AMPP SP21443-2021
Approved 2021-07-27

Coating Systems (External) for Pipeline Trenchless Crossings

Coating Systems (External) for Pipeline Trenchless Crossings

This AMPP standard represents a consensus of those individual members who have reviewed this document, its scope, and provisions. Its acceptance does not in any respect preclude anyone, whether he or she has adopted the standard or not, from manufacturing, marketing, purchasing, or using products, processes, or procedures not in conformance with this standard. Nothing contained in this AMPP standard is to be construed as granting any right, by implication or otherwise, to manufacture, sell, or use in connection with any method, apparatus, or product covered by Letters Patent, or as indemnifying or protecting anyone against liability for infringement of Letters Patent. This standard represents minimum requirements and should in no way be interpreted as a restriction on the use of better procedures or materials. Neither is this standard intended to apply in all cases relating to the subject. Unpredictable circumstances may negate the usefulness of this standard in specific instances. AMPP assumes no responsibility for the interpretation or use of this standard by other parties and accepts responsibility for only those official AMPP interpretations issued by AMPP in accordance with its governing procedures and policies which preclude the issuance of interpretations by individual volunteers.

Users of this AMPP standard are responsible for reviewing appropriate health, safety, environmental, and regulatory documents and for determining their applicability in relation to this standard prior to its use. This AMPP standard may not necessarily address all potential health and safety problems or environmental hazards associated with the use of materials, equipment, and/or operations detailed or referred to within this standard. Users of this AMPP standard are also responsible for establishing appropriate health, safety, and environmental protection practices, in consultation with appropriate regulatory authorities, if necessary, to achieve compliance with any existing applicable regulatory requirements prior to the use of this standard.

CAUTIONARY NOTICE: AMPP standards are subject to periodic review and may be revised or withdrawn at any time in accordance with AMPP technical committee procedures. AMPP requires that action be taken to reaffirm, revise, or withdraw this standard no later than five years from the date of initial publication and subsequently from the date of each reaffirmation or revision. The user is cautioned to obtain the latest edition. Purchasers of AMPP standards may receive current information on all standards and other AMPP/NACE/SSPC publications by contacting the AMPP Customer Support, 15835 Park Ten Place, Houston, Texas 77084-5145 (Tel: +1 281-228-6200, email: customersupport@ampp.org).

Document History

2021-07-27 Developed by AMPP Standards Committee (SC) 03, External Coatings—Buried & Immersed

AMPP values your input. To provide feedback on this standard, please contact: standards@ampp.org

Coating Systems (External) for Pipeline Trenchless Crossings

Tables

Foreword

This Association for Materials Protection and Performance (AMPP) standard practice provides the most current technology and industry practices for the use of coating systems (external) for pipeline directional drill applications. This includes application and inspection for both plant- and field-applied coatings.

This standard is intended for use by corrosion control personnel, design engineers, project managers, purchasers, and construction engineers, and managers. It is applicable to underground steel pipelines in the oil and gas gathering, distribution, and transmission industries.

In AMPP standards, the terms *shall* and *must* are used to state requirements and are considered mandatory. The term *should* is used to state something that is recommended, but is not considered mandatory. The term *may* is used to state something considered optional.

Section 1: General

1.1 This AMPP standard practice establishes minimum requirements for the application and inspection of coating systems (external) for directional drill applications.

1.2 This specification applies to previously coated or uncoated pipe that is to be coated for directional drills, road bores, and areas where extra abrasion resistance is required.

1.3 The function of such coatings is to prevent corrosion when used in conjunction with cathodic protection.

1.4 This standard describes methods for qualifying and controlling the quality of fusion-bonded epoxy (FBE) pipe coatings, urethane coatings, epoxy-urethanes, shrink sleeves (special applications), two-part liquid epoxies, and other properly qualified coatings (as long as the proper parameters are met in accordance with this document, e.g., polyolefin, three-layer coatings), provides guidelines for the proper application, and identifies inspection and repair techniques to achieve the best application of plant- and field-applied coating systems.

1.5 The existing standard practices that should be used to support this standard are:
(a) NACE SP0394[1];
(b) NACE Standard RP0402[2];
(c) NACE Standard RP0105[3];
(d) AMPP SP21493 (Standard under development),[4] "Coatings, Polyurethane for Field Repair, Rehabilitation, and Girth Weld Joints of Pipelines";
(e) NACE SP0303[5];
(f) CSA[(1)] Z245.20/Z245.21[6];
(g) CSA Z245.30[7]; and
(h) ISO[(2)] 21809-3.[8]

[(1)] Canadian Standards Association (CSA), 178 Rexdale Blvd. Toronto, ON, Canada M9W 1R3.
[(2)] International Organization for Standardization (ISO), Chemin de Blandonnet 8, CP 401, 1214 Vernier, Geneva, Switzerland.