



Lecture Outline

Weld Joint Design and Preparation – Welds, Joints, and Positions



HFC Course Code: CIMWD-100

Course Topic: Weld Joint Design and Preparation – Safety and Joint Design

Lecture: Safety

Lecture Outline:

- I. Infrared Rays
 - a. Assume all steel is hot
 - b. Use pliers to move steel
 - c. Mark projects hot
- II. Ultraviolet Rays
 - a. Eye protection
 - i. Shade numbers
 - b. Skin protection
 - c. Booth curtains
 - d. Reflections
- III. Burns
 - a. 1st Degree, 2nd Degree, and 3rd Degree
 - b. Sparks
 - c. Slag and misc
 - d. Clothing
 - e. Melting temperatures
- IV. Fumes
 - a. Air System
 - b. Galvanized Steel
 - c. Stainless Steel
 - d. Manganese
 - e. Face in the plume
 - f. Cleaning agents
- V. Electrical Shock
 - a. Path of least resistance
 - b. Sweating
 - c. SMAW
 - d. GTAW





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