

The National Board  
Body of Knowledge  
for the  
**Authorized  
Inspector Supervisor**



Approved by:  9-2-25  
Executive Director Approval Date

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NB-429 Rev 1  
\*Denotes Revisions

# The National Board Body of Knowledge for the **Authorized Inspector Supervisor (B)**

- \* The National Board has developed this Body of Knowledge to outline duties and responsibilities for supervisors of inspectors performing inspection activities during the construction phase of (non-nuclear) pressure equipment built in accordance with the *ASME Boiler and Pressure Vessel Code*. This Body of Knowledge builds on the Body of Knowledge for the Authorized Inspector, NB-331-NC.

## **Objectives**

- \* An Authorized Inspector Supervisor should have knowledge, and the ability to apply that knowledge, of the following:
  - Responsibilities and duties of the Authorized Inspection Agency (AIA)
  - Responsibilities and duties of the Authorized Inspector Supervisor (AIS)
  - Responsibilities and duties of the Authorized Inspector (AI)
  - Manufacturer Responsibilities
  - Quality Management Systems
  - Auditing Inspectors and Certificate Holders
  - ASME Joint Review Process
  - Requirements of ASME Code Sections I, IV, VIII Div. 1, 2, and 3, X, XII, and ASME B31.1
  - Requirements of *National Board Inspection Code, Part 3, Repairs and Alterations*

## **Reference Material**

- \* The following reference material is required to obtain and apply the knowledge of the listed objectives in this Body of Knowledge.
  - ASME Section I, *Rules for the Construction of Power Boilers*
  - ASME B31.1, *Power Piping*
  - ASME Section IV, *Rules for the Construction of Heating Boilers*
  - ASME Section V, *Nondestructive Examination*
  - ASME Section VIII, Div. 1, 2, and 3, *Rules for the Construction of Pressure Vessels*
  - ASME Section IX, *Welding, Brazing, and Fusing Qualifications*
  - ASME Section X, *Fiber-Reinforced Plastic Pressure Vessels*
  - ASME Section XII, *Rules for Construction and Continued Service of Transport Tanks*
  - ASME QAI-1, *Qualification for Authorized Inspection*
  - ASME Procedure Document, *Conduct Conformity Assessment Activities*
  - ASME CA-1, *Conformity Assessment Requirements*
  - ASNT SNT-TC-1A, *Personnel Qualification and Certification in Nondestructive Testing*
  - NB-263, RCI-1, *Rules for Commissioned Inspectors*
  - NB-360, *National Board Acceptance of Authorized Inspection Agencies (AIA) Accredited by the American Society of Mechanical Engineers (ASME)*
  - NB-381, *Quality Management Systems for Inspection Organizations*
  - NB-415, *Accreditation of Repair Organizations*
  - *National Board Inspection Code, Part 3, Repairs and Alterations*

## Body of Knowledge Outline

This outline provides information regarding the listed objectives of this Body of Knowledge, and further describes the responsibilities and duties of an Authorized Inspector Supervisor.

### 1. Responsibilities and duties of the Authorized Inspection Agency (AIA)

Understanding of NB-360 and ASME QAI-1 applicable to:

- Accreditation
- Quality Management System
- Qualification of personnel providing inspection services
- Conducting Annual Audits of Supervisors

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### 2. Responsibilities and Duties of the Authorized Inspector Supervisor (AIS)

Understanding of NB-263, RCI-1 and ASME QAI-1 applicable to:

- Performance of Authorized Inspectors
- Authorized Inspector assignments
- Quality Control Programs of assigned clients
- Assisting in maintaining competency of assigned Inspectors

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### 3. Responsibilities and duties of the Authorized Inspector (AI)

Understanding of NB-263, RCI-1, ASME QAI-1,, and ASME Codes applicable to:

- Inspection Activities
- Monitoring Quality Management System Elements of assigned clients
- Verify welding and NDE procedures comply with applicable code requirements
- Verify welders and NDE personnel qualification comply with applicable code requirements
- Observation of fabrication processes to assure compliance with applicable code requirements

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### 4. Manufacturer Responsibilities

Familiarity with ASME Codes applicable to:

- Design
- Materials
- Fabrication
- Testing
- Examination
- Certification and Stamping
- Record Retention

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### 5. Quality Management Systems

Familiarity with ASME Codes applicable to:

- Manufacturers Quality Management System
- Quality Management System Documentation
- Quality Management System Implementation

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6. Conducting Annual Planned Audits of the Authorized Inspector

Understanding the requirements of NB-263, RCI-1 and ASME QAI-1 applicable to:

- Auditing performance of Authorized Inspectors
- Confirm Authorized Inspector involvement in corrective action of deficiencies

\* 7. ASME Joint Review Process

Familiarity with ASME procedures applicable to:

- ASME joint review process
- Involvement of the Authorized Inspector and Authorized Inspector Supervisor
- UM and PEB

\* 8. Reports

Familiarity with submitting audit reports to ASME for:

- AIA review of UM and PEB Certificate Holders
- Additional building and temporary locations