

Specification for the Qualification of B31 Owner's Inspectors



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An American National Standard

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Specification for the Qualification of B31 Owner's Inspectors

1st Edition

Prepared by the
American Welding Society (AWS) Qualification and Certification Committee

Under the Direction of the
AWS Technical Activities Committee

Approved by the
AWS Board of Directors

Abstract

This standard describes the requirements for qualification as an Owner's Inspector as described in the ASME B31 codes. The requirements include education, experience, and written examinations. This standard also covers the job functions a qualified Owner's Inspector should be able to perform.



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Foreword

This foreword is not part of this standard but is included for informational purposes only.

The Owner's Inspector (OI) is responsible for ensuring that all inspections required by the code are performed, as well as any additional inspections deemed necessary to verify contractual compliance. Owners of facilities that utilize American Society of Mechanical Engineers (ASME) piping systems have a code obligation to ensure that all fabrication, examination, testing, and repairs of the facilities meet the requirements of ASME B31 and Section IX. The B31 codes specify that this obligation is met through the services of an OI. However, the exact tasks, duties, and qualifications of OIs are not prescriptively defined. Several ASME B31 Code sections (B31.1, B31.3, B31.5, B31.9, B31.12, and others) have responsibilities for an OI. Many Owners are uninformed of this responsibility and turn this function over to the fabricator, which isn't permitted per ASME codes. The OI must be employed by, or represent, the Owner and not have any direct employment or direct contractual ties to the fabricator, erector, assembler, or material supplier(s). Fabricators of these piping systems are required to maintain a Quality Control (QC) Program, and B31 puts the Quality Assurance (QA) oversight of that QC function onto the OI.

The OI shall make all specifically required inspections, plus any additional inspections deemed necessary to verify compliance. This includes shop and field activities, and inspection of unlisted/nonstandard components, but does not include inspections of listed/standard manufactured components. Listed/standard and unlisted/nonstandard components are defined in ASME B31 codes.

The ASME B31 Code sections have prescribed requirements to maintain an acceptable level of safety over an intended service life. However, misapplying engineering applications to control corrosion is often why piping systems fail. Therefore, this program includes the OI's purview of coating applications and proper insulation installation.

Comments and suggestions for the improvement of this standard are welcome. They should be sent to the Secretary, AWS Qualification and Certification Committee, American Welding Society, 8669 NW 36 St, # 130, Miami, FL 33166.

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Specification for the Qualification of B31 Owner's Inspectors

1. General Requirements

1.1 Scope. This standard establishes requirements for the qualification of Owner's Inspectors (OIs) acting in accordance with the requirements of the American Society of Mechanical Engineers (ASME) B31 piping codes. It describes how personnel are qualified, and the practice by which qualification may be maintained.

1.2 Units of Measurement. This standard does not require units of measure. Therefore, no equivalents or conversions are contained except when they are cited in examples.

1.3 Safety. Safety and health issues and concerns are beyond the scope of this standard and, therefore, are not addressed herein.

Safety and health information is available from the following sources:

American Welding Society:

- (1) ANSI Z49.1, *Safety in Welding, Cutting, and Allied Processes*
- (2) AWS Safety and Health Fact Sheets
- (3) Other safety and health information on the AWS website

Material or Equipment Manufacturers:

- (1) Safety Data Sheets supplied by materials manufacturers
- (2) Operating Manuals supplied by equipment manufacturers

Applicable Regulatory Agencies

Work performed in accordance with this standard may involve the use of materials that have been deemed hazardous and may involve operations or equipment that may cause injury or death. This standard does not purport to address all safety and health risks that may be encountered. The user of this standard should establish an appropriate safety program to address such risks and meet applicable regulatory requirements. ANSI Z49.1 should be considered when developing the safety program.

1.4 Qualification. The candidate shall successfully complete an examination designed to demonstrate general knowledge of piping systems and the ability to fabricate, assemble, and erect piping systems in accordance with customer requirements, engineering specifications, and the requirements of the relevant ASME B31 Code section. An additional examination shall be taken to demonstrate the candidate's piping-related qualifications and knowledge of the requirements for the general application of standards and codes. The Owner shall maintain all qualification records.

1.5 Responsibility. This standard is intended to supplement the requirements of an Owner or operator of a piping system and shall not be construed as preemption of an Owner's responsibility for all work performed. Hence, it is the responsibility of the Owner to determine an OI's qualifications other than those stated in 1.4 above and confirm the capability to perform the duties required. This standard is not intended to supersede or contradict local, state, or national regulations.