



# **Guide for the Training and Qualification of Welding Personnel: Level II—Advanced Welders**



**American Welding Society**

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# Guide for the Training and Qualification of Welding Personnel

## Level II – Advanced Welders

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Prepared by  
AWS Education Department

Under the Direction of  
AWS Education Grant Committee

Approved by  
AWS Board of Directors

### Abstract

This guide contains information to assist education and training facilities in the development and administration of competency-based training that leads to the qualification and certification of trainees in accordance with the requirements of AWS QC11, *Specification for the Qualification and Certification for Level II – Advanced Welders*. Included are sections on curriculum and qualification guidelines, as well as recommendations for facility planning, materials, equipment, and tools.



**American Welding Society**

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*A special note of appreciation is extended to each member of the American Welding Society who participated in the original industrial survey that helped identify the skill requirements for the Level II – Advanced Welder.*



## Foreword

(This Foreword is not a part of EG3.0–96, *Guide for the Training and Qualification of Welding Personnel Level II – Advanced Welder*, but is included for information purposes only.)

The American Welding Society (AWS), recognizing the need for competent welders, through a grant by the U. S. Department of Education (DOEd), formed the Education Grant Committee and assigned them the task of preparing this guide.

Welding has become a very sophisticated and technical science, requiring not only mental application but also hands-on abilities. The future need for competent welders should prompt the establishment of a greater number of educational programs. Thus, it becomes imperative that the training given be of a quality and quantity that adequately prepares trainees for industrial assignments at various levels of skill development well into the next century. To this end Level II – Advanced Welders come to the workforce possessing a prerequisite amount of knowledge, attitudes, skills and habits required to perform proceduralized tasks under general supervision, and complex tasks involving the use of theoretical knowledge and motor skills under close supervision.

As the name implies, it is the intent of this document to serve as a *Guide* for those wishing to establish, expand, or enhance a private or public training program for Level II – Advanced Welders. The basic requirements contained in this document are established as a result of individuals from a broad range of businesses, job classifications and industrial or educational areas participating in a national survey to identify welder skills. In conjunction with industry's response and the AWS Education Grant Committee's consensus, this document establishes the minimum requirements necessary to standardize the training and qualification of Level II – Advanced Welders throughout the United States of America. Members of the AWS community and the Education Grant Committee have a growing interest in positively promoting welder training and providing minimum standards for its delivery.

The American Welding Society welcomes comments on this publication, and communications should be addressed to: The American Welding Society, Attention: Director of Education, 550 N. W. LeJeune Road, Miami, Florida, 33126.



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## 1. General

**1.1 Scope.** This guide establishes a minimum skill standard defining training and qualification requirements that are necessary for Participating Organizations to develop and administer a Level II – Advanced Welder Program in accordance with AWS QC11, *Specification for the Qualification and Certification for Level II – Advanced Welders*. This Guide is intended to specify a credible path for post-secondary or employer-based training facilities to build new programs and/or enhance existing programs to administer Level II – Advanced Welder training and qualification. Use of this guide is voluntary. Participating Organizations desiring to certify a trainee as an AWS Certified Level II – Advanced Welder shall consider the training and qualification guidelines within this document as mandatory requirements under the requirements of AWS QC11. Further, Participating Organizations may elect to use, or become, AWS Accredited Test Facilities under the requirements of AWS QC4, *Standard for Accreditation of Test Facilities for AWS Certified Welder Program* and qualify advanced welders according to the requirements of AWS QC7, *Standard for AWS Certified Welders*.

### 1.2 Objectives

**1.2.1** Provide training facilities with an industrial awareness of the occupational description, conditions, task listing, and profile that encompasses the job classification of Level II – Advanced Welder.

**1.2.2** Establish a broad competency-based curriculum detailing the minimum acceptable skill requirements for the training and qualification of advanced welders.

**1.2.3** Provide training facilities participating in the certification of advanced welders with a list of learning objectives and learning activities necessary to accomplish Level II – Advanced Welder training.

**1.2.4** Provide training facilities participating in the certification of advanced welders with the references needed to compare existing or new curriculum with the AWS documents specified in this guide.

**1.2.5** Provide training facilities participating in the certification of advanced welders with information related to the administration of Level II – Advanced Welder, written examination, workmanship qualification testing, and performance qualification testing.

**1.2.6** Provide training facilities participating in the certification of advanced welders with information related to optional AWS QC11, *Level II – Advanced Welder Program* requirements for performance qualification tests administered at an AWS QC4, *Accredited Test Facility* through the AWS QC7, *Certified Welder Program*.

### 1.3 Requirements

**1.3.1** Unless the secondary, post-secondary or employer-based training facility elects to become a Participating Organization under the requirements of AWS QC11, *Specification for Qualification and Certification for Level II – Advanced Welders*, use of this document is voluntary.

**1.3.2** Participating Organizations shall meet the requirements of AWS QC11, *Specification for Qualification and Certification for Level II – Advanced Welders*.