ASME ANDE-1–2015

ASME Nondestructive Examination and Quality Control Central Qualification and Certification Program

AN AMERICAN NATIONAL STANDARD

The American Society of Mechanical Engineers

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The American Society of Mechanical Engineers

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This Standard will be revised when the Society approves the issuance of a new edition.

ASME issues written replies to inquiries concerning interpretations of technical aspects of this Standard. Interpretations are published on the Committee Web page and under go.asme.org/InterpsDatabase. Periodically certain actions of the ASME NDE (ANDE) Committee may be published as Cases. Cases are published on the ASME Web site under the Committee Pages at http://cstools.asme.org/ as they are issued.

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The American Society of Mechanical Engineers
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FOREWORD

In 2010, an ASME Project Team was formed with the intent to write a written practice type of document for the Qualification and Certification of Nondestructive Examination (NDE) personnel. The written practice document would have been used to support ASME qualification and certification efforts. After much discussion, it was determined that a Standard was more appropriate for accomplishing the goals of the ASME Project Team. The Project Team was dissolved in May 2012 and merged into a Standards Writing Committee. The Standards Writing Committee is now called the "ASME NDE (ANDE) Committee on Qualification and Certification of Nondestructive Examination Personnel and Quality Control Technicians" and, as used in this Standard, is referenced as the "ANDE Committee." The ANDE Committee (consensus Committee), with its supporting Subcommittees, has the responsibility to write, maintain, and approve this Standard.

This Standard has been written to provide the requirements for a "Central Qualification and Certification Program" conducted by a Third-Party Certification Organization (Certification Body) for NDE and Quality Control (QC) personnel and uses both performance-based and prescriptive requirements that serve as the program core for these activities.

This Standard has been written to meet the needs of many different industries such as the aerospace and defense industry, the automotive industry, the construction and building industry, and the energy industry. The energy industry, which by itself directly relates to many different specific industry sectors (SISs), such as power plants, fossil power, renewable energy, arctic engineering and offshore technology, nuclear power, and energy efficiency, has within these SISs many SIS activities that require NDE or QC to be performed by qualified and certified personnel. These SIS activities include manufacturing, fabrication, construction, installation, maintenance, preservice inspection, and inservice inspection. The use of performance-based requirements for qualification with a Systematic Approach to Training (SAT) process in this Standard, along with the use of Job Task Analyses (JTAs) for the Qualification and Certification of NDE and QC personnel, makes it unique and supports a goal of enhancing personnel capabilities to perform NDE and QC methods. These performance-based requirements are focused on training and true performance demonstration of the skills needed for personnel to perform specific job functions throughout initial Qualification and Certification and then during Certification periods.

It is expected that with the use of this Standard, NDE and QC Inspection reliability and qualification performance will be improved and that a larger pool of personnel will become available to support any industry or SIS that either requires or chooses to use this Standard.

This Edition of the Standard may be used beginning with the date of issuance printed on the copyright page. After such date of issuance, this Edition becomes the requirement for compliance with this Standard, except for equipment or services contracted for prior to the end of the period.

This Standard was approved as an American National Standard on April 22, 2015.

ASME NDE (ANDE) COMMITTEE
Certification of Nondestructive Examination (NDE) Personnel and Quality Control (QC) Technicians

(The following is the roster of the Committee at the time of approval of this Standard.)

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CORRESPONDENCE WITH THE ASME NDE (ANDE) COMMITTEE

General. ASME Standards are developed and maintained with the intent to represent the consensus of concerned interests. As such, users of this Standard may interact with the Committee by requesting interpretations, proposing revisions or a Case, and attending Committee meetings. Correspondence should be addressed to:

Secretary, ANDE Standards Committee
The American Society of Mechanical Engineers
Two Park Avenue
New York, NY 10016-5990
http://go.asme.org/Inquiry

Proposing Revisions. Revisions are made periodically to the Standard to incorporate changes that appear necessary or desirable, as demonstrated by the experience gained from the application of the Standard. Approved revisions will be published periodically.

The Committee welcomes proposals for revisions to this Standard. Such proposals should be as specific as possible, citing the paragraph number(s), the proposed wording, and a detailed description of the reasons for the proposal, including any pertinent documentation.

Proposing a Case. Cases may be issued for the purpose of providing alternative rules when justified, to permit early implementation of an approved revision when the need is urgent, or to provide rules not covered by existing provisions. Cases are effective immediately upon ASME approval, except that regulatory authorities may require prior approval of Cases to be used with this Standard. Cases shall be posted on the ASME Committee Web page.

Requests for Cases shall provide a Statement of Need and Background Information. The request should identify the Standard and the paragraph, figure, or table number(s), and be written as a Question and Reply in the same format as existing Cases. Requests for Cases should also indicate the applicable edition(s) of the Standard to which the proposed Case applies.

Interpretations. Upon request, the ANDE Standards Committee will render an interpretation of any requirement of the Standard. Interpretations can only be rendered in response to a written request sent to the Secretary of the ANDE Standards Committee at go.asme.org/Inquiry.

For inquiries that involve the intent of a provision in the Standard that cannot be answered with the current words in the Standard by the Committee, a revision to the Standard will be approved prior to issuing the interpretation.

The request for an interpretation should be clear and unambiguous. It is further recommended that the inquirer submit his/her request in the following format:

Subject:	Cite the applicable paragraph number(s) and the topic of the inquiry.
Edition:	Cite the applicable edition of the Standard for which the interpretation is being requested.
Question:	Phrase the question as a request for an interpretation of a specific requirement suitable for general understanding and use, not as a request for an approval of a proprietary design or situation. The inquirer may also include any plans or drawings that are necessary to explain the question; however, they should not contain proprietary names or information.

Requests that are not in this format may be rewritten in the appropriate format by the Committee prior to being answered, which may inadvertently change the intent of the original request.

ASME procedures provide for reconsideration of any interpretation when or if additional information that might affect an interpretation is available. Further, persons aggrieved by an interpretation may appeal to the cognizant ASME Committee or Subcommittee. ASME does not "approve," "certify," "rate," or "endorse" any item, construction, proprietary device, or activity.

Attending Committee Meetings. The ANDE Standards Committee regularly holds meetings and/or telephone conferences that are open to the public. Persons wishing to attend any meeting and/or telephone conference should contact the Secretary of the ANDE Standards Committee.

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ASME NONDESTRUCTIVE EXAMINATION AND QUALITY CONTROL CENTRAL QUALIFICATION AND CERTIFICATION PROGRAM

Part 1 General Requirements

Section 1-1 Introduction

1-1.1 SCOPE

(a) This Standard includes both performance-based and prescriptive requirements to be used for an ASME Nondestructive Examination and Quality Control Central Qualification and Certification Program that applies to NDE personnel and QC Inspection personnel.

(b) This Standard uses a SAT process that integrates with JTAs and established Body of Knowledge (BoK) requirements, to provide personnel experience requirements, written examinations, and practical demonstrations.

(c) This Standard is applied by a Third-Party Certification Organization, which is referred to within this Standard as a Certification Body (CB).

(d) The use of the terms Level I, Level II, or Level III in this Standard apply to a CB certified individual.

(e) Specific requirements for industry sectors are included in the Mandatory Appendices of this Standard such as the Nuclear Sector in Mandatory Appendix I.

1-1.2 APPLICABILITY

This Standard is applicable to any Industry or Industry Sector that performs Industry Sector Activities such as Manufacturing, Fabrication, Construction, Installation, Maintenance, Preservice Inspection (PSI), and Inservice Inspection (ISI) that require NDE or QC Inspections to be performed by qualified and certified NDE and QC Inspection personnel.

1-1.3 USE OF THIS STANDARD

This Standard is required to be used when referenced by a user's Code, Standard, Specification, Procedure, or Instruction, which the user has committed to meet or is required to meet. Optional use of this Standard is not prohibited, but when this Standard is used, all requirements are mandatory, including Mandatory Appendices, except where specific alternatives are provided in this Standard. Use of Nonmandatory Appendices is optional, but when they are chosen to be used, all the requirements within a Nonmandatory Appendix become mandatory unless the Nonmandatory Appendix is specified for guidance only. See Nonmandatory Appendix A for guidance on maintenance of the Standard.

1-1.4 REGULATORY, ENFORCEMENT AUTHORITIES OR AUTHORIZED INSPECTION AGENCY INVOLVEMENT

When a referencing Code, Standard, Specification, Procedure, or Instruction requires the use of this Standard and has requirements that shall be met for the involvement of Regulatory, Enforcement Authorities or an Authorized Inspection Agency (AIA), then those authorities or agencies shall be provided full access with the certified individual's written approval, to any record of documentation, qualification, or certification activities performed to meet this Standard.