



PROCESS
INDUSTRY
PRACTICES

February 2017

Pipeline Systems

PIP PLSC0013
Non-Destructive Examination of ASME B31.4
and B31.8 Metallic Pipelines

PURPOSE AND USE OF PROCESS INDUSTRY PRACTICES

In an effort to minimize the cost of process industry facilities, this Practice has been prepared from the technical requirements in the existing standards of major industrial users, contractors, or standards organizations. By harmonizing these technical requirements into a single set of Practices, administrative, application, and engineering costs to both the purchaser and the manufacturer should be reduced. While this Practice is expected to incorporate the majority of requirements of most users, individual applications may involve requirements that will be appended to and take precedence over this Practice. Determinations concerning fitness for purpose and particular matters or application of the Practice to particular project or engineering situations should not be made solely on information contained in these materials. The use of trade names from time to time should not be viewed as an expression of preference but rather recognized as normal usage in the trade. Other brands having the same specifications are equally correct and may be substituted for those named. All Practices or guidelines are intended to be consistent with applicable laws and regulations including OSHA requirements. To the extent these Practices or guidelines should conflict with OSHA or other applicable laws or regulations, such laws or regulations must be followed. Consult an appropriate professional before applying or acting on any material contained in or suggested by the Practice.

This Practice is subject to revision at any time.

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PUBLISHING HISTORY

February 2017 Issued

Not printed with State funds



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1. Scope

This Practice provides requirements for nondestructive examination (NDE) of pressure containing welds on steel pipelines, compressor stations, meter stations, pump stations, and fabricated assemblies. This Practice does not apply to structural welds, ongoing examinations for mechanical integrity, or welds on boiler and pressure vessels.

2. References

Applicable parts of the following industry codes and standards shall be considered an integral part of this Practice. The edition in effect on the date of contract award shall be used, except as otherwise noted. Short titles are used herein where appropriate. Code section references below are specific to the code editions in effect at the issuance of this Practice.

2.1 Industry Codes and Standards

- American Petroleum Institute (API)
 - API Standard 1104 - *Welding of Pipelines and Related Facilities*
- American Society of Mechanical Engineers (ASME)
 - ASME B31.4 - *Pipeline Transportation Systems for Liquids and Slurries*
 - ASME B31.8 - *Gas Transmission and Distribution Piping Systems*
 - ASME BPVC-IX - *ASME Boiler and Pressure Vessel Code, Section IX: Welding and Brazing Qualifications*
- American Society for Nondestructive Testing (ASNT)
 - SNT-TC-1A - *Recommended Practice, Personnel Qualification and Certification in Nondestructive Testing*

3. Definitions

owner: The party who owns the facility wherein the nondestructive examination services will be performed

purchaser: The party who awards the contract to the supplier. The purchaser may be the owner or the owner's authorized agent.

purchaser's inspector: The purchaser's authorized representative with authority to act in the interest of, and on behalf of, the purchaser in quality assurance matters

supplier: The party responsible for providing the nondestructive examination services

4. Requirements

4.1 NDE Procedures and Personnel Qualifications

- 4.1.1 Radiographic examination shall only be performed by personnel qualified in accordance with the minimum requirements of ASNT SNT-TC-1A, Level I.