

Welding Inspection Handbook



American Welding Society

Welding Inspection Handbook

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**Prepared by
AWS Committee on Methods of Inspection**

**Under the Direction of
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**Approved by
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American Welding Society

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Chapter 1

Scope and Application

1.1 Scope

The scope of this handbook includes testing and examination methods that apply to a majority of metallic and nonmetallic weldments used in construction. The extent of inspections should be clearly defined in contract documents or on drawings that refer to a particular weldment (unless otherwise defined in applicable codes or specifications). Furthermore, acceptance criteria should be clearly understood and agreed upon by both the supplier and the purchaser before any production welding begins. Acceptance criteria for weld discontinuities are specifically excluded from this handbook.

1.2 Application

The information in this handbook pertains to the general duties and responsibilities of welding inspectors and is intended to enhance their performance. This book provides specific information about methods of weldment inspection; however, much of the information will also generally apply to the examination of nonwelded components, such as base metal inspection prior to fabrication. For the inspec-

tion process to be effective, the welding inspector should be knowledgeable about each examination method required.

It is the responsibility of those charged with the administration and supervision of inspection to make certain that the principles and methods to be used are properly understood and applied uniformly. This responsibility may include the qualification and certification of inspectors where such certification is required by codes, specifications, job contracts, civil law, or company policies.

The following documents address the qualification of welding inspection and nondestructive examination personnel:¹

(1) ASNT Recommended Practice SNT-TC-1a

(2) AWS QC1, *Specification for Qualification and Certification of Welding Inspectors*

Even when a particular qualification for certification program is not mandatory, every welding inspector should be aware of the ethical criteria for welding inspectors contained in documents such as AWS QC1.

1. See Chapter 17 for addresses of standards-writing organizations.