

Specification for Qualification and Certification of Level I—Entry Welder



American Welding Society

Key Words —Entry Welder, Training
Organization, performance tests,
acceptance criteria

AWS SENSE QC10:2008

Specification for Qualification and Certification of Level I—Entry Welder

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Prepared by the
American Welding Society (AWS) Committee on SENSE
AWS Committee on Education

Approved by the
AWS Board of Directors

Abstract

This standard defines the requirements for the American Welding Society to register a Level I—Entry Welder to the AWS SENSE program. The AWS *Schools Excelling through National Skill Standards Education* (SENSE) program began in 1993 with the award of a grant by the US Department of Education to develop a series of standards and a program for the recognition of welders based on welding performance testing and practical knowledge tests. The SENSE welder program is comprised of three levels: Level I—Entry Welder, Level II—Advanced Welder, and Level III—Expert Welder. The certification of a Level I—Entry Welder requires performance qualification (skill) and practical knowledge (written) tests. These tests require reading, computational, and manual skills to complete.



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Foreword

This foreword is not a part of QC10:2008, *Specification for Qualification and Certification of Level I—Entry Welder*, but is included for informational purposes only.

The AWS *Schools Excelling through National Skill Standards Education* (SENSE) program began in 1993 with the award of a grant by the U.S. Department of Education to develop a series of standards and a program for the recognition of welders based on welding performance testing and practical knowledge tests. The development of this National Skill Standard has involved the participation of the welding industry through a survey designed to determine a consensus of welder skills and competencies required for individuals seeking the development of their welding skills. The result of this industry survey was an occupational task analysis that formed the basis for guidelines for the training of welders at three levels: Level I—Entry Welder, Level II—Advanced Welder, and Level III—Expert Welder.

Three specifications were developed in the period July 1993 to July 1996:

AWS QC10-95, *Specification for Qualification and Certification of Entry Level Welders*
AWS QC11-96, *Specification for Qualification and Certification for Level II—Advanced Welder*
AWS QC12-96, *Specification for Qualification and Certification for Level III—Expert Welders*

In addition, guideline documents were developed for each level:

AWS EG2.0-95, *Guide for the Training and Qualification of Welding Personnel: Entry Level Welder*
AWS EG3.0-96, *Guide for the Training and Qualification of Welding Personnel: Level II—Advanced Welder*
AWS EG4.0-96, *Guide for the Training and Qualification of Welding Personnel: Level III—Expert Welder*

The present standard is the first in a series of revisions to the SENSE program documents and updates QC10:2004. The administration of the program has been more clearly defined emphasizing the modular nature of the guidelines and allowing for the recognition of welders who complete defined portions of the program.

Your comments for improving the *Specification for Qualification and Certification of Level I—Entry Welder* are welcome. Submit comments to the Secretary, AWS Committee on Education, American Welding Society, 550 N.W. LeJeune Road, Miami, FL 33126; telephone (305) 443-9353; fax (305) 648-2396; e-mail education@aws.org; or via the AWS web site www.aws.org.

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Specification for Qualification and Certification of Level I—Entry Welder

1. Scope

1.1 This standard establishes the minimum requirements for qualification and certification as a SENSE Level I—Entry Welder with the American Welding Society.

1.2 This standard specifies practical knowledge and performance tests that require a minimum level of reading, computational, and manual skills to successfully complete.

1.3 All individuals meeting the specified performance criteria at a facility that is a training organization will be listed in the AWS database of SENSE Entry Welders.

1.4 Organizations that are not training organizations may use this standard, but individuals they instruct will not be listed in the AWS database of SENSE Entry Welders.

1.5 Although a written test including questions on safety is required by this standard, this standard is not intended to address safety and health. Safety and health requirements are provided in ANSI Z49.1, *Safety in Welding, Cutting, and Allied Processes*, other safety and health standards, and federal, state, and local government regulations. The responsibility for safety is primarily with the welder, the training organization during training and testing, and afterwards, with the employer.

2. Referenced Document

1. EG2.0, *Guide for Training of Welding Personnel: Level I—Entry Welder*

3. Definitions

Welding terms used in this standard are defined in AWS A3.0, *Standard Welding Terms and Definitions*. Other terms are defined as follows:

competency. A set of skills, related knowledge, and attributes that allow an individual to perform a task, and that can be verified by performance and practical knowledge testing.

Entry Welder (Level I). An individual employed in this position is considered to possess a prerequisite amount of knowledge, attitude, skills, and habits required to perform routine, predictable, repetitive, and procedural tasks involving motor skills, and limited theoretical knowledge while working under close supervision.

module. The collection of training or learning activities defining a particular set of skills for a subject or group of related subjects. A module may contain one or more Units. There are 9 modules in the Level I—Entry Welder program.

unit. The collection of training or learning activities defining a particular set of skills for a single subject. A part of a module that focuses on a particular theme or topic. For example, Module 8, “Thermal Cutting Principles and Practices,” contains 4 units.

4. Requirements for Entry Welder

4.1 Trainee must be enrolled in and attending a training organization.

4.2 Trainee must be taking coursework that will develop the skills necessary to master the learning modules shown in Table 1.

4.3 Trainee may continue in the program during employment with a signed agreement between the training organization and the trainee’s employer stating how the trainee will continue in the program. (See Clause 11 for length of registration.)