

Specification for Field-welded Tanks for Storage of Production Liquids

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Introduction

This specification is under the jurisdiction of the API Subcommittee on Aboveground Storage Tanks.

This specification is based on the accumulated knowledge and experience of purchasers and manufacturers of field-welded steel storage tanks of various sizes and capacities for internal pressures approaching atmospheric. This publication provides a purchase specification to facilitate the manufacture and procurement of storage tanks for production service, such as storage of crude oil, condensate, hydrocarbon products, and nonpotable water. If tanks are purchased in accordance with this specification, the purchaser is expected to specify certain basic requirements.

This specification shall become effective on the date printed on the cover.

Specification for Field Welded Tanks for Storage of Production Liquids

1 Scope

1.1 General

This specification covers material, design, fabrication, and testing requirements for vertical, cylindrical, aboveground, closed top, welded steel storage tanks in various standard sizes and capacities for internal pressures of approximately atmospheric, not to exceed those listed in Table 5.1, Column 2.

This specification provides the oil production industry with tanks of adequate safety and reasonable economy for use in the storage of crude petroleum and other liquids commonly handled and stored by the production segment of the industry. This specification is for the convenience of purchasers and manufacturers in ordering and fabricating tanks.

1.2 Compliance

The manufacturer is responsible for complying with all provisions of this specification. The purchaser may make any investigation necessary to be satisfied that the manufacturer is in compliance and may reject any material that does not comply with this specification. It is urged that the purchaser exercise this right by providing an inspection independent of any supervisory inspection furnished by the manufacturer, and that the purchaser's inspector closely monitor all of the details of the fabrication and/or field construction and testing herein specified that may affect the integrity and safety of the completed structure.

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 applies including any amendments.

API Specification 5L, *Specification for Line Pipe*

API Standard 650, *Welded Tanks for Oil Storage*

API Recommended Practice 652, *Lining of Aboveground Petroleum Storage Tank Bottoms*

API Standard 2000, *Venting Atmospheric and Low-pressure Storage Tanks*

ASME Boiler and Pressure Vessel Code, Section IX¹, *Welding, Brazing, and Fusing Qualifications*

ASME B16.5, *Pipe Flanges and Flanged Fittings: NPS 1/2 through NPS 24 Metric/Inch Standard*

ASME B16.11, *Forged Fittings, Socket-Welding and Threaded*

ASTM A36/A36M², *Standard Specification for Carbon Structural Steel*

ASTM A53/A53M, *Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless*

ASTM A106/A106M, *Standard Specification for Seamless Carbon Steel Pipe for High-Temperature Service*

¹ ASME International, 2 Park Avenue, New York, New York 10016-5990, www.asme.org.

² ASTM International, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428, www.astm.org.