Minnesota State College Southeast

WELD 1420: GMAW - MIG Wire Feed I

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: *.*

Lab Hours/Week: 6

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

In this course the student will learn the proper machine set-up from turning on the power switch to performing various weld joints in the flat position. The student will learn the identification of the different MIG machine parts as well as demonstrate how to set the machine for various thicknesses of metal and different types of wire (filler metal) when used during the different welding processess. The student will also examine and identify the differences between good welds and bad welds such as welds that are too cold, too hot, or have other variables or inconsistencies. (Prerequisite: None) (3 credits: 0 lecture/3 lab)

B. COURSE EFFECTIVE DATES: 03/03/2008 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

D. LEARNING OUTCOMES (General)

1. Demonstrate safe practices when working with compressed gases
2. Demonstrate the proper uses of compressed gases
3. Demonstrate proper set-up and start-up procedures
4. Identify the different parts of the welding equipment
5. Identify the different gas mixtures
6. Demonstrate the proper set-up and use of flow meters
7. Identify the different types of welding wire
8. Demonstrate the proper set-up of the welding equipment
9. Demonstrate proper maintenance of welding equipment
10. Demonstrate welding a proper stringer bead weld in the flat position
11. Demonstrate welding a proper lap joint weld in the flat position
12. Demonstrate welding a proper fillet weld in the flat position
13. Demonstrate proper set-up and welding of a butt weld in the flat position
14. Demonstrate proper inspection of welds
15. Demonstrate proper shut-down of welding equipment
16. Demonstrate proper shut-down of compressed gases Revised 7/28/08

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted