

TRAINING PROGRAM IN SMAW (1F, 2F, 3F, 4F) GMAW, OXFW/OXFC WITH SIMULATOR PRACTICE



Course Code: WD-1 (M)



No. of Seats: 20 per batch



Duration: 200 Hrs (5 weeks)



Dates & Fees: See Course Schedule

COURSE OBJECTIVE:

This course will enable the young entrants to welding trade to acquire the basic skills/practice of Shielding metal arc welding, Gas Metal arc welding, Oxy-Fuel welding cutting. The course is carefully designed to offer the fundamental theoretical and extensive practical exposure to all three processes. The lessons are, planned in a methodical, step-by-step approach to enable the participant too easily to learn the skills of an entry arc welder.

COURSE CONTENT:

THEORY: 46 hrs

- Safety practices during welding
- Knowledge of GMAW welding Apparatus & Consumables
- GMAW Accessories, care in handling & routine maintenance
- Types of shielding-gases GMAW
- Safety Precaution in GMAW
- Basic understanding of GMAW process.
- Introduction and principle of SMAW.
- Welding power sources SMAW.
- Welding electrode and their selection.
- Types of joints and their preparation.
- Introduction to gas welding process
- Fuel gases and supporting gas.
- Gas welding equipment & accessories.
- Welding flames and their application.
- Welding consumable for all processes.
- Comparison of fusion and non-fusion techniques in gas welding.
- Principle of oxy-fuel cutting.
- Feature of gas cutting torches.
- Use and application of Various Welding techniques & patterns.
- Defects in welding - causes and remedies.
- Awareness of Inspection and testing.
- Employability skills

PRACTICAL: 154 Hrs

Including practice over several lessons on a welding Simulator.

- Developing hand skills related to Position, Speed, Stick-out/ Arc length and angle.
- Learning to observe the impact on weld of Gaps, weld bead shape & size, spatters, weld penetration and porosity etc.
- Practicing over various Welding Positions: 1F, 2F, 3F, 4F for Mild Steel After successful practical in every lesson on the Simulator (GMAW), candidate goes for actual arc welding practice in the shop

ELIGIBILITY:

For a youngster willing to take up welding as career, preferably 8th grade pass.

COURSE EVALUATION:

Practical & written/ Oral tests.

OUTCOMES:

The course curriculum will enable students to become a good subordinate welder.

Note:

The above course can be delivered in English, Hindi and Marathi