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**Specification of fusion-bonded epoxy external coatings for
steel pipeline**

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Foreword

This document is in accordance with the provisions of GB/T 1:1-2020 Standardization Guidelines Part 1: Structure and Drafting Rules of Standardization Documents

Drafting:

This document uses the redrafting method to refer to ISO 21809-2:2014 "Buried underground for pipeline transportation systems in the oil and gas industry

The outer covering layer of the pipeline or submerged under water: Part 2: Single-layer fusion epoxy coating: Compilation, consistent with ISO 21809-2:2014

The degree is not equivalent:

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1 Scope

This document specifies the technical requirements for fusion-bonded epoxy powder coatings for steel pipelines:

This document is applicable to the design, production, construction and inspection of single-layer and double-layer structure fusion bonded epoxy powder outer coatings for steel pipelines, and is suitable for operation

Fused epoxy powder outer coating for buried or underwater steel pipes with a temperature

of -30 degrees C~80 degrees C:

2 Normative references

The contents of the following documents constitute indispensable clauses of this document through normative references in the text: Among them, dated quotations

Only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

This document:

GB/T 1408:1 Insulating material electric strength test method Part 1: Test under power frequency

GB/T 1768 Paints and varnishes-Determination of abrasion resistance-Rotating rubber grinding wheel method

GB/T 8923:1 Visual assessment of surface cleanliness of steel surface treatment before coating-Part 1: Uncoated steel

The corrosion grade and treatment grade of the surface and the steel surface after the original coating has been completely removed

GB/T 13288:5 Steel surface treatment before coating: Surface roughness characteristics of steel after blast cleaning: Part 5: Surface

Method for measuring roughness copy tape method

GB/T 18570:3 Evaluation test of surface cleanliness of steel surface treatment before coating: Part 3: Steel before coating

Surface dust evaluation (pressure sensitive adhesive tape method)

GB/T 18570:9 Evaluation test of surface cleanliness of steel surface treatment before coating: Part 9: Site of water-soluble salt

Conductivity measurement

GB/T 21782:1 Powder coatings Part 1: Determination of particle size distribution by sieving method

GB/T 31838:2 Dielectric and electrical characteristics of solid insulating materials Part 2: Resistance characteristics (DC method) Volume resistance and volume

Product resistivity

GB 50369 Code for construction and acceptance of long-distance oil and gas pipeline engineering

GB/T 51241 Technical Specification for Pipeline External Anticorrosion Patching

JB/T 6570 Ordinary abrasive magnetic content determination method

SY/T 0063 Leak detection test method for pipeline coating

SY/T 4113:1 Pipeline anti-corrosion coating performance test method Part 1: Scratch resistance test

SY/T 4113:3 Pipeline anticorrosive coating performance test method Part 3: Cathodic stripping test

SY/T 4113:5 Pipeline anticorrosive coating performance test method Part 5: Bend resistance test

SY/T 4113:7 Pipeline anticorrosive coating performance test method Part 7: Thickness test

SY/T 4113:9 Pipeline anticorrosion coating performance test method Part 9: Resistance to liquid medium immersion

3 Terms and definitions

The following terms and definitions apply to this document: