WELDING TRAINING AND CERTIFICATION

WELDING QUALIFICATION TEST—3 GENRE

WCSA3

Major collision damage requires a greater level of expertise to repair and welding is one of the most critical skills necessary in completing that repair safely. Poor welds can lead to part failure and compromised safety for the passengers in the vehicle.

Gas Metal Arc welding on steel has many advantages and is a common practice in today's collision repair facilities. From machine setup to mastering refined techniques, it is critical that technicians have a thorough understanding of MIG, MAG and spot welding in order to achieve complete and safe repairs that ensure the vehicle is restored to its original condition.

Course Content

Overview

The Welding Qualification Series begins with a brief presentation of machine setup of the MIG and MAG welding equipment as well as providing information on weld defect identification and correction, and how welds will be visually and destructively tested for qualification.

Following the training, led by the Test Administrator, test participants will practice the combinations of steel, bronze and spot welds. The time spent practicing will be based on the participant's skill level and visual and destructive testing results.

When the participant is ready after practicing each weld, he or she will perform the final weld. This will continue through the series until all specified welds are completed to the satisfaction of the Test Administrator. All welds must be passed in order to earn credit. Participants who pass **60%** of their welds will be retested at no charge. Those who do not, will complete a full retest at their expense. The Welding Qualification remains active five years from the test date.

Participants will work with two different thicknesses of automotive-grade, zinc-coated steel—16 gauge (1.4-1.6 mm) 22 gauge (0.68-0.81 mm). These material thicknesses, and the welds selected, represent common weld joints required on today's vehicles. With these selections, I-CAR is keeping pace with industry demands, mirroring this qualification test to welding requirements that technicians perform on a daily basis.

Recommendations

The Welding Qualification Test is NOT an introductory welding course. It is a hands-on practice session and verification of a technician's welding skill.

The student should have an understanding of the collision repair process, know how to work safely when welding, and have steel welding experience in a repair facility environment.

The following I-CAR Australia training courses are suggested:

- Squeeze-Type Resistance Spot Welding (WCS04)
- MIG Brazing (BRZ01)
- Steel GMA (MIG/MAG) Theory and Preparation (WQPA3)

Registration

To register for Welding Qualification Test—3 Genre (WCSA3) click here.

Course Highlights

Points: 5

Estimated Duration: 8 Hours

Format: Hands on, Instructor led testing

Meets the I-CAR training requirements for the following roles:

- STRUCTURAL TECHNICIAN
- NON-STRUCTURAL TECHNICIAN

After completing this course, you will be able to:

- Understand how to set and tune a welding machine for all the weld types
- Explain the different visual requirements for each weld type
- Perform proper welding techniques
- Know how to properly prepare joints for welding
- Identify and correct weld defects.

Also Available

Adhesive Bond Testing

Allows technicians to perform adhesive bond testing for steel to steel, steel to aluminium and aluminium to aluminium bonded repairs.