

**Petroleum and natural gas industries - External coatings  
for buried or submerged pipelines used in pipeline  
transportation systems - Part 2: Single layer  
fusion-bonded epoxy coatings (ISO 21809-2:2014)**

## EESTI STANDARDI EESSÕNA

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See Eesti standard EVS-EN ISO 21809-2:2014 sisaldab Euroopa standardi EN ISO 21809-2:2014 inglisekeelset teksti.	This Estonian standard EVS-EN ISO 21809-2:2014 consists of the English text of the European standard EN ISO 21809-2:2014.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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ICS 75.200

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English Version

Petroleum and natural gas industries - External coatings for  
buried or submerged pipelines used in pipeline transportation  
systems - Part 2: Single layer fusion-bonded epoxy coatings  
(ISO 21809-2:2014)

Industries du pétrole et du gaz naturel - Revêtements  
externes des conduites enterrées et immergées utilisées  
dans les systèmes de transport par conduites - Partie 2:  
Revêtements monocouche à base de résine époxydique  
appliquée par fusion (ISO 21809-2:2014)

Erdöl und Erdgasindustrie - Umhüllungen für erd- und  
wasserverlegte Rohrleitungen in Transportsystemen - Teil  
2: Einschicht-Epoxipulverbeschichtungen (ISO 21809-  
2:2014)

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EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

## Foreword

This document (EN ISO 21809-2:2014) has been prepared by Technical Committee ISO/TC 67 “Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries” in collaboration with Technical Committee ECISS/TC 110 “Steel tubes, and iron and steel fittings” the secretariat of which is held by UNI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2015, and conflicting national standards shall be withdrawn at the latest by May 2015.

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### Endorsement notice

The text of ISO 21809-2:2014 has been approved by CEN as EN ISO 21809-2:2014 without any modification.

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## Introduction

Users of this part of ISO 21809 should be aware that further or differing requirements might be needed for individual applications. This part of ISO 21809 is not intended to inhibit a vendor from offering, or the purchaser from accepting, alternative equipment or engineering solutions for the individual application. This can be particularly applicable if there is innovative or developing technology. If an alternative is offered, the vendor should identify any variations from this part of ISO 21809 and provide details.

# Petroleum and natural gas industries — External coatings for buried or submerged pipelines used in pipeline transportation systems —

## Part 2: Single layer fusion-bonded epoxy coatings

### 1 Scope

This part of ISO 21809 specifies the requirements for qualification, application, testing and handling of materials for plant application of single layer fusion-bonded epoxy (FBE) coatings applied externally for the corrosion protection of bare steel pipe for use in pipeline transportation systems for the petroleum and natural gas industries as defined in ISO 13623.

NOTE Pipes coated in accordance with this part of ISO 21809 are considered suitable for additional protection by means of cathodic protection.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 2815, *Paints and varnishes — Buchholz indentation test*

ISO 8130-2, *Coating powders — Part 2: Determination of density by gas comparison pyknometer (referee method)*

ISO 8130-3, *Coating powders — Part 3: Determination of density by liquid displacement pyknometer*

ISO 8501-1:2007, *Preparation of steel substrates before application of paints and related products — Visual assessment of surface cleanliness — Part 1: Rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal of previous coatings*

ISO 8502-3, *Preparation of steel substrates before application of paints and related products — Tests for the assessment of surface cleanliness — Part 3: Assessment of dust on steel surfaces prepared for painting (pressure-sensitive tape method)*

ISO 8502-6, *Preparation of steel substrates before application of paints and related products — Tests for the assessment of surface cleanliness — Part 6: Extraction of soluble contaminants for analysis — The Bresle method*

ISO 8502-9, *Preparation of steel substrates before application of paints and related products — Tests for the assessment of surface cleanliness — Part 9: Field method for the conductometric determination of water-soluble salts*

ISO 8503-4, *Preparation of steel substrates before application of paints and related products — Surface roughness characteristics of blast-cleaned steel substrates — Part 4: Method for the calibration of ISO surface profile comparators and for the determination of surface profile — Stylus instrument procedure*

ISO 8503-5, *Preparation of steel substrates before application of paints and related products — Surface roughness characteristics of blast-cleaned steel substrates — Part 5: Replica tape method for the determination of the surface profile*

ISO 10474:2013, *Steel and steel products — Inspection documents*