

# ASSESSMENT/COMPETENCY RECORD

## GMAW ALUMINUM PRACTICES

**BTC: WLD 225 (2 credits)**

Student will demonstrate GMAW process using various thicknesses of aluminum material in the 2F and 3F positions.



**STUDENT NAME** \_\_\_\_\_

**SCHOOL NAME** \_\_\_\_\_

### HIGH SCHOOL WELDING LAB:

- \_\_\_ Demonstrate safe and effective welding and shop working practices.
- \_\_\_ Demonstrate use of proper welding-related terminology related to the GMAW process.
- \_\_\_ Demonstrates proper set-up of welding power source.
- \_\_\_ Demonstrates proper and safe use of welding and fitting tools.
- \_\_\_ Demonstrate proper equipment set-up and trouble-shooting techniques.
- \_\_\_ Demonstrate that proper welding wire & alloy is being used for welding base metal alloy & thickness of material selected.
- \_\_\_ Demonstrate proper roller size used in wire feeder.
- \_\_\_ Demonstrate ability to change wire, rollers, tips, diffusers, nozzles, and set proper tension on rollers for welding.
- \_\_\_ Demonstrate ability to set proper welding parameters (voltage and wire feed speed).
- \_\_\_ Demonstrate understanding of simple layout and fit-up practices when working with aluminum.
- \_\_\_ Demonstrate competency in GMAW techniques with solid wire on aluminum in the Flat, Horizontal & Vertical Fillet positions.
  - ✓ Weld deposited with complete fusion
  - ✓ Bead shape is slightly convex and uniform in appearance
  - ✓ Weld is free from slag, undercut, cracking & porosity
  - ✓ Proper overlapping with a uniform appearance

\_\_\_\_\_  
**HS Instructor Verifies Student has Achieved All Competencies**

\_\_\_\_\_  
**Grade**

\_\_\_\_\_  
**Date**

**Comments:**