MICROTECH PRECISION ENGINEERING

WELDING TECHNOLOGIES AND ADVANCED SOLUTIONS

Precision deposition. Controlled processes.
Reliable performance for critical components.



Precision in Every Component. Confidence in Every Delivery.

- CNC HOTWIRE TIG
- LASER WELDING
- ROBOTIC WELDING
- HARD-FACING / CLADDING
- PLASMA WELDING
- ARC /TIG/ MIG WELDING

Engineering Expertise. Process Discipline.

COMPANY OVERVIEW

Advanced welding capabilities supporting precision manufacturing.

- Precision manufacturing and advanced welding solutions
- Support for Oil & Gas, valve, general engineering , Defence, Aerospace & Marine applications
- Integration of machining, welding and inspection requirements
- Focus on repeatability, traceability and delivery performance



CNC HOTWIRE TIG AUTOMATION

Hard-Facing & Cladding Applications

COMPONENT-FOCUSED SOLUTIONS









APPLICATION EXAMPLES

- Ball valve component cladding
- Valve trim and sealing surfaces
- Wear-resistant overlay on selected components
- Stellite or other approved overlay materials
- Post-weld machining and dimensional verification



CNC Hotwire TIG Welding

TECHNOLOGY SPOTLIGHT



VALUE PROPOSITION

- Programmed welding paths for controlled deposition
- Suitable for selected large and complex components
- Potential use in hard-facing, cladding and build-up applications
- Parameter control and documented inspection requirements

Why MICROTECH?

Critical component manufacturing

High-mix / low-volume precision machining

Advanced welding and overlay capability



Engineering support from drawing to dispatch

Quality, traceability and delivery discipline

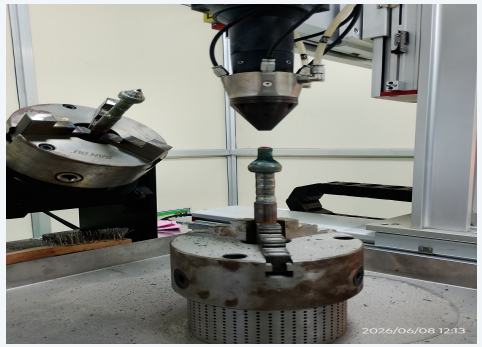
A customer-focused manufacturing partner

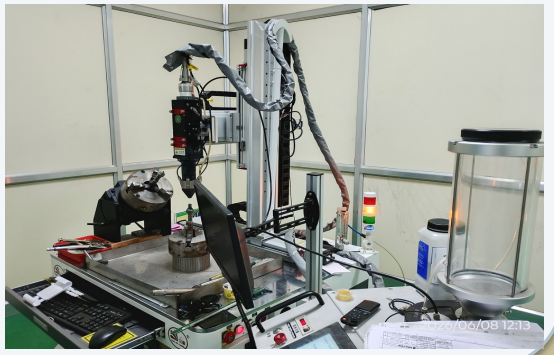
Laser & Robotic Welding Solutions

TECHNOLOGY SPOTLIGHT



LASER ARM / LASER WELDING





ROBOTIC LASER WELING



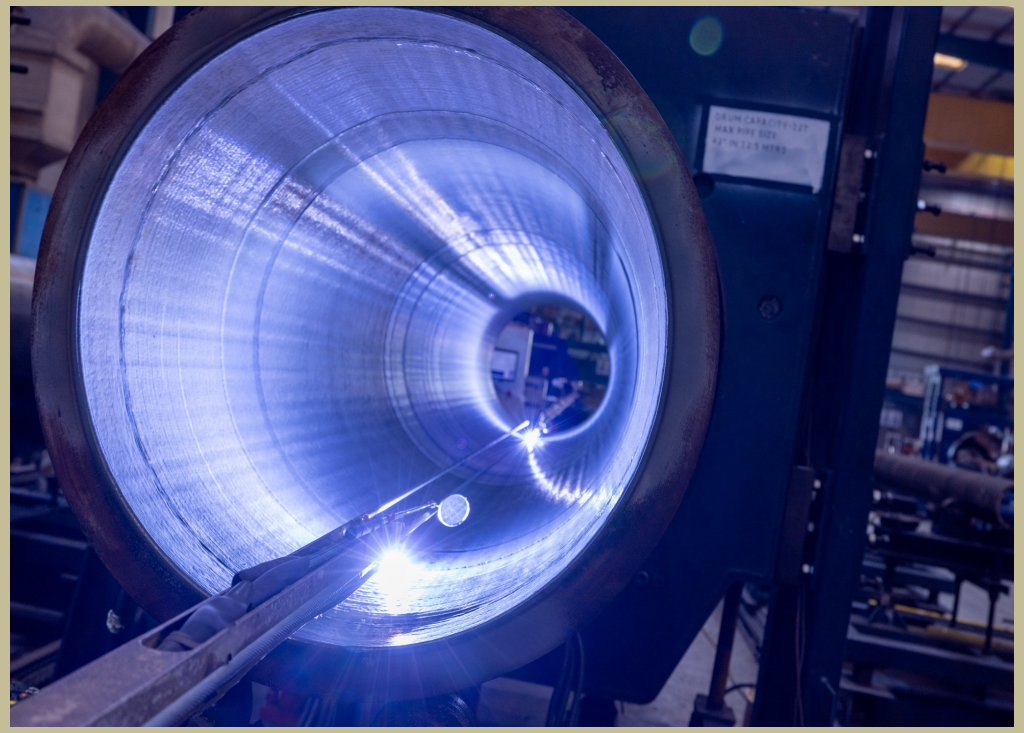


Laser welding

Focused energy delivery for applications where precision and heat-input control are important.

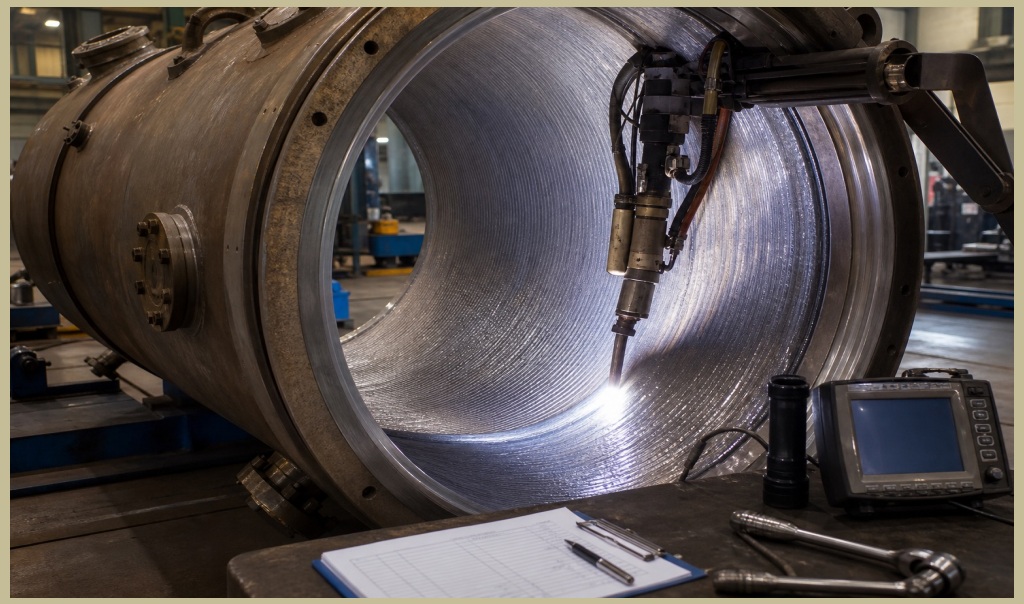
Robotic LASER welding

Programmable motion and repeatable torch paths for suitable component geometries.





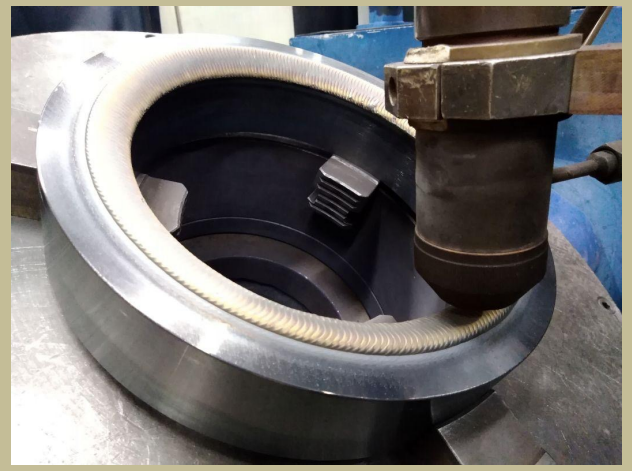
CLADDING WELD
HOTWIRE CNC WELDING



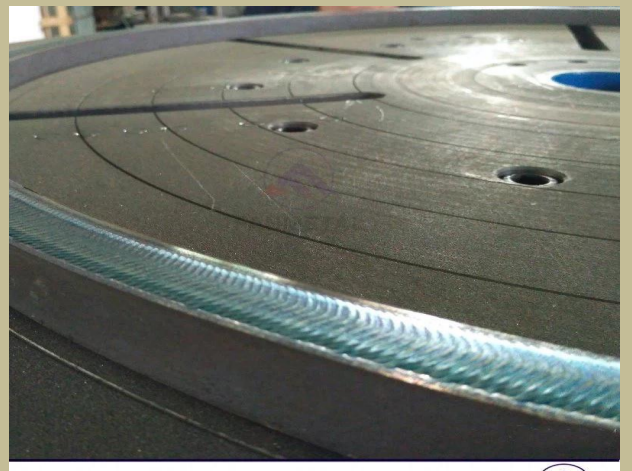




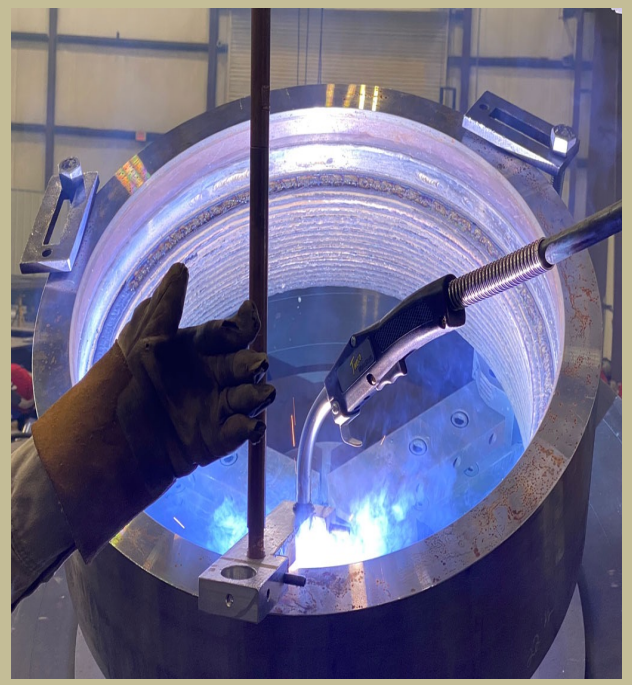
WELDING PRODUCTS - CNC HOTWIRE WELDING TECHNOLOGY







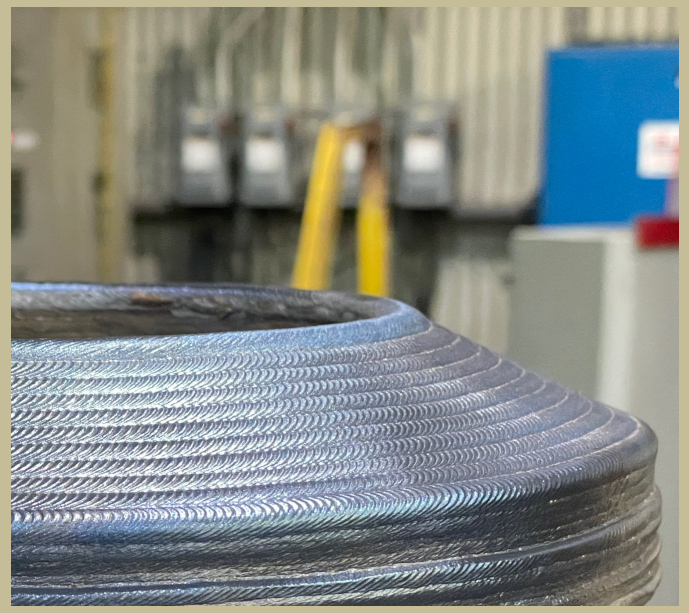






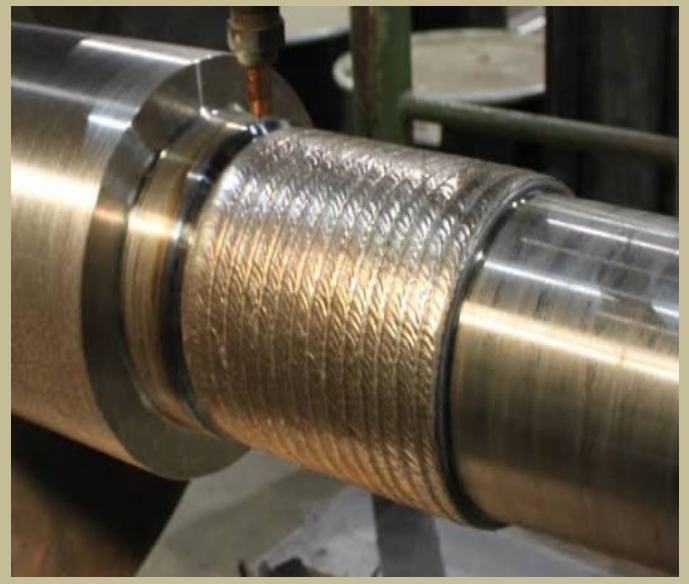
CLADDING WELD
HOTWIRE CNC WELDING

WELDING PRODUCTS - CNC HOTWIRE WELDING TECHNOLOGY





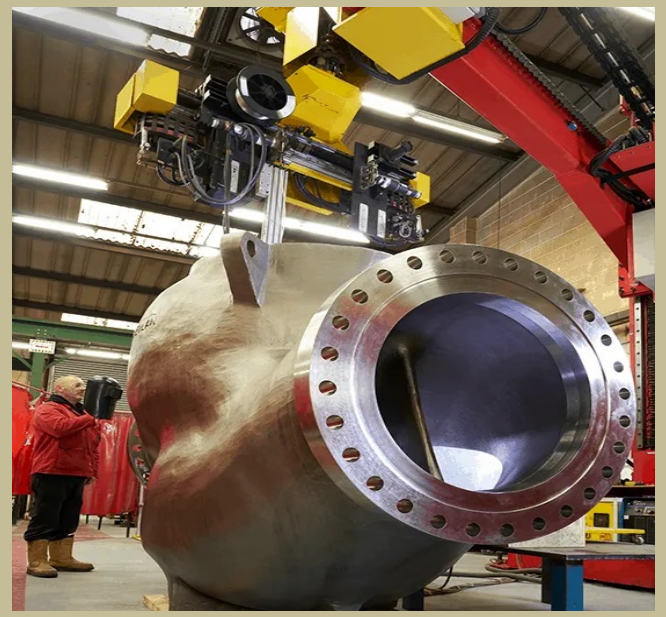


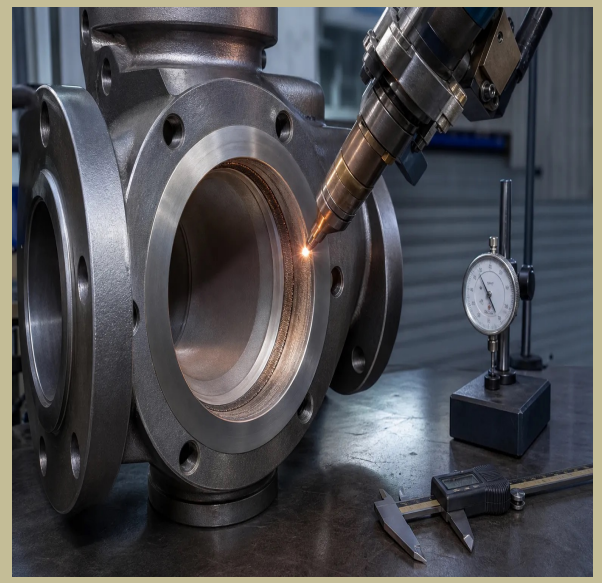


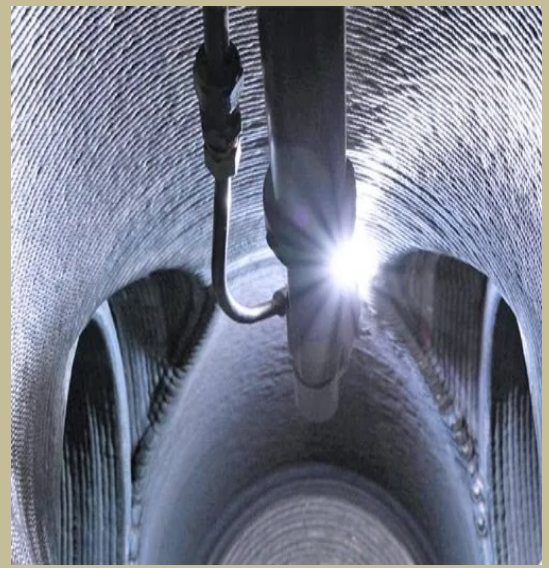






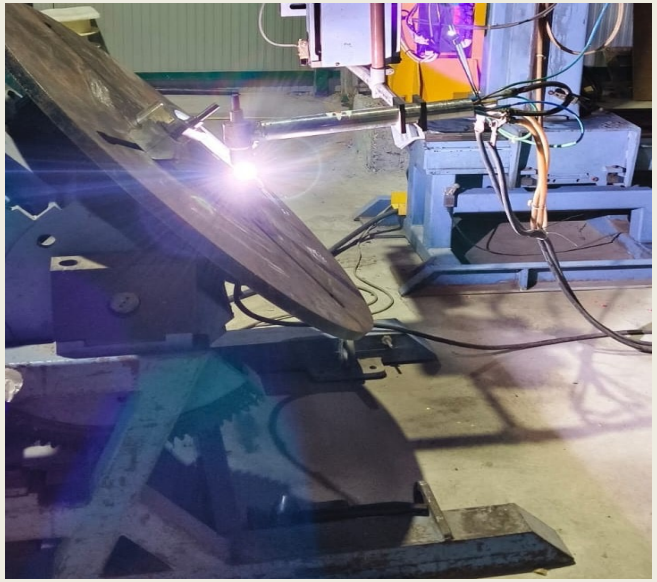




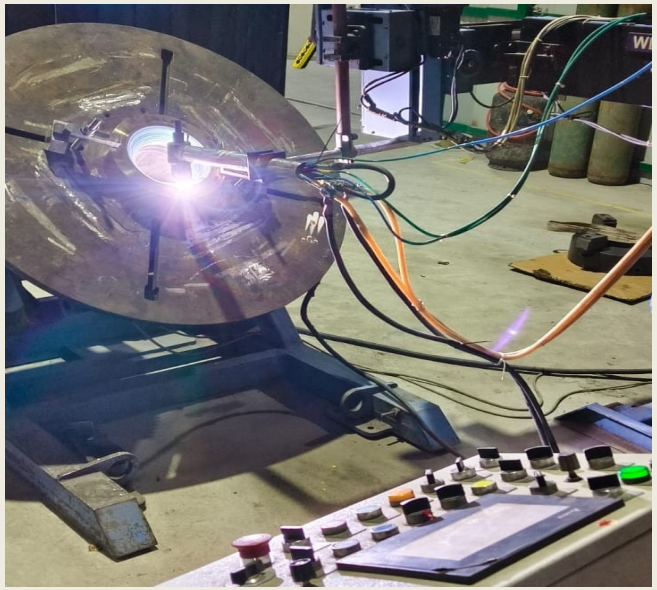



PLASMA / MIG / TIG WELDING

PLASMA WELDING



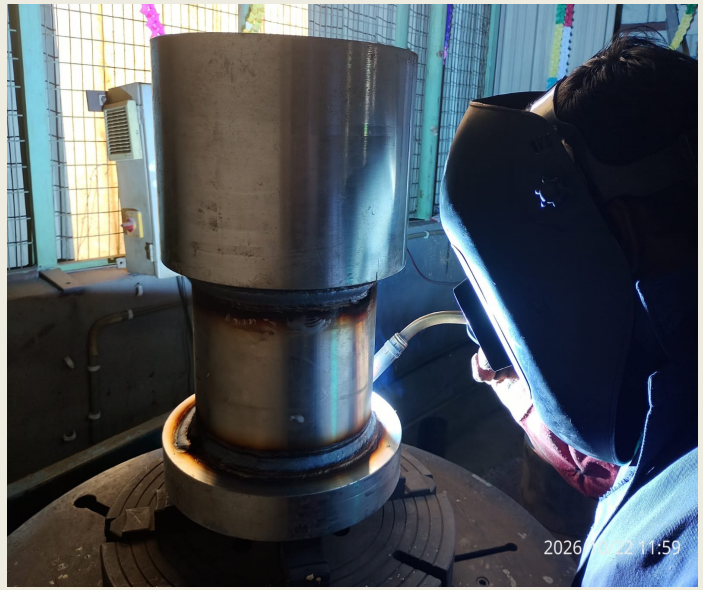
PLASMA WELDING



TIG WELDING



MIG WELDING



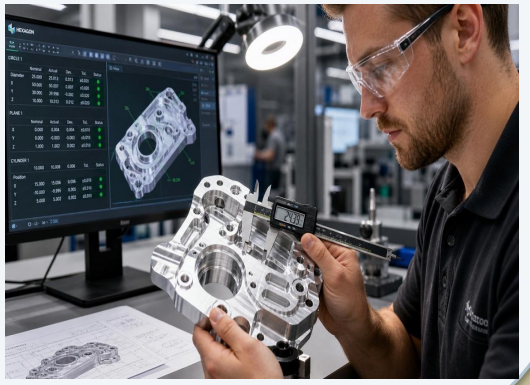
Quality Assurance & Traceability

BUILT INTO THE PROCESS









QUALITY CONTROLS

- Material identification and traceability
- WPS / procedure and welder qualification as applicable
- Consumable storage, handling and batch control
- Visual and dimensional inspection
- DPT / other NDT as specified by customer
- Weld records, inspection reports and final release

Welding Technology Portfolio

CAPABILITIES AT A GLANCE

CNC Hotwire TIG
Program-controlled deposition for complex or large components (Hard facing overlay)

CNC Laser Welding
Precision joining / deposition with focused heat input.(Hardfacing overlay)

Robotic Laser Welding (Hard facing overlay)
Repeatable welding paths for suitable production applications.

Plasma welding overlay
Hard facing overlays, including Stellite 6 / Stellite 21 overlay hardfacing.

TIG / MIG Welding (Manual)
Hard facing overlays, including Stellite 6 / Stellite 21 overlay hardfacing.

Arc Welding (Manual)
Assembly, Joints, Fabrication etc..

Controlled Welding Process Flow

FROM ENQUIRY TO DISPATCH

01 Technical review

Drawing • material • acceptance criteria

02 Process planning

WPS / parameters • fixture • route card

03 Material verification

Identification • traceability • consumables

04 Welding execution

Qualified operator • parameter monitoring

05 Inspection & NDT

Visual • dimensional • specified NDT

06 Machining & release

Final inspection • records • dispatch

Industries & Component Applications

WHERE WELDING EXPERTISE CAN ADD VALUE

Oil & Gas

Valve trim • sealing surfaces • wear protection

Valves

Ball / control valve components • overlays

Industrial Pumps

Wear-related components and repair feasibility

Pressure Equipment

Selected fabricated / pressure-related components

Energy & Turbine

Application-specific overlay and welding needs

General Engineering

Specialised joining, build-up and machining integration

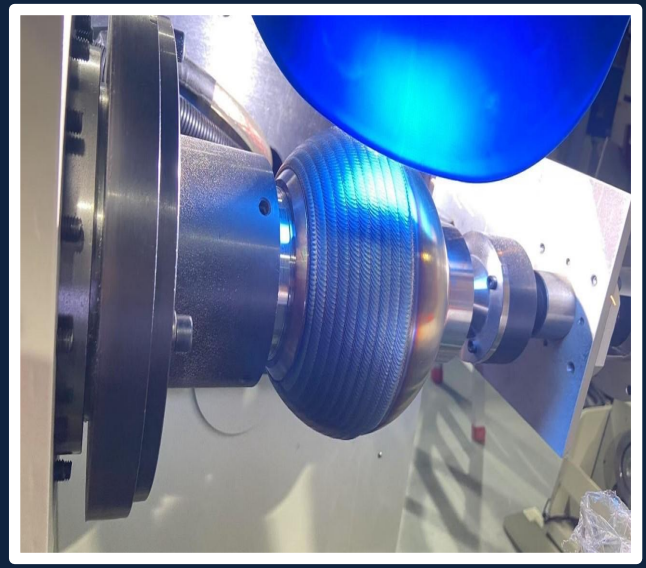
LET’S ENGINEER THE RIGHT WELDING SOLUTION.

MICROTECH PRECISION ENGINEERING
576/5, POTHIYAM PALAYAM ROAD
ARASUR – ANNUR TK
COIMBATORE – 641407
TAMILNADU - INDIA

+91 97860 51113 (Mr. A. Mohan Raj, CEO)
+91 90473 33308 (Mr.Guru – Operations)

mohan@microtechprecisionengineering.in
works@microtechprecisionengineering.in

microtechprecisionengineering.in



Precision in Every Component. Confidence in Every Delivery.