

Multi-State Advanced Manufacturing Consortium

US DOL SPONSORED TAACCCT GRANT: TC23767

RELEASE DATE

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VERSION

v 002

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Course Outline

PRIMARY DEVELOPER: Kevin Ridge, Welding Instructor, Henry Ford College

Tool and Die Welding (SMAW)



HFC Course Code: CIMWD-222

Course Topic: Tool and Die Welding (SMAW)

Recommended Textbook: Welding: Principles and Applications 7th Edition

Course Description:

Covers safety protocols, preparation procedures, and welding techniques used to weld tool steel used in tools and dies. Focuses on using the shielded metal arc welding process.

Course Topics

- 1. SMAW pad build-up.
- 2. SMAW line build-up.
- 3. SMAW knife edge.
- 4. Broken bolt removal

Course Objectives*

- 1. Demonstrate the proper preparation techniques for the repair of a tool or die.
- 2. Perform a weld using the proper techniques for the repair of a tool or die using the Shielded Metal Arc Welding process.
- 3. Demonstrate the proper technique for removing a broken bolt.

Lectures

1. x



^{*} See Projects for more details.



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