Line Pipe

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

Highlights of some of the significant changes between publishing the 46th edition and 47th edition include the following:

— hydrotest pressure measuring device calibration;

— nondestructive examination personnel certification;

— assessing ASTM E709 vs. ASTM E3024/E3024M for magnetic particle inspection;

— flattening test requirements;

— modified record retention requirements;

— moderate sour service requirements;

— microalloy chemistry changes;

— high-frequency weld quality;

— updating European Pipeline Research Group toughness guidelines in Annex G;

— ultrasonic testing for laminations;

— subsize Charpy requirements;

— sulfide stress cracking guidance for thermomechanically controlled processed plate;

— transfer requirements for licensees to API Monogram Program.

See Annex A of API Q1 or the API website for information pertaining to the API Monogram Program and use of the API Monogram on applicable products, or for information about the Monogram licensing program, please contact certification@api.org.

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Line Pipe

1 Scope

1.1 This specification specifies requirements for the manufacture of two product specification levels (PSL 1 and PSL 2) of seamless and welded steel pipe for use in pipeline transportation systems in the petroleum and natural gas industries.

1.2 This specification is not applicable to cast pipe.

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 addenda or errata) applies.

API Recommended Practice 5A3, *Thread Compounds for Casing, Tubing, Line Pipe, and Drill Stem Elements*

API Specification 5B, *Threading, Gauging, and Inspection of Casing, Tubing, and Line Pipe Threads*

API Recommended Practice 5L3, *Drop-Weight Tear Tests on Line Pipe*

API Bulletin 5T1, *Imperfection and Defect Terminology*

ANSI/NACE MR0175-2021/ISO 15156-1:2020 [1, 2, 3], *Petroleum and Natural Gas Industries—Materials for Use in H_2S-Containing Environments in Oil and Gas Production—Part 1: General Principles for Selection of Cracking-resistant Materials*

ANSI/NACE MR0175-2021/ISO 15156-2:2020, *Petroleum and Natural Gas Industries—Material for Use in H_2S-Containing Environments in Oil and Gas Production—Part 2: Cracking-Resistant Carbon and Low-Alloy Steels, and the Use of Cast Irons*

ASNT SNT-TC-1A [4], *Personnel Qualification and Certification in Nondestructive Testing*

ASTM A370 [5], *Standard Test Methods and Definitions for Mechanical Testing of Steel Products*

ASTM A435, *Standard Specification for Straight-Beam Ultrasonic Examination of Steel Plates*

ASTM A578, *Standard Specification for Straight-Beam Ultrasonic Examination of Plain and Clad Steel Plates for Special Applications*

ASTM A751, *Standard Test Methods and Practices for Chemical Analysis of Steel Products*

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1 American National Standards Institute, 1899 L Street, NW, Washington, DC 20036, www.ansi.org.

2 NACE International (now Association for Materials Protection and Performance), 15835 Park Ten Place, Houston, Texas 77084, www.ampp.org.

3 International Organization for Standardization, Chemin de Blandonnet 8, CP 401, 1214 Vernier, Geneva, Switzerland, www.iso.org.

4 American Society for Nondestructive Testing, 1201 Dublin Road, Columbus, Ohio 43215, www.asnt.org.

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