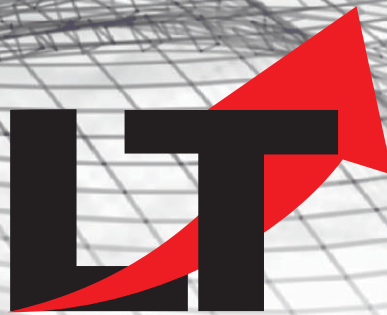
MACHINE MANUFACTURING

Die Mould Laser Welding Samples



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