

Minnesota State College Southeast

WELD 1435: GTAW - Tungsten Inert Gas Welding II

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: *.*

Lab Hours/Week: 6

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course is a continuation of WELD1430 (GTAW-TIG 1) and will expand the student's knowledge and practice to include stainless steel welding. The student will learn to interpret the material specific processes for aluminum and stainless steel as well as practice the proper tungsten preparation and polarity. (Prerequisite: WELD1430) (3 credits: 0 lecture/3 lab)

B. COURSE EFFECTIVE DATES: 04/07/2008 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

D. LEARNING OUTCOMES (General)

1. Demonstrate the proper use and storage of compressed gases
2. Demonstrate the proper set-up and start-up procedures
3. Identify the different parts of the welding equipment
4. Identify the different types of gases and mixtures
5. Demonstrate the proper set-up and use of flow meters
6. Demonstrate proper TIG equipment set-up for an out-of-position weld
7. Demonstrate proper puddle control in the vertical up position without filler metal
8. Demonstrate proper puddle control in the vertical up position with filler metal
9. Demonstrate proper aluminum stringer bead welds in the vertical up position
10. Demonstrate proper aluminum lap welds in the vertical up position
11. Demonstrate proper aluminum fillet welds in the vertical up position
12. Demonstrate proper inspection of welds and identify defects
13. Demonstrate proper shut-down of welding equipment
14. Demonstrate proper shut-down of welding compressed gases
15. Demonstrate proper maintenance of welding equipment 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