



# **Standard for the AWS Certification of Arc Welding Personnel**



**American Welding Society**

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AWS QC19:2002

## *Standard for the AWS Certification of Arc Welding Personnel*

**Prepared by:**

The AWS Certification Committee  
Under the Direction of AWS Standards Council

**Approved by:**

The American Welding Society  
Board of Directors

### **Abstract**

This standard defines the certification program for the American Welding Society for use in the Certification of Automated Process Operators and Technicians. These certifications require documentation of experience, satisfactory completion of both written and practical examinations. The examination tests the CRAW's knowledge of welding processes, welding procedures, destructive and non-destructive tests, welding terms, definitions, symbols, reports, safety, quality assurance and responsibilities, robot programming and robot arc welding, and other related subjects. Successful completion of all requirements constitutes the basis for awarding a certification as a Robotic Arc Welding Technician or Robotic Arc Welding Operator.

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***AWS QC19:2002, Standard for AWS Certification of  
Arc Welding Robotic Personnel***

**1. Scope**

1.1 This standard establishes the requirements for AWS certification of automated process operators and technicians. It describes how personnel are certified, and the principles of conduct and practice by which certification may be maintained. Any oral or written claim of certification under the guidelines established herein shall be made only by those individual Certified Robotic Arc Welding (CRAW – O/T) Operator or Technician who are, at the time of the claim, current and in compliance with all sections of this standard.

1.2 In the certification process, AWS conducts an examination to determine a person's general knowledge of robotic arc welding operation and related technical areas. No determination is made of an individual's capabilities in applying that knowledge neither within a specific work environment nor under actual working conditions.

1.3 In the certification process, the employer is responsible for determining that a person has other qualifications as stated herein.

1.4 It shall be the responsibility of the employers to determine that the CRAW Technician or Operator is capable of performing the duties involved in their particular welding environment, and to provide or make available such training or indoctrination as may be required.

1.5 This standard is intended to supplement the requirements of an employer, code, or other documents and shall not be construed as a preemption of the employer's responsibility for the work or for the performance of the work.

1.6 **Safety Precautions.** This document is not intended to address safety and health matters regarding certified CAWRP Technician or Operator. Safety and health requirements are provided in ANSI Z49.1, *Safety in Welding and Cutting, and Allied Processes* (available from the American Welding Society) and RIA 15.06, *American National Standard of Industrial Robots and Robot Systems - Safety Systems* and other safety and health standards, and federal, state, and local government regulations. This document only covers the rules of personnel certification.

**2. Reference Documents**

AWS A3.0, *Standard Welding Terms and Definitions*  
AWS B1.10, *Guide for Nondestructive Inspection of Welds*  
AWS B1.11, *Guide for Visual Welding Inspection*  
AWS B5.1, *Qualification Standard for AWS Welding Inspectors*  
AWS QC1, *Standard for AWS Certification of Welding Inspectors*  
AWS WI, *Welding Inspection*  
AWS CM-00, *Certification Manual for Welding Inspectors*  
AWS B2.1, *Specification for Welding Procedure and Performance Qualification*