

Automation and I4.0 in Welding Date: 21 to 22 September, 2021

Time: 1340 Hrs to 1700 Hrs (Online Mode)

### **INTRODUCTION**

With many variables affecting the productivity and quality, Welding still remains more of an art than science. Deskilling and getting defect & distortion free welding remains a big challenge. This feature also affects the efficacy of deploying "Robotic Automation" where the Controls remain blind to the welding process and just do blind execution of trajectory programmed. In fact, real time sensing of welding variables and adaptive control of automation is a dire need.

Realization of adaptive welding automation can be easily linked to larger umbrella of Industry 4.0 for Welding Process and Equipment since the welding equipment is already coming with many Industry 4.0 features build into them.

Special Offer: Participants will be provided **FREE ACCESS** to **IMTMA E'learning course** on "**Arc Welding Processes**" towards continual learning and up skilling. Access will be valid from 21 Sept to 30 Sept 2021.

#### **FOCUS AREAS**

- Welding Challenges for the industry
- Tips for Distortion / Defect & Distortion Free Welding
- Welding Process Design, Standards and Best Practices
- Need for an 'Intelligent' Welding System
- Introduction to existing intelligent Welding System
- Advanced welding Process- Cold Metal Transfer(CMT) for Automotive and 3D Printing
- Automation in Welding, Live Demonstration of easy & simple welding automation
- Role of Fixturing and weld sequence optimization
- Live Demonstration of Robotic Welding Solutions with Industry 4.0

#### **KEY TAKE AWAYS**

- Update themselves on I4.0 and automation features in welding process
- Update on new developments in sheet welding technology as well as heavy duty fabrication welding
- Visualize and envision integration of their welding processes through Industry 4.0
- · Possibilities of De-skilling
- Specific requirements from different sectors such as Automotive, Ship Building, Railways, Pressure Vessels and Structures

# **FEE PER PARTICIPANT (PER LOGIN)**

Rs. 4500/
+18% GST

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

Members/ Others

USD 135/-Overseas Participants

Group Concession: 20% for 3 to 5 and 30% for 6 and more delegates being nominated from the same company

# **FACULTY**

This program will be conducted by Mr. Avinash Khare, Mr. Shripad Ranade & Team of Experts from Fronius India.

**Mr. Avinash Khare,** is presently working as a Consultant Head for IMTMA Pune Technology Centre for last 5 years; he has been designing, developing content and delivering wide range of Training Courses as a Faculty. He is Electrical Engineer by Qualification and he has worked for over 33 years at Tata Motors Pune in various capacities ranging from R&D in Industrial Electronics, Machine Maintenance, Technology Procurement, Head of Machine Shops, Tool Room Shop Head, Head of Die Design and Champion in Business Excellence.

**Mr. Shripad Ranade,** he is a dynamic and highly regarded Welding Engineer and Manager who has excelled throughout his career to date, this has involved gaining comprehensive experience in the oil and gas sector, Mobility, Aerospace and welding engineering and across all levels through to management role. An individual with extensive project exposure, this has involved maintaining complete strategic planning, quality management and project leadership control. Over 33 years of experience in welding engineering, Project Planning, Project Management and Inspection with reputed business houses.

Extensive experience in Welding Process such as SMAW, GTAW, GMAW, FCAW, SAW, PAW, EBW

Hands on experience in welding automation – orbital pipe welding, tube to tube sheet welding, plasma welding. Well versed with welding Codes & Standards such as ASME, TEMA, API 1104, AWS D1.1, AWS D 17.1, ANSI B 31.3, 31.4., DIN standards, PED norms, Aerospace standards & NADCAP approvals. Worked on Aerospace standards AS -9100 [aerospace standards].

## **For Registration Contact**

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