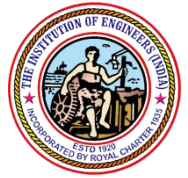




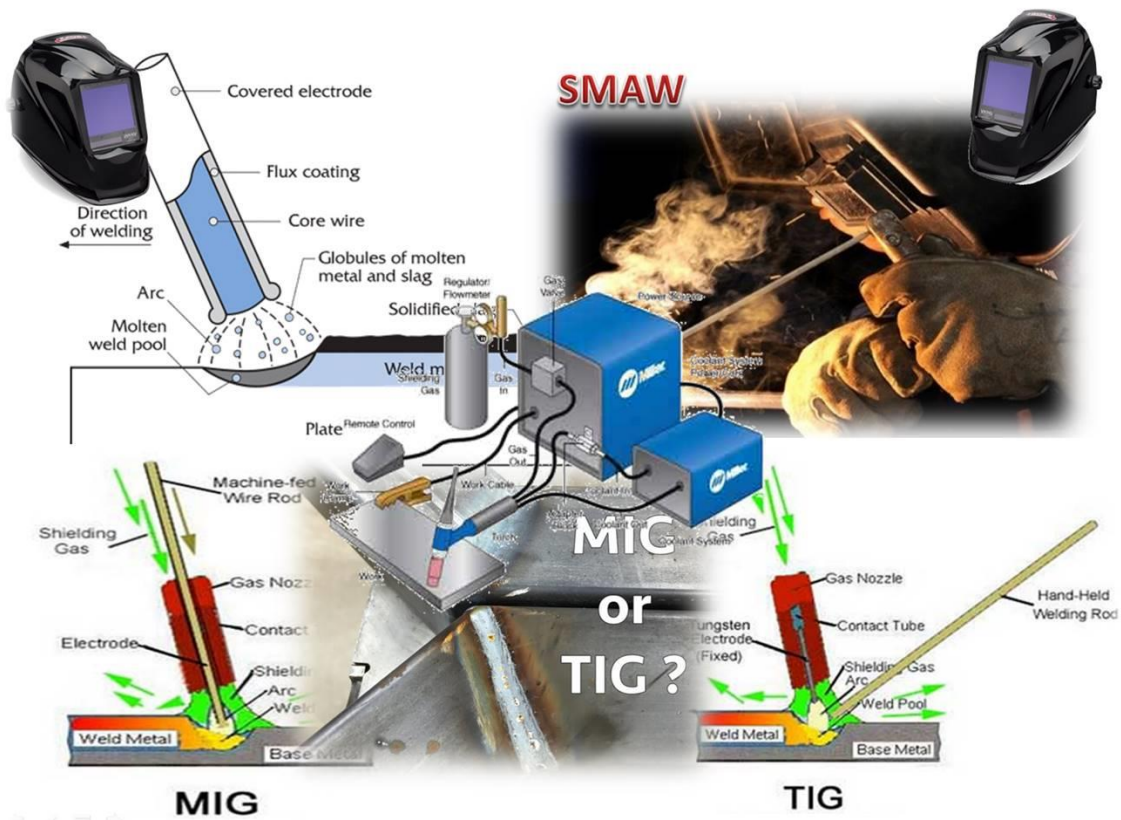
Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)
Old Bombay Road, Gachibowli, Hyderabad – 500 032.TS, India



Management and Technology Division

Continuing Professional Development Programme on **Welding : A welder's Perspective in SMAW, TIG and MIG** 06 - 10 August 2018



(An ISO 9001:2015 Certified, AICTE & CEA Recognized Institution)

Centre for Promotion of Professional Excellence

INTRODUCTION:

Worldwide, welding is a multi-billion dollar fabrication technology, used extensively in the construction of building, bridges, manufacturing automobile, aircraft, aerospace applications, power & energy sector, shipbuilding and electronic industries. Defects in welds or poor performance of weld can lead to catastrophic failures with costly consequences including losses to property and life.

As materials are developed with increased strength, corrosion resistance and other performance factors, has assumed even greater importance. Special filler materials, pre and post weld heat treatment and advanced welding techniques have resulted in higher productivity.

While the weld practitioners have mastered the skill over a period of time, updating them with practices and advancements becomes relevant. In addition advancement in technology of welding, practices, materials equipment and inspection and quality control processes need also to be conveyed to the personnel in the field.

This programme developed by senior and experience scientists and industrial experts' deals with developing the welding skills of the welders during welding and repair welding processes.

OBJECTIVES:

The main objective of the programme is to:

Re-equip engineers, managers, welders and related personnel with the knowledge and information on welding practices with a view to realize how to produce consistently high quality weld joints in industrial scenario.

COURSE CONTENT

- Introduction to welding and allied processes and Duties and responsibilities of welder and welding engineer
- Brief introduction and comparison of different welding processes
- Welding terms and definitions
- Types of weld joints and positions
- Weld bead geometry and terminology
- Understanding engineering drawing and welding symbols
- Welding arc and power sources
- Shielded metal arc welding : process and techniques
- TIG welding : process and techniques
- MIG welding: process and techniques
- Welding consumables and accessories (SMAW, TIG and MIG)
- Techniques of welding in SMAW, TIG and MIG
- Visual examination of weld joints and welding parameters optimization
- Automation in TIG and MIG
- Planning and design of weld fixtures and tooling
- Weld joint design and preparation methods
- Pre-weld cleaning practices for different materials
- Weld quality and inspection techniques
- Welding defects and ways to minimize them
- Repair welding procedures
- Control of welding distortion and residual stresses.
- Safety practices in welding and cutting
- Standards and codes in Welding
- Welder Qualification Procedures : WPS/ PQR /WQR
- Welding practices in Aerospace and defence sectors.

Technical Visit to Modern Welding Technology Units

METHODOLOGY:

Methodology of the programme includes class room Sessions with Lecture/discussion with audio visual aid, benched marked practices if any, video shows, Chalk & Talk sessions, group discussions, case studies, debates, sharing of experiences, etc. All the sessions will be interactive demanding active participation from all the members. Case Method of Instructions will be the main method of knowledge facilitation. Technical Field and Social visits are integral part of the training methodology.

FACULTY

The faculty for the programme consists of Eminent Experts from various Research and Manufacturing organisations besides the core faculty from ESCI.

PROGRAMME ADVISORY COMMITTEE & RESOURCE PERSONS:

Mr. P. Mastanaiah, Division Head, Special Fabrication Division

Mr. Surendra Kumar OS and Former Lab Director of DRDO Lab

Dr. KGK Murti, Former Sr. Dy. General Manager, Welding Research Institute BHEL, Tiruchirapalli ,
Tamil Nadu

TARGET PARTICIPANTS: -

Engineering Executives, Scientists from various Defence Labs, Engineering Managers, Supervisors working in production, welding, R&D units, process planning, designs, maintenance and Quality Control / Quality Assurance in manufacturing and process industries, heavy equipment fabrication sectors, automobile, defence, aeronautical, electronics, power sectors, medical products, precision instruments, petrochemicals, fertilizers, ordnance factories, public & private sectors enterprises will get immense benefits attending the programme.

BENEFIT TO THE PARTICIPANTS.

- Generating and Understanding awareness on latest techniques in welding processes and good practices in the field.
- Enhancing knowledge through case studies, field visit and interactive experience sharing.
- Exploiting the knowledge gained during the programme in correct identification, optimum utilization of thereby enhancing the productivity and finally profitability of their organization

PROGRAMME VENUE, DATES & TIMINGS

Venue: Engineering Staff College of India (ESCI) Campus, Old Bombay Road, Gachibowli, Hyderabad. 500032. TS, India.

Dates

06 – 10 August 2018

Timings

On the first day Registration will commence at 0900 h. On all other days the programme timings will be from 09.45-17.15 Hrs with breaks in between for tea and lunch.

COURSE DIRECTOR



Gp Capt (Retd) BS Phillora BE (ETC), AE (L), MMS (DS), M Phil, FIE, Certified Lead Auditor ISO 9001:2015
Dean of Studies ESCI &
Sr. Faculty, Management & Technology Division, ESCI

COURSE FEE

₹ **25, 000/- (Residential Fee)** per participant. Fee includes, course material, course kit, twin-sharing/single AC accommodation as per availability, breakfast, lunch, dinner, tea / coffee and snacks during the actual days of training programme.

DISCOUNTS:

- ❖ **Non-Residential Fee:** 10% discount on course fee is allowed for non-residential participants.
- ❖ **Group Discount:** Additional 10% discount for three or more participants, if sponsored by the same organization.

(All discounts are applicable only if fee is received at ESCI before the commencement of the programme.)

Goods and Service Tax @ 18% is to be paid extra over and above the training fee. PAN Card No AAATT3439Q; **GST No. 36AAATT3439Q1ZV.**(Under commercial training or coaching services).

Programme fee is to be paid in favour of "IE (I)-Engineering Staff College of India" in the form of demand draft payable at Hyderabad at par cheques payable at any Bank Branches.

Alternatively, the payment may be made by Electronic Fund Transfer (EFT) to ESCI - **SB A/c No.0432104000039631 with The IDBI Bank Ltd., Gachibowli Branch, Plot No. 2-53/2, JNIBF, IIIT Junction, Gachibowli, Hyderabad-500032 by RTG's/ NIFT / IFSC Code No: IBKL0000432. ESCI PAN No. is AAATT3439Q.** While using EFT/ Draft method of payment, kindly forward a covering letter giving details on the names of the participants, Title and the programme schedule so that proper accounting can be done.

REGISTRATION:

Online registration shall be available on ESCI website.([URL:www.escihyd.org](http://www.escihyd.org)) or Click Link: <http://www.escihyd.org/index.php/mt-upcoming-trainings>

To register, manually please send your nominations giving details of name, designation, contact address, email address, mobiles no, telephone and fax number of the participant along with the details of mode of payment of fee, addressed to:

Head, Management & Technology Division

Engineering Staff College of India

Old Bombay Road, Gachibowli, Hyderabad 500 032, TS, India

Phone: Direct 040 6630 4111, 6630 4112, 6630 4105 & 66304128

Fax : 04066304103 & (91)4030995227

Email: mt@escihyd.org,

For Registration Please Contact:

Mr. LV Rao

Programme Manager,

Land line 040 6630 4105

Mob: 0 9949145865

CERTIFICATION

A certificate of participation will be awarded to each participant on conclusion of the programme.

GENERAL INSTRUCTIONS:

- ESCI encourages participants to present case studies from their respective organizations.
- For the convenience of outstation participants, ESCI will facilitate pick-up and drop from Airport / Railway Stations / Bus Stations, if travel plans are received at least 3 days in advance along with mobile number by fax or email. The charges shall be paid by the participant directly to the Cab.
- ESCI provides complimentary accommodation and boarding to the participants one day before commencement (Check-in 1200 h) and one day after conclusion (Check-out 1200 h) of the programme duration. Overstay charges will be applicable as per ESCI rules (subject to availability of accommodation)
- Well-developed Information Centre and Internet facilities are available to the participants.
- **Nominating authorities are requested to kindly send the contact details of the participants while sending their nomination letter. This will help us in making necessary administrative arrangement for them.**