

SHIELDED METAL ARC WELDING (1F, 2F, 3F, 4F) & OFW / CUTTING FOR BEGINNERS



Course Code: WD-1



No. of Seats: 15 per batch



Duration: 4 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. The course is carefully designed to offer the necessary theoretical and practical exposure to the shielded Metal arc welding processes. The lessons are planned in a methodical, step-by-step approach to enable the participant to easily graduate from beginner level to confident arc welder.

COURSE CONTENT:

THEORY: 86 hrs

- Introduction and principle of SMAW
- Welding power sources
- Safety Precautions
- Welding electrode and their selection
- Types of joints and their preparation
- Defects in welding - causes and remedies
- Welding techniques
- Inspection and testing weldments
- Economics of welding
- Introduction to gas welding process
- Fuel gases and supporting gas
- Gas welding equipment & accessories
- Welding flames and their applications
- Welding consumables
- Comparison of fusion and non-fusion techniques
- Principle of oxy-fuel cutting
- Feature of gas cutting torches
- Application of gas cutting process
- Module on employability skill

PRACTICAL: 74 hrs

Practical session with various electrodes types, joint types, techniques, weld processes.

ELIGIBILITY:

For the 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 good subordinate welder.

Note:

The above course can be delivered in English, Hindi or Marathi.

BASE WELD TRAINING PROGRAM IN SMAW/MMAW & GAS WELDING/ BRAZING/CUTTING PROCESSES



Course Code: BW-1



No. of Seats: 12 per batch



Duration: 12 weeks



Dates & Fees: See Course Schedule

COURSE OBJECTIVE:

Basic welding course will facilitate youths to become supportive associates of industry & the nation. Hands on training, in vernacular dialects, will enable them to imbibe the Art & Science of welding with ease, to become skillful certified structural welders.

COURSE CONTENT:

THEORY: 120 hrs

- Role of welders in industry
- Introduction & applications of commonly used metal- in Cutting/Gouging/Welding/Brazing processes
- Safety precaution in manual metal arc & gas-welding/brazing/cutting
- Choice of welding power source, polarity & accessories for SMAW welding
- Types of SMAW welding electrodes- Type, Size & Other Selection Criteria
- SMAW welding electrodes coding, classification & applications
- Identification, construction and care in handling & storage of gas cylinders
- Identification, construction and selection of welding blow pipes/cutting nozzles & accessories
- Care in selection of pressure gas regulators, hose pipes & flash back arresters
- Selection and care in storage & handling of filler-rods/fluxes for Oxy-Acetylene welding
- Oxy-Acetylene welding/cutting flames & uses in industry
- Rebuilding & hard surfacing by welding
- Weld joint preparation, type, size & profile for plate/sheet-steels
- Different welding position & techniques
- Commonly used metals & their welding attributes
- Distortion and discontinuities in welding – causes & remedies
- Right welding procedures for improved quality & productivity
- Visual examination standards of weld
- Module on Employability Skills

PRACTICAL: 240 hrs

Practical session with various electrodes types, joint types, techniques, weld processes.

ELIGIBILITY:

ITI Welder, Welder's Helper with 1-2 years work experience, or the non-SSC fresh candidates with an aptitude for welding as career.

COURSE EVALUATION:

Progress of BASEWELD welders will regularly be reviewed at the week-end for theory & practice both by Ador Training Division-faculty. They will also have to pass the Theory & Skill tests by Visual, Fillet-Weld Break Tests for all position welding, brazing, cutting and gouging at the end of their course curriculum.

OUTCOMES:

Student - welders upon successful completion of this course will be eligible to perform general entry level production & maintenance welding at fabrication-shop/site by using general purpose and basic-coated steel welding electrodes.

Note:

The above course can be delivered in English, Hindi or Marathi.