



Course Outline

Tool and Die Welding (Technology)



HFC Course Code: CIMWD-220

Course Topic: Tool and Die Welding (Technology)

Recommended Textbook: Welding: Principles and Applications 7th Edition

Course Description:

Covers safety protocols, preparation, and the proper welding techniques used to weld tool steel used in tools and dies.

Course Topics

1. Safety.
2. Tool steels.
3. Filler metals.
4. Preparation procedures.
5. Weld procedures.

Course Objectives

1. Demonstrate proper safety practices for tool and die welding.
2. Identify and explain tool steels.
3. Identify the proper filler metals used in the repair of tools and dies.
4. *Explain the proper preparation techniques for the repair of a tool or a die.
5. *Explain the proper welding procedures for the repair of a tool or die.





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Course Performance Based Objectives

1. Based on class notes and lecture, recognize weld metallurgy on tool steels according to a list of multiple choice or true/false answers.
2. Based on class notes and lecture, recognize weld metallurgy on cast irons according to a list of multiple choice or true/false answers.
3. Based on class notes and lecture, determine weld repair preparation according to a list of multiple choice or true/false answers.
4. Based on class notes and lecture, recognize filler metals according to a list of multiple choice or true/false answers.
5. Based on class notes and lecture, determine welding effect on heat-treating according to a list of multiple choice or true/false answers.
6. Based on class notes and lecture, recognize build up tolerances according to a list of multiple choice or true/false answers.

Lectures/Demonstrations:





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