Application of Tape Coatings for External Corrosion Protection of Buried Metal Pipelines

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Document History:

2023-11-21: Revised by AMPP Standards Committee (SC) 03, External Coatings – Buried and Submerged

2019-02-25: Revised by NACE International Task Group (TG) 251, Coatings Tape for External Repair, Rehabilitations, and Weld Joints on Pipelines

2009: Approved by NACE TG 251, Coatings Tape for External Repair, Rehabilitations, and Weld Joints on Pipelines

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Foreword

This standard practice provides the material characteristics, minimum system performance requirements, application methods, handling, shipping, and installation procedures for tape coatings for the prevention of external corrosion of underground or submerged pipelines. This standard is applicable to both carbon steel (CS) pipe and ductile iron (DI) pipe when the application of a tape coating system is desirable. This standard is intended for use by coating applicators, engineers, and pipeline owners as a guide to specifying application parameters.

Scope

The tape coatings covered in this standard are used as the external corrosion protection for new and existing pipes, girth welds, and fittings, and for repair and rehabilitation. The primary function of these tape coating systems is to prevent corrosion of the pipeline when used with or without cathodic protection (CP).

Rationale

The revision to this standard was initiated due to the 5-year requirement for revisions of standard practices. Most of the changes made are editorial in nature, some sections were also restructured to have more consistency between the various types of tapes that are covered in this document.

Referenced Standards and Other Consensus Documents

Unless specifically dated, the latest edition, revision, or amendment of the documents listed in the table below shall apply.

AMPP/NACE/SSPC, www.ampp.org:	
NACE SP0169	Control of External Corrosion on Underground or Submerged Metallic Piping Systems
NACE SP0274	High-Voltage Electrical Inspection of Pipeline Coatings
SSPC-SP 1	Solvent Cleaning
SSPC-SP 2	Hand Tool Cleaning
SSPC-SP 7/NACE No. 4	Brush-Off Blast Cleaning
ASTM International, www.astm.org:	
ASTM D5	Standard Test Method for Penetration of Bituminous Materials
ASTM D36	Standard Test Method for Softening Point of Bitumen (Ring-and-Ball Apparatus)
ASTM D93	Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester
ASTM D149	Standard Test Method for Dielectric Breakdown Voltage and Dielectric Strength of Solid Electrical Insulating Materials at Commercial Power Frequencies
ASTM D1000	Test Methods for Pressure-Sensitive Adhesive-Coated Tapes Used for Electrical and Electronic Applications
ASTM E96	Standard Test Methods for Water Vapor Transmission of Materials
ASTM G8	Standard Test Method for Cathodic Disbonding of Pipeline Coatings
ASTM G14	Standard Test Method for Impact Resistance of Pipeline Coatings (Falling Weight Test)
ASTM G42	Standard Test Method for Cathodic Disbonding of Pipeline Coatings Subjected to Elevated Temperatures