

BEACON BY SIESGST [ISR]

SUBJECT: WELDING [Duration:60 Hours]

MODULE 1: Introduction

- Objectives
- Types of joints
- Causes of accident
- General safety rules
- Importance of welding in industry
- Safety in manual metal arc welding
- Cutting, Marking and Measuring tools
- Materials Preparation method
- Summary

MODULE 2: Electrical aspects in welding

- Introduction of electric terms regarding welding
- Uses of electricity as applied in welding – Electricity, AC & DC
- Types of electric welded joints
- Welding applications
- Summary

MODULE 3: Welding machine

- Introduction of welding machine and other accessories
- Principle of arc welding
- Necessity & construction of welding machines
- Advantages and disadvantages of welding machine
- Care and maintenance
- Summary

MODULE 4: Welding Positions

- Flat, Horizontal, Vertical & Overhead
- Slope and rotation
- Electrodes and its types
- Use of flux coating, characteristic of flux and criteria for choice of electrodes
- Instructions about welding positions
- Practice on above

MODULE 5: Nomenclature of welding joints

- Terms applied to each joint, Explanation with simple sketches
- Welding symbols
- Description & uses
- Edge Preparation and application
- Preparation of various welding joints like butt, corner, Tee, Lap, Joint etc
- Summary