Welding Training & Certification™: Steel GMA (MIG) Welding

(WCS03)

Course Overview

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 (GMA) 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 GMA (MIG) welding in order to perform complete, safe and quality repairs.

After completing this course, you will have proven your ability to:

- Understand how to properly set up, tune, and maintain a welding machine
- Make common GMA (MIG) welds on multiple thicknesses of steel in vertical and overhead positions
- Perform proper welding techniques

One single training event can accommodate multiple technicians.

Course Content

Welding Capability & Readiness Assessment

Before instruction starts, the instructor will conduct the Welding Capability & Readiness Assessment to determine whether shop infrastructure and equipment conditions are adequate so technicians can properly perform hands-on practice and certification testing.

Instruction

Students will be provided with instruction on welding theory, infrastructure, equipment, process, techniques, and best practices. Students will be coached on:

- Machine set up and maintenance of GMA (MIG) welding equipment in his/her facility
- How to identify and correct defective welds
- How welds will be visually and destructively tested for certification

Hands-on Practice

Following the instructor-led training, students will apply their knowledge through practice with combinations of GMA (MIG) plug, fillet, butt joint with backing, and open butt joint welds. The time spent on supervised practice will be based on the student's skill level and visual and destructive testing results.

Students will work with two different thicknesses of automotive-grade, zinc-coated steel - 16 gauge (1.4-1.6 mm) and 22 gauge (0.68-0.81 mm).

Skills Verification Test

The final phase of the training consists of the student taking the hands-on test, when he or she demonstrates the ability to perform the specified 10 welds. All 10 welds must pass against I-CAR standards in order to receive the certification.

Students will be given multiple attempts to perform each weld if necessary. Students who are unable to properly complete all of the welds during the event may retake the training and test on another date and pass in order to receive the certification.

Course Highlights

Credit Hours: 6

Estimated Duration: 8 Hours

Format: In-shop assessment, instruction, hands-on practice and certification test

Meets I-CAR® ProLevel® or annual training requirements for the following role(s):

- Estimator
- Steel Structural Technician
- Non-Structural Technician

Prerequisite: None

All earned I-CAR Welding Training & Certification designations are valid for five years from the passing date.

In-Shop Course

This course is administered at your repair facility using the welding equipment that you work with regularly. **The event also includes a shop Welding Capability & Readiness Assessment,** where the Instructor will assess the shop infrastructure, equipment and coach technicians, owners or managers before the training begins.

Recommendations

The Welding Training & Certification: Steel GMA (MIG) Welding 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 some steel welding experience in a repair facility environment.

If introductory welding or safety training is needed before signing up, the following I-CAR training courses are suggested:

- Steel GMA (MIG) Welding Theory (WCS06e)
- Hazardous Materials, Personal Safety, and Refinish Safety (WKR01)

I-CAR WELDING TRAINING & CERTIFICATION™

To Register or Learn More

Visit **www.I-CAR.com** and select Welding Training & Certification™ located under the I-CAR Training tab, or call **888.589.3148**, Monday – Friday from 7:00 A.M. to 6:00 P.M. CST.

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