

**ASME QAI-1–2023**  
(Revision of ASME QAI-1–2018)

# Qualifications for Authorized Inspection

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The American Society of  
Mechanical Engineers

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Mechanical Engineers**

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# FOREWORD

The format and structure of ASME QAI-1-2023 is a departure from previous editions. However, the authorized inspection requirements and the qualification requirements for Inspectors, Supervisors, and Certified Individuals have not changed. The Standard is delineated by chapters and appendices. This edition establishes requirements that are to be applied uniformly across all entities performing designated oversight activities provided by an Authorized Inspection Agency, Certified Individual, or Qualified Inspection Organization. To ensure that requirements are applied consistently and evenly, the following terms are used within the Standard:

- *Shall* is used to denote a requirement.
- *Should* is used to denote a recommendation.
- *May* is used to denote permission, neither a requirement nor a recommendation.

The process for an entity to have its quality program accredited by the American Society of Mechanical Engineers (ASME) is addressed in ASME CA-1.

The requirements in ASME QAI-1 were developed and are maintained by the ASME Committee on Qualifications for Authorized Inspection, which was first formed on March 29, 1973, as a special committee under the Policy Board, Codes and Standards and that now reports to the ASME Board on Conformity Assessment.

ASME Codes and Standards are developed and maintained with the intent to represent the consensus of concerned interests. The committee operates under approved ASME procedures and is guided by the principles of consensus, due process, transparency, and openness. The committee is balanced, with participants from diverse interest categories, and fair and equitable consideration of all viewpoints is exercised by all concerned interests.

ASME QAI-1 has been developed with the following principles that are intended to apply to all jurisdictional authorities accredited as an Authorized Inspection Agency by ASME:

(a) *Reciprocity.* The enforcement authority (jurisdiction) agrees to accept the results of inspections required by the ASME Boiler and Pressure Vessel Code that have been performed by an accredited Authorized Inspection Agency.

(b) *Integrity.* The Authorized Inspection Agency maintains the commitment to the integrity of the inspection process and of the ASME Single Certification Mark by fulfilling its obligations under the ASME Boiler and Pressure Vessel Code and by recognizing the role of the third-party inspection system.

(c) *Openness.* The enforcement authority (jurisdiction) permits ASME Certificate Holders and applicants for ASME Certificates of Authorization located within its jurisdiction to select other ASME-accredited Authorized Inspection Agencies.

(d) *Participation in the Process.* The Authorized Inspection Agency agrees to participate in the development of the ASME Boiler and Pressure Vessel Code by becoming a member of either the Conference Committee or the International Interest Review Group.

When required by context in this Standard, the singular shall be interpreted as the plural and vice versa, and the feminine, masculine, or neuter gender shall be treated as such other gender as appropriate.

This Standard was approved by the Standards Committee on Qualification for Authorized Inspections and by ASME on August 7, 2023.

# COMMITTEE ON QUALIFICATIONS FOR AUTHORIZED INSPECTION

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

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## CORRESPONDENCE WITH THE QAI COMMITTEE

**General.** ASME codes and standards are developed and maintained by committees with the intent to represent the consensus of concerned interests. Users of ASME codes and standards may correspond with the committees to propose revisions or cases, report errata, or request interpretations. Correspondence for this Standard should be sent to the staff secretary noted on the committee's web page, accessible at <https://go.asme.org/QAIcommittee>.

**Revisions and Errata.** The committee processes revisions to this Standard on a continuous basis 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 in the next edition of the Standard.

In addition, the committee may post errata on the committee web page. Errata become effective on the date posted. Users can register on the committee web page to receive e-mail notifications of posted errata.

This Standard is always open for comment, and the committee welcomes proposals for revisions. 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 background information and supporting documentation.

### Cases

(a) The most common applications for cases are

(1) to permit early implementation of a revision based on an urgent need

(2) to provide alternative requirements

(3) to allow users to gain experience with alternative or potential additional requirements prior to incorporation directly into the Standard

(4) to permit the use of a new material or process

(b) Users are cautioned that not all jurisdictions or owners automatically accept cases. Cases are not to be considered as approving, recommending, certifying, or endorsing any proprietary or specific design, or as limiting in any way the freedom of manufacturers, constructors, or owners to choose any method of design or any form of construction that conforms to the Standard.

(c) A proposed case shall be written as a question and reply in the same format as existing cases. The proposal shall also include the following information:

(1) a statement of need and background information

(2) the urgency of the case (e.g., the case concerns a project that is underway or imminent)

(3) the Standard and the paragraph, figure, or table number(s)

(4) the edition(s) of the Standard to which the proposed case applies

(d) A case is effective for use when the public review process has been completed and it is approved by the cognizant supervisory board. Approved cases are posted on the committee web page.

**Interpretations.** Upon request, the committee will issue an interpretation of any requirement of this Standard. An interpretation can be issued only in response to a request submitted through the online Interpretation Submittal Form at <https://go.asme.org/InterpretationRequest>. Upon submitting the form, the inquirer will receive an automatic e-mail confirming receipt.

ASME does not act as a consultant for specific engineering problems or for the general application or understanding of the Standard requirements. If, based on the information submitted, it is the opinion of the committee that the inquirer should seek assistance, the request will be returned with the recommendation that such assistance be obtained. Inquirers can track the status of their requests at <https://go.asme.org/Interpretations>.

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.

Interpretations are published in the ASME Interpretations Database at <https://go.asme.org/Interpretations> as they are issued.



**Committee Meetings.** The QAI Standards Committee regularly holds meetings that are open to the public. Persons wishing to attend any meeting should contact the secretary of the committee. Information on future committee meetings can be found on the committee web page at <https://go.asme.org/QAIcommittee>.

# Chapter 1

## Introduction

### 1-1 SCOPE

This Standard provides requirements for the qualification of individuals performing designated oversight activities as required by the American Society of Mechanical Engineers (ASME). This Standard also establishes the requirements for an organization qualifying Inspectors and Supervisors to be accredited.

### 1-2 DESIGNATED OVERSIGHT

ASME authorizes Certificate Holders under a Certificate of Authorization to apply the ASME Single Certification Mark to items that are in conformance with the governing standard. This authorization requires designated oversight to assure that the activities performed by the Certificate Holder are in accordance with the appropriate ASME standard. The types of designated oversight are

- (a) Authorized Inspection Agency
- (b) Certified Individual
- (c) Qualified Inspection Organization

The type of designated oversight required for each of ASME's conformity assessment programs is specified in ASME CA-1.

### 1-3 QUALIFICATION AND ACCREDITATION REQUIREMENTS

This Standard establishes the duties and qualification requirements for the certification and accreditation of individuals and organizations, respectively, who provide designated oversight.

These duties and qualification requirements include

- (a) the qualification and accreditation requirements and responsibilities of an Authorized Inspection Agency.
- (b) the appointment requirements and duties of the following:
  - (1) Authorized Inspector
  - (2) Authorized Inspector Supervisor
  - (3) Authorized Nuclear Inspector
  - (4) Authorized Nuclear Inspector Supervisor
  - (5) Authorized Nuclear Inservice Inspector
  - (6) Authorized Nuclear Inservice Inspector Supervisor
  - (7) Authorized Nuclear Inspector (Concrete)
  - (8) Authorized Nuclear Inspector Supervisor (Concrete)

These appointments may be generically referred to as "Inspector" and "Supervisor" elsewhere within this Standard.

(c) the qualification and certification requirements and duties of a Certified Individual.

### 1-4 DEFINITIONS

*ASME*: the American Society of Mechanical Engineers. Also called *the Society*.

*ASME standard*: a document establishing characteristics of quality and/or requirements for conformity assessment. Some documents may be referred to as an "ASME code" or "code," e.g., the ASME Boiler and Pressure Vessel Code (ASME BPVC).

*authorized inspection*: the inspection, monitoring, or auditing activities required by an ASME standard or other activities performed by an Inspector or Supervisor.

*Authorized Inspection Agency*: an organization accredited by ASME that employs one or more Inspectors and Supervisors to provide third-party inspection services to either a Certificate Holder working under a Certificate of Authorization or an applicant seeking to obtain a Certificate of Authorization.

*Authorized Inspector*: a Commissioned Inspector holding an Authorized Inspector commission card issued by the National Board. Authorized Inspectors are selected and designated by their employer (an accredited Authorized Inspection Agency) as being qualified to provide third-party authorized inspection services for a Certificate Holder performing work under a Certificate of Authorization or an applicant seeking to obtain a Certificate of Authorization. Authorized Inspectors have the authority to sign a manufacturer's Data Report. See also *Inspector*.

*Authorized Inspector Supervisor*: a Commissioned Inspector who

(a) is employed by an accredited Authorized Inspection Agency

(b) holds the appropriate endorsement or endorsements

(c) has been qualified and designated by the employer to perform supervisory duties

See also *Supervisor*.

*Certificate Holder*: an organization that holds a certificate issued by ASME.