Irish Standard
I.S. EN ISO 18797-2:2021

Petroleum, petrochemical and natural gas industries - External corrosion protection of risers by coatings and linings - Part 2: Maintenance and field repair coatings for riser pipes (ISO 18797-2:2021)

I.S. EN ISO 18797-2:2021

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN ISO 18797-2:2021 is the adopted Irish version of the European Document EN ISO 18797-2:2021, Petroleum, petrochemical and natural gas industries - External corrosion protection of risers by coatings and linings - Part 2: Maintenance and field repair coatings for riser pipes (ISO 18797-2:2021)

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 18797-2

September 2021

ICS 75.180.10

English Version

Petroleum, petrochemical and natural gas industries - External corrosion protection of risers by coatings and linings - Part 2: Maintenance and field repair coatings for riser pipes (ISO 18797-2:2021)

Industries du pétrole, de la pétrochimie et du gaz naturel - Protection de la corrosion externe des tubes de production par revêtements et doublures - Partie 2: Entretien et réparation in situ des tubes de production (ISO 18797-2:2021)

Erdöl-, petrochemische und Erdgasindustrie - Äußerer Korrosionsschutz von Steigleitungen durch Beschichtungen und Auskleidungen - Teil 2: Wartungs- und Reparaturbeschichtungen für Steigleitungen (ISO 18797-2:2021)

This European Standard was approved by CEN on 28 August 2021.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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Contents

Page

European foreword

This document (EN ISO 18797-2:2021) 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 CEN/TC 12 “Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries” the secretariat of which is held by NEN.

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 March 2022, and conflicting national standards shall be withdrawn at the latest by March 2022.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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Endorsement notice

The text of ISO 18797-2:2021 has been approved by CEN as EN ISO 18797-2:2021 without any modification.

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INTERNATIONAL STANDARD

ISO 18797-2

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Petroleum, petrochemical and natural gas industries — External corrosion protection of risers by coatings and linings —

Part 2: Maintenance and field repair coatings for riser pipes

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Contents

Page

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 67, *Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 12, *Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

A list of all parts in the ISO 18797 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document has been developed in response to worldwide demand for minimum specifications for field applied maintenance and repair coatings for riser pipes. ISO 18797-1 specifies the shop applied coatings for risers. Coated offshore risers are intermittently exposed to varying conditions. These include – but are not limited to – sunlight, rain, snow, hail, water spray, salt spray, high humidity, fluctuating ambient temperatures (varying from sub-zero to high temperature), water currents, and impacts from waves, drifting debris and marine growth. Exposure to such conditions can cause severe coating deterioration in time, resulting in ineffective corrosion prevention of the steel riser pipe.

Users of this document are advised that further or differing requirements can be utilized for individual applications. This document can also be used for the maintenance and repair of coatings on other types of structures in the offshore splash zone, such as jetty piles and platform legs. This document does not limit the contractor or the manufacturer from proposing, or from accepting, alternative engineering solutions for the individual application. This can be particularly applicable where there is innovative or developing technology. Where an alternative is proposed, the specification issuer is expected to identify any deviations from this document and provide details.

Petroleum, petrochemical and natural gas industries — External corrosion protection of risers by coatings and linings —

Part 2: Maintenance and field repair coatings for riser pipes

1 Scope

This document specifies the selection criteria and minimum requirements for protective coating systems for maintenance and field repair of risers exposed to conditions in the splash zone. It is applicable for maintenance requirements and field repairs of riser coatings.

This document does not apply to the selection of techniques and materials used to restore integrity of the risers to be coated, nor does it apply to the selection of additional mechanical protective materials that are not part of the coating systems described in this document.

New construction shop applied riser coatings are covered in ISO 18797-1. Compatible maintenance and repair coating systems specified in ISO 18797-1 are covered in this document.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 34-1, *Rubber, vulcanized or thermoplastic — Determination of tear strength — Part 1: Trouser, angle and crescent test pieces*

ISO 37, *Rubber, vulcanized or thermoplastic — Determination of tensile stress-strain properties*

ISO 48-2, *Rubber, vulcanized or thermoplastic — Determination of hardness — Part 2: Hardness between 10 IRHD and 100 IRHD*

ISO 527-1, *Plastics — Determination of tensile properties — Part 1: General principles*

ISO 527-2, *Plastics — Determination of tensile properties — Part 2: Test conditions for moulding and extrusion plastics*

ISO 527-3, *Plastics — Determination of tensile properties — Part 3: Test conditions for films and sheets*

ISO 868, *Plastics and ebonite — Determination of indentation hardness by means of a durometer (Shore hardness)*

ISO 1183-1, *Plastics — Methods for determining the density of non-cellular plastics — Part 1: Immersion method, liquid pycnometer method and titration method*

ISO 1431-1, *Rubber, vulcanized or thermoplastic — Resistance to ozone cracking — Part 1: Static and dynamic strain testing*

ISO 1523, *Determination of flash point — Closed cup equilibrium method*

ISO 1817, *Rubber, vulcanized or thermoplastic — Determination of the effect of liquids*