

Welding Services for Equipment Used in the Petroleum and Natural Gas Industry

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Welding Services for Equipment Used in the Petroleum and Natural Gas Industry

1 Scope

1.1 Purpose

This standard specifies requirements for the qualification of suppliers of welding services used in the manufacture of equipment for the petroleum and natural gas industries.

1.2 Applicability

The requirements of this standard apply to welding operations performed in a welding facility or in the field. Included are pressure-containing, pressure-controlling, overlay, and structural welds.

NOTE This standard does not limit the responsibility of any manufacturer of commercial products using welding 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, except that new editions may be used on issue and become mandatory upon the effective date specified by the publisher or six months from the date of the revision (where no effective date is specified).

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

API Standard 20D, *Nondestructive Examination Services for Equipment Used in the Petroleum and Natural Gas Industry*

API Standard 20H, *Heat Treatment Services—Batch Type for Equipment used in the Petroleum and Natural Gas Industry*

ASME¹ Boiler and Pressure Vessel Code Section II—Materials, Part C, Specifications for Welding Rods, Electrodes and Filler Metals

ASME. BPVC Section III—Welding, Brazing, and Fusing Qualifications

AWS² A5.01, *Welding Consumables—Procurement of Filler Metals and Fluxes*

AWS D1.1, *Structural Welding Code—Steel*

AWS QC1, *Specification for AWS Certification of Welding Inspectors*

ISO 9001, *Quality management systems*

ISO 9606-1, *Qualification testing of welders – Fusion welding – Part 1: Steels*

¹ American Society of Mechanical Engineers, Two Park Avenue, New York, NY 10016, www.asme.org.

² American Welding Society, 8669 NW 36th Street, #130, Miami, FL 33166, www.aws.org.

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