



## Training Course Description/Factsheet

### **Welding Works for Supervisors**

#### **COURSE DESCRIPTION**

The course is designed for three days, 30% lecture and 70% practicum to give the trainee the basic knowledge and skills in shielded metal arc welding (SMAW).

Proper setting up of equipment, electrode selection, basic welding joints, work place preparation and the techniques for setup for various welding position, welding trouble shooting as well as safe welding practices.

#### **COURSE OBJECTIVES**

At the end of the training, the participants will be able to:

- Explain the principles and operation of shielded metal arc welding;
- Set up the equipment correctly;
- Select the correct electrode for a particular job;
- Make a single V butt joint in flat, horizontal and vertical position;
- Weld a single pass lap joint in flat position;
- Make a multi-pass T-joint in horizontal, vertical and overhead position;
- Make a straight beads on overhead position;
- Identify welding defects and their prevention in welding mild steel;
- Perform safe working practices;

#### **COURSE CONTENT**

Overview of Welding in General

Welding Terminology

Basic Joints and Welds

Welding Positions

Safety in Arc Welding

Shielded Metal Arc Welding (SMAW)

1. Fundamentals of the Process
  - Principles of Operation
  - Process Capabilities and Limitations

2. Equipment
  - Power Source
  - Accessories
3. Covered Electrodes
4. Personal Protective Equipment (PPE)
5. Welding Techniques

Welding Trouble Shooting

**DURATION:** 3-day (