Qualification of Nondestructive Examination Services for Equipment Used in the Petroleum and Natural Gas Industry

API STANDARD 20D
SECOND EDITION, AUGUST 2019

AMERICAN PETROLEUM INSTITUTE

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Suggested revisions are invited and should be submitted to the Standards Department, API, 200 Massachusetts Avenue, Suite 1100, Washington, DC 20001, standards@api.org.

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1 Scope

1.1 Purpose

This standard specifies requirements for the application of nondestructive examination (NDE) methods as well as the development and qualification procedures used in the manufacturing, servicing, and/or service of equipment for the petroleum and natural gas industries.

1.2 Applicability

This is applicable to suppliers providing NDE services for equipment used in the oil and natural gas industries. The requirements of this standard apply to magnetic particle, liquid penetrant, radiography, and ultrasonic methods of NDE.

NOTE This standard does not limit the responsibility of any manufacturer of commercial products using NDE services and manufactured to an API standard from its responsibility for compliance with all applicable requirements of that API standard.

2 Normative References

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any addenda) applies.

API Specification Q1, *Specification for Quality Management System Requirements for Manufacturing Organizations for the Petroleum and Natural Gas Industry*

API Specification Q2, *Specification for Quality Management System Requirements for Service Supply Organizations for the Petroleum and Natural Gas Industries*

ASME *Boiler and Pressure Vessel Code* (*BPVC*) [1], *Section V: Nondestructive Examination*

ASNT SNT-TC-1A, *Recommended Practice for Personnel Qualification and Certification in Nondestructive Testing*

ASNT ACCP-CP-1, *ASNT Central Certification Program*

ASTM E428 [2],*Standard Practice for Fabrication and Control of Metal, Other Than Aluminum, Reference Blocks Used in Ultrasonic Testing*

ASTM E1114, *Standard Test Method for Determining the Size of Iridium-192 Industrial Radiographic Sources*

ASTM E1165, *Standard Test Method for Measurement of Focal Spots of Industrial X-Ray Tubes by Pinhole Imaging*

ASTM E1316, *Standard Terminology for Nondestructive Examinations*

ASTM E1417, *Standard Practice for Liquid Penetrant Testing*

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1 ASME International, Two Park Avenue, New York, New York 10016-5990, www.asme.org.

2 ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, Pennsylvania 19428-2959, www.astm.org.