Manufacturing Technology Training
An IMTMA initiative

Welding Inspection & Quality Control
Date : 10 to 11 December, 2026
Venue : IMTMA Technology Centre, Bengaluru

Last date for registration 03 December 2026

INTRODUCTION

Welding quality has a direct impact on the **safety, reliability, performance and service life** of welded structures and components. Effective welding inspection and quality control are therefore essential for industries such as fabrication, pressure vessels, pipelines, power plants, automotive, defence, aerospace, infrastructure and heavy engineering.

Keeping this in view, Indian Machine Tool Manufacturers' Association (IMTMA) is organizing a 2 days offline training programme on **“Welding Inspection & Quality Control”.**

This two-day programme provides a practical understanding of **welding inspection principles, quality control requirements, welding defects, inspection methods, documentation and applicable standards**.

The course is designed to bridge the gap between welding production and quality assurance, enabling participants to effectively identify, prevent and control welding-related quality problems.

FOCUS AREAS

Welding Inspection Fundamentals

- Role & responsibility of a welding Inspector
- Welding terminology and welding Symbols
- Welding joint configuration and positions
- Welding stages and inspection planning

Welding Processes and Parameters

- SMAW, GAMW/MIG-MAG, GTAW/TIG, FCAW and SAW
- Welding parameters and their influence on weld quality
- Heat Input & preheating and Interpass temperature
- Welding sequence and distortion control

Welding defects and Quality control

- Common welding defects
- Causes and prevention

Welding visual Inspection

- Surface preparation and inspection conditions
- Visual inspection
- Dimensional Inspection and Distortion
- Weld acceptance criteria

Non-Destructive Testing

- Principle and application of:
- Liquid Penetrant Testing (PT)
- Magnetic Particle Testing (MT)
- Ultrasonic Testing (UT)
- Radiographic Testing (RT)

Welding Procedure and Personnel Qualification

- WPS - Welding Procedure Specification
- ISO 15614 – Welding Procedure Qualification
- ISO 9606-1 – Welder Qualification
- Review and verification of welding documents

KEY TAKE AWAYS

At the end of the programme, participants will be able to:

- Understand the fundamentals of welding inspection and quality control
- Plan inspection activities at different stages of fabrication
- Identify common welding defects and understand their causes
- Perform effective visual and dimensional inspection
- Understand the principles and applications of major NDT methods
- Interpret welding drawings, WPS and inspection requirements
- Understand acceptance criteria and quality requirements
- Improve the overall reliability and quality of welded fabrication

PARTICIPATION FEE

Rs. 4999/-	Rs. 2500/-	Rs. 999/-	USD 200/-
+18% GST	+18% GST	+18% GST	
IMTMA Members/ Micro Companies/ Individuals/ IMTMA Non Members/ Others	**Professors**	**Student**	**Overseas Participants**

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

PARTICIPANT PROFILE

The programme is particularly suitable for:

- Welding Inspectors and Quality Inspectors
- QA/QC Engineers and Managers
- Welding Engineers and Welding Supervisors
- Fabrication Engineers
- Project Engineers and Site Engineers
- Professionals involved in welded fabrication and quality management

FACULTY

This programme will be conducted by, IMTMA Subject Matter Expert.

He is an International Welding Engineer (IWE) and retired officer of the Indian Skill Development Service (ISDS), has over 40 years of professional experience in welding technology, skill development, training, industrial inspection and technical consultancy. He served for more than 25 years with the Ministry of Skill Development and Entrepreneurship, including as Joint Director-cum-Principal, with expertise in vocational training and competency development.

He also brings around 15 years of experience with a DRDO laboratory, specializing in welding structural inspection and metrology inspection of Main Battle Tanks. His key areas of expertise include welding inspection and quality assurance, welding procedures and welder qualification, ISO 3834, welding standards and certification. He is also actively associated with the Indian Institute of Welding (IIW) India, including its Bengaluru Branch.

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.