NACE SP0402-2023
Revised January 18, 2023

Field-Applied Fusion-Bonded Epoxy (FBE) Pipe Coating Systems for Girth Weld Joints: Application, Performance, and Quality Control

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Document History

2023-01-18: Revised by AMPP Standards Committee (SC) 03, External Coatings—Buried & Immersed

2002: Approved (as RP0402) by NACE Task Group (TG) 249, "Field-Applied Fusion-Bonded Epoxy (FBE) Pipe Coating Systems for Girth Weld Joints: Application, Performance, and Quality Control"

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Foreword

This AMPP standard practice provides the most current technology and industry practices for the use of field-applied, fusion-bonded epoxy (FBE) external pipe coating systems for girth weld joints. This standard is intended for use by corrosion control personnel, design engineers, project managers, purchasing personnel, and construction engineers and managers. It is applicable to underground steel pipelines.

Scope

NACE SP0402 presents guidelines for establishing minimum requirements to ensure proper application and performance of field-applied single- and dual-layer fusion-bonded epoxy (FBE) coating systems to the external surfaces of steel pipe at girth weld joints.

Rationale

The latest revision of this document was made with the intent to include guidance regarding the application process and quality testing. Additionally, the committee strove toward setting numerical parameters in areas that had previously been vague, outdated, or left out completely. The ultimate goal of this document is to provide a useful tool for pipeline operators that would allow them to follow the FBE field joint coating process from selection through application and testing with minimal need for outside references.

Referenced Standards and Other Consensus Documents

The latest edition, revision, or amendment of the referenced documents in effect shall govern unless otherwise dated.

AMPP/NACE/ SSPC: www.ampp.org:	
NACE SP0169	Control of External Corrosion on Underground or Submerged Metallic Piping Systems
NACE SP0178	Design, Fabrication, and Surface Finish Practices for Tanks and Vessels to Be Lined for Immersion Service
NACE SP0287	Field Measurement of Surface Profile of Abrasive Blast Cleaned Steel Surfaces Using a Replica Tape
NACE SP0394	Application, Performance, and Quality Control of Plant-Applied, Fusion-Bonded Epoxy External Pipe Coating
NACE/ASTM G193	Standard Terminology and Acronyms Relating to Corrosion
SSPC-PA 2	Procedure for Determining Conformance to Dry Coating Thickness Requirements
SSPC-SP 1	Solvent Cleaning
SSPC-SP 10/NACE No. 2	Near-White Metal Blast Cleaning
SSPC-VIS 1	Guide and Reference Photographs for Steel Surfaces Prepared by Dry Abrasive Blast Cleaning