# WELDING TRAINING AND CERTIFICATION

# WELDING TRAINING AND CERTIFICATION

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**

#### Instruction

The content of this course contains 3 phases. The first phase is the online course (ST020E01) to be completed by the student prior to attending the hands-on session

During this course, participants will be briefed on Machine set up and maintenance of GMA (MIG) welding equipment. This will include how to identify and correct defective welds and how welds will be visually and destructively tested for certification.

# **Hands-On Practice**

The second phase is the Hands-on training session. Following the instruction, participants will apply their knowledge through practice with combinations of Steel and Bronze GMA (MIG/ MAG) welds. The time spent on supervised will practice he hased the on participant's skill level visual and and destructive testing results

Participants 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 consists of the participants taking the hands-on test, when he or she demonstrates the ability to perform the specified 10 welds. All 10 welds must have zero faults to pass against I-CAR standards in order to receive the certification. Participants are required to complete all welds within the steel allocation provided.

#### Certification

All successfully completed I-CAR Steel Welding Certification designations are valid for three years from the passing date.

### Retesting

Participants who are unable to properly complete all of the welds during the event may retake the certification test on another date and pass in order to receive the certification. Participants who fail to complete the required welds will need to complete a full retest at the cost of 70% of the full course fees.

# 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 participant 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.

In order for a participant to successfully complete the steel program, participants are highly encouraged to complete the following training programs:

Successful completion of AUR 32116 – Certificate III in Automotive Vehicle Body or equivalent.

Completion of the above-mentioned training program will help ensure the participants have the basic skills required to complete the steel program. Participants without prior experience & training will have difficulty in passing the steel program.

# **Course Highlights**

I-CAR Credit Hours: 6

I-CAR Points: 5

**Estimated Duration: 12 Hours** 

(over 2 days)

Format: Hands on, Instructor led

testing

Meets the I-CAR ProLevel 2 or 3 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, and maintain welding machine
- Perform proper welding techniques
- Make common GMA (MIG) welds on multiple thicknesses of steel in vertical and overhead positions

