

Linings of Aboveground Petroleum Storage Tank Bottoms

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1 Scope

This recommended practice (RP) provides guidance on achieving effective corrosion control in aboveground storage tanks by application of tank bottom linings. It contains information pertinent to the selection of lining materials, surface preparation, lining application, cure, and inspection of tank bottom linings for existing and new storage tanks. In many cases, tank bottom linings have proven to be an effective method of preventing internal corrosion of steel tank bottoms.

The intent of this RP is to provide information and guidance specific to aboveground steel storage tanks in hydrocarbon service. Certain practices recommended herein may also be applicable to tanks in other services. This RP is intended to serve only as a guide. Detailed tank bottom lining specifications are not included.

This RP does not designate specific tank bottom linings for every situation because of the wide variety of service environments.

NACE No.10/SSPC-PA 6 and NACE No. 11/SSPC-PA 8 are industry consensus standards for installation of linings on tank floors and vessels. They are written in compulsory language and contain specific criteria intended for use by persons who provide written specifications for tank and vessel linings. These documents should be given consideration when designing and installing a lining system for steel bottom tanks.

2 Normative References

2.1 Codes, Standards, and Specifications

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 Recommended Practice 575, *Inspection of Atmospheric and Low-Pressure Storage Tanks*

API Standard 620, *Design and Construction of Large, Welded, Low-Pressure Storage Tanks*

API Standard 650, *Welded Tanks for Oil Storage*

API Recommended Practice 651, *Cathodic Protection of Aboveground Petroleum Storage Tanks*

API Standard 653, *Tank Inspection, Repair, Alteration, and Reconstruction*

API Standard 2015, *Requirements for Safe Entry and Cleaning of Petroleum Storage Tanks*

API Recommended Practice 2016, *Guidelines and Procedures for Entering and Cleaning Petroleum Storage Tanks*

ASTM D2583¹, *Standard Test Method for Indentation Hardness of Rigid Plastics by Means of a Barcol Impressor*

ASTM D4414, *Standard Practice for Measurement of Wet Film Thickness by Notch Gages*

¹ ASTM International, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428, www.astm.org.