

Last date for registration 12 February 2026

INTRODUCTION

Welding technology is a fabrication process that joins materials together by melting them and adding a filler material to create a weld pool. The weld pool then solidifies to form a sturdy joint between the materials. Different welding technologies use different methods to join materials, such as electricity, lasers, or high-temperature flames. How Welding Technology has Changed over the Years, can be explained by recent improvements in welding technology include friction, inertia, and laser welding.

Welding Automation: Propelled by unprecedented improvements in technology, the welding process has now reached the age of automation. Automation has also enabled the industry to keep up with the ever-growing demand from other industries that utilize welding products. Not only does automation allow faster production, but it also enables a more accurate process of welding materials which is important for the transportation, marine, automotive and marine industries. Welding robots are also on the rise. Although they require a huge amount of investment, these robots are able to do the job quicker. Also, labourers are kept away from possible injuries and danger associated with the welding process.

This learning intervention will help companies to explore, identify and drive developments in welding technology as a part of manufacturing operations by developing a group of Welding leaders. These leaders would design, develop, and demonstrate an implementable solution to an opportunity identified by their company or the business / plant head.

To extend the benefits of experience and competency in Welding technology; Indian Machine Tool Manufacturers' Association is organising 2 days training programme on "Joy of Welding in Manufacturing".

FOCUS AREAS

- Welding concepts, basics and weld positions
- Classification of welding, AWS
- Welding applications
- GMAW, FCAW, GTAW, SAW and RW
- Welding defects
- Weld distortion, prevention techniques
- Weld Design aspects and design guidelines
- Recent advancements in welding: FSW, LBW etc.,
- Robotics and Welding automation
- Welding Simulation-Software
- Welding Inspection- NDT techniques
- Welding Parameters- Thermal stress relieving
- Case studies
- Welding Videos, presentations- New welding technology and Robotics
- Industry Visit

KEY TAKE AWAYS

After undergoing the programme, the participants will be able to -

- Refreshing basics of Welding
- Welding Processes choices available
- Welding Robotics and Automation
- Design Guidelines for few welding methods
- Welding defects, testing and Inspection
- Welding Pre heating and PWHT
- Develop design and manufacture of welded structures and products.

PARTICIPATION FEE

Rs. 4999/-
+18% GST

**IMTMA Members/ Micro Companies/ Individuals/
Educational Institutions / Students/ IMTMA Non
Members/ Others**

USD 200/-
Overseas Participants

Group Concession : 10% for 3 to 5 and 20% for 6 and more delegates being nominated from the same company

PARTICIPANT PROFILE

This course is ideal for those who are in Design and Manufacture of welded fabrications.

- Managers/ Senior Managers of Manufacturing industries
- Managers/ Senior Managers from Operations, Quality, Supply Chain, etc.
- Engineers who have the role of enabling welding in their products and processes in manufacturing industries.
- Production Engineers/ R&D Engineers/ Shop-floor Supervisors Professors/ HOD

FACULTY

S V Nanda Kumar B.E. (BU-Mech), M.Tech (IIT-M- CIM)

For Registration Contact

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REGISTRATION : Prior registration for participation is necessary. Number of participants is limited and will be accepted on 'First Come First Serve' basis. A Certificate of participation will be issued to participants.

Important Information : Participation fee includes, course material, working lunch and tea / coffee. Interested companies are requested to register online by clicking on 'REGISTER' button and by filling up the nomination authority and participant's details in specified form.