

# EXPLAIN GMA/MIG/MAG STEEL WELDING

ST020E01

**Course Format:** Online training with posttest

**I-CAR Credit Hours:** 1 hour

**Points:** 0.25

**This course helps satisfy ProLevel training requirements for the following roles:**



Structural Technician

## Knowledge and Skill Area Definition

Technician is able to discuss surface preparation, determine power requirements, set up the welder, and perform maintenance to make a variety of GMA welds (plug, fillet, open butt, butt joint with backing).

ST020E01 is a recommended prerequisite for WCSA2 and WCSA3

## Knowledge Detail

- Examine principles required to set up for GMA welding.
- Identify GMA welder parts (power sources, electrode wire, shielding gas, welding guns, work clamps) and explain general maintenance.
- Explain electrical fundamentals and how they apply to the GMA welding process.
- Discuss proper welding gun angle, travel speed, heat management techniques, and weld penetration.
- Explain how to tune a GMA welder.
- Explain the techniques for performing a successful plug, fillet, butt joint with backing, and an open butt joint weld.