

Module for Welding Course

| Day | Module No | Job Description |
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| 1 | 1 | Occupational health and safety (OHS), Personal protective equipment (PPE), Safety of welding Workshop |
| 2 | 2 | Measuring Instrument, Hand Tools, Power Tools & Equipment |
| 2 | 3 | Measuring by Slide Calipers or vernier calipers, Try Square & Still Tape |
| 2 | 4 | Introduce of Welding Machine |
| 1 | 5 | Introduce different types of Electrode |
| 2 | 6 | Use of cutting tools & Hand Grinding Machine |
| 1 | 7 | Basic and The Foundation of Engineering Drawing |
| 4 | 8 | Different types of welding passes |
| 30 | 9 | Type of Welding joint and position |

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| 1 | Occupational Health and Safety (OHS) | <ul style="list-style-type: none"> ❖ Describe Health & Hygiene ❖ Describe Occupational Diseases ❖ Describe the Causes of Occupational Diseases ❖ Describe First Aid ❖ Perform First aid action |
| | Personal Protective Equipment (PPE) | <ul style="list-style-type: none"> ➤ Describe personal protective Equipment ➤ Identify different types of PPE ➤ Perform the uses of PPE |
| | Safety of Welding Workshop | <ul style="list-style-type: none"> ❖ Describe workshop safety ❖ Describe workshop safety rules and precaution ❖ Describe accident and identify main reasons ❖ Describe fire & classification of fire ❖ Describe fire-fighting equipment ❖ Identify the location of fire-fighting equipment ❖ Perform to operate fire-fighting equipment ❖ Perform good house keeping |
| 2 | Measuring Instrument, Hand Tools, Power Tools & Equipment | <ul style="list-style-type: none"> ➤ Describe about measurement ➤ Identify different types of measuring tools ➤ Ensure safe use of different measuring tools and equipment ➤ Identify different types of machine tools & hand tools ➤ Ensure safe use of different Power tools and hand tools |
| 3 | Measuring by Slide Calipers or Vernier Calipers, Try Square & Still Tape | <ul style="list-style-type: none"> ❖ State the specification of slide calipers or vernier calipers ❖ Identify the main parts of slide calipers or vernier calipers ❖ Perform measurement by slide calipers or vernier caliper in metric system & british system ❖ Perform measurement by Try Square & Still Tape |

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| 4 | Introduce of Welding Machine | <ul style="list-style-type: none"> ➤ Description & Classification of welding ➤ Identify different types of welding machine and welding machine properties ➤ Introduce with different machine of welding ➤ Introducing to Ac power & Dc power ➤ Introducing to Ac, Dc, TIG, MIG, MAG welding machine |
| 5 | Introduce Different Types of Electrode | <ul style="list-style-type: none"> ❖ Classification of electrode ❖ Specification of welding electrode ❖ Ensure safe use electrode on environment ❖ Perform on different types of electrode |
| 6 | Use of Cutting Tools & Hand Grinding Machine | <ul style="list-style-type: none"> ➤ Identify different types of cutting tools ➤ Describe cutting tool materials ➤ State different types of tool bit with specification ➤ Identify cutting angles of tool bit ➤ Perform on Grinding Machine to using finishing metal surface area ➤ Perform on auto gas cutter using MS plate ➤ Perform on Drill Machine to using MS metal |
| 7 | Basic and The Foundation of Engineering Drawing | <ul style="list-style-type: none"> ❖ Describe about engineering drawing ❖ Describe about line, circle, triangle, square ❖ Describe about orthographic drawing & isometric drawing |
| 8 | Different Types of Welding Passes | <ul style="list-style-type: none"> ➤ Identify different types of passes ➤ Perform on root, hot, fill and cap passes |
| 9 | Type of Welding Joint and Position | <ul style="list-style-type: none"> ❖ Describe to American Welding Society referred joints by the butt, lap, tee, corner and edge ❖ Describe about Fillet weld joint ❖ Describe about Groove weld joint ❖ Describe about Types of welding position ❖ Perform on state welding bid and weaving welding bid to using flat bar ❖ Perform on flat welding to using flat position(1F and 1G) ❖ Perform on horizontal welding position(2F and 2G) ❖ Perform on vertical welding position (3F and 3G) ❖ Perform on overhead welding position (4F and 4G) ❖ Perform on 5G & 6G welding position on MS pipe |

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