



Advanced Welding

This ten-day course is designed to give experienced welders advanced welding skills in arc and gas welding, resistance welding, resistance spot welding, resistance seam welding, projection welding, thermit welding, pulse arc, flux cored, plasma arc cutting, and pipe welding. Also, various welding problems are identified and corrected, and the weld failure analysis process is explained.

I. Arc Welding

- A. Metal Electrode
- B. Carbon Electrode

II. Gas Welding/Oxyfuel Cutting

III. Resistance Welding

IV. Thermit Welding

V. Pulse Arc

VI. Flux Cored

VII. Plasma Arc Cutting

VIII. Pipe Welding

IX. Warpage

- A. Causes of Warpage
- B. Stress Reduction Around Weld Area

X. Pitting

- A. Causes of Pitting
- B. Correction of Pitting

XI. Cracking

- A. Causes of Cracking
- B. Stress Relief

XII. Fracture

- A. Types of Fractures
- B. Causes of Fractures
- C. Stress Relief

XIII. Arc Blow

- A. Causes of Arc Blow
- B. Correction of Arc Blow

XIV. Weld Failure Analysis

- A. Areas of Interest
- B. Classification of Weld Failures