



One-Day Training Programme on Innovative Heating Techniques: Induction Heating for Pre-Weld and Post-Weld Heat Treatment

15th
November, 2025

Evolve by TCR
215, Pancham Icon,
Vasna Road, near D-Mart,
Vadodara, Gujarat 390007

Fees: INR 5,000/-
for single person +
GST 18% extra.

10% Discount on total
amount of invoice for 03
or more nominations from
the same organization.

Course Content

- Overview of Industrial Heating Methods.
- Principles Underpinning Various Heating Techniques.
- Critical Role of Preheating, Inter-pass Temperature Control, and Post Weld Heat Treatment (PWHT).
- Induction Heating as a Superior Alternative to Gas and Resistance Heating.
- Influence of Uniform Heating on Mechanical and Metallurgical Properties.
- Industrial Applications and Implementation Scenarios for Induction Heating.

Who Should Attend

- Welding Engineers and Metallurgists
- Plant Maintenance and Reliability Engineers
- Fabrication and Production Engineers
- Quality Assurance and Inspection Personnel
- NDT and Inspection Professionals
- EPC Contractors
- Third-Party Inspectors
- Supervisors and Foremen in Fabrication and Welding Units

Objectives of the Training Programme:

- Develop an in-depth understanding of the influence of various heating methods on metallurgical transformations, mechanical properties, and residual stress distribution in welded joints.
- Gain technical proficiency in the principles, control parameters, and operational advantages of induction heating as a precise and efficient technique for pre-weld and post-weld thermal treatment.
- Acquire practical knowledge of best practices for implementing induction heating in diverse applications such as repair welding, circumferential welds on rotational components, and controlled heating in constrained environments.
- Comprehend the critical roles of preheating, Interpass temperature control, and post-weld heat treatment (PWHT) in mitigating hydrogen-induced cracking, controlling microstructure evolution, and ensuring weldment integrity.

Meet The Faculty



Subject Matter Expert (Another Faculty)

- He holds an M.E. in Metallurgical Engineering and a Ph.D. in Welding Technology, with over 15 years of expertise in welding consumable testing, selection for similar/dissimilar metals, and welding procedure qualification. He is proficient in advanced welding processes including SMAW, GTAW, GMAW, SAW, Pulse TIG, Plasma TIG, Activated TIG, and WAAM, and is a recognized expert in induction heating for pre- and post-weld heat treatment. With deep insight into welding metallurgy and heat-affected zone behaviour, he has trained professionals across industries on ASME Section VIII Div. 1, ASME IX, and EN/ISO 15614-1 & 9606-1 standards. His unique ability to connect metallurgical theory with practical applications makes him a highly respected trainer in welding technology and heat treatment practices.

Subject Matter Expert (Another Faculty)

- He holds a Ph.D. in Metallurgical Engineering and is a certified International Welding Technologist (IWT), BS EN ISO 14731 Welding Coordinator, and BS EN ISO 3834 Auditor. With over 12 years of specialized experience in welding training, he brings deep technical knowledge in welding metallurgy—particularly of stainless steels and dissimilar metal combinations. He is highly proficient in international welding standards, including ASME Section VIII Div. 1, ASME IX, EN ISO 15614-1, ISO 9606-1, ISO 14732, and AWS D1.1. Known for his clarity in interpreting welding codes and qualification processes (WPS-PQR-WPQ), he has successfully trained engineers, inspectors, and coordinators across industries. His strong academic foundation and code-based expertise make him an authoritative trainer in welding metallurgy and compliance-driven welding practices.



Mr. Paresh Haribhakti, MD

- He holds a post-graduate degree in Materials Technology from M.S. University, providing him with a solid academic foundation in metallurgy and materials science. With a leadership role at TCR Advanced Engineering Services, he has accumulated extensive experience in metallurgical engineering, and has solved over 9000+ industrial challenges. He is expert in risk mitigation and management. He has also developed innovative tools for asset management and reliability enhancement, specifically tailored to the needs of critical infrastructure in the fertilizer and chemical industries.
- Paresh has authored 'Failure Investigation of Boiler Tubes: A Comprehensive Approach', published by ASM International, USA. His commitment to advancing knowledge and expertise is evident through his active participation in global conferences and contributions to leading metallurgical journals. He is an acclaimed expert for damage mechanism of oil & gas, refinery, petrochemicals, power, fertilizers. He holds expertise in inspection of fertilizer and petrochemical tanks

Mr. M.N. Patel

- BE & ME in Metallurgy. Has 33 years of teaching experience in UG and PG level in subjects like Plastic Deformation of Metals, Mechanical Metallurgy, NDT and Failure Analysis, Mechanical behavior of materials, Selection of Materials and Failure Analysis, Physical Metallurgy and Welding Metallurgy.
- He holds expertise in physical metallurgy, micro structural analysis, scanning electron microscopy, welding metallurgy, failure analysis.



For NFET/ RTGS/ Bank transfer:

Account No: 05730400000034
IFSC: BARB0INDMAK (5th letter is zero)
Bank: BOB, Makarpura Branch
Merchant Name: TCR ADVANCED ENGINEERING PVT LTD
UPI ID : tcrad93762@barodampay



QR code for payment