

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

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

1 Scope

1.1 Purpose

This standard specifies requirements for the design, development, and qualification of nondestructive examination (NDE) methods used in the manufacturer 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.

2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) 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*

ANSI/ASNT CP-106 ², *Nondestructive Testing—Qualification and Certification of Personnel*

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

ASTM E428 ³, *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*

¹ ASME International, 3 Park Avenue, New York, New York 10016-5990, www.asme.org.

² American Society for Nondestructive Testing, 1711 Arlingate Lane, P.O. Box 28518, Columbus, Ohio 43228, www.asnt.org.

³ ASTM International, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428, www.astm.org.