Dakota County Technical College

WELD 1250: Flux Cored Arc Welding II

A. COURSE DESCRIPTION

Credits: 2

Lecture Hours/Week: *.*

Lab Hours/Week: 2

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

Students will receive instruction in equipment, technique, and will have opportunity to practice skill development with the Flux Cored Arc Welding on mild steel plate. Use of two types of cored electrodes, gas-shielded and self-shielded. The goal is to be able to perform welds in the vertical and overhead positions to an industry acceptable level of quality for employment. Practice to achieve the required skill level is conducted by supervised instruction. Prerequisites: Flux Cored Arc Welding I, Welding Safety Theory I, and must be taken at same time as Welding Safety and Theory II

B. COURSE EFFECTIVE DATES: 08/27/2012 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

D. LEARNING OUTCOMES (General)

1. Demonstrate and follow all safety practices
2. Perform basic overhead hoist operations
3. Visual inspection of welds and cuts per applicable code or standard
4. Perform all work orders in accordance with shop standards
5. Perform tube and pipe cutting
6. Perform tube and pipe forming
7. FCAW equipment setup and basic operation
8. Set and use the correct amperage (wire feed speed/stick out),
9. Set the correct voltage
10. Set the correct gas flow rate(if applicable)
11. Master travel and work angles control
12. Master travel speed control
13. Master electrode manipulation control
14. Perform proper arc striking, restart, and crater fill techniques
15. Vertical Position Surfacing Welds with GS and SS electrodes
16. 3F single pass weld using Self-Shielded electrode
17. 3G single pass weld using Gas Shielded electrode
18. 3F multi-pass weld using Self-Shielded electrode
19. 3G multi-pass weld using Gas Shielded electrode
20. Overhead Position Surfacing Welds GS and SS electrodes
21. 4F single pass weld using Self-Shielded electrode
22. 4G single pass weld using Gas Shielded electrode
23. 4F multi-pass weld using Self-Shielded electrode
24. 4G multi-pass weld using Gas Shielded electrode
25. Out of position welder qualification test

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted