SLOVENSKI STANDARD
SIST EN ISO 19277:2019

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Petrokemična industrija ter industrija za predelavo nafte in zemeljskega plina - Preskušanje primernosti in sprejeta merila za zaščitne premazne sisteme pod izolacijo (ISO 19277:2018)

Petroleum, petrochemical and natural gas industries - Qualification testing and acceptance criteria for protective coating systems under insulation (ISO/FDIS 19277:2018)

Erdöl-, petrochemische und Erdgasindustrie - Qualifikationsprüfungen und Abnahmekriterien für Beschichtungssysteme unter Isolierung (ISO 19277:2018)

Industries du pétrole, de la pétrochimie et du gaz naturel - Essais de qualification des systèmes de revêtement protecteurs sous isolation (ISO 19277:2018)

Ta slovenski standard je istoveten z: **EN ISO 19277:2018**

ICS:

75.200	Oprema za skladiščenje nafte, naftnih proizvodov in zemeljskega plina	Petroleum products and natural gas handling equipment

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EUROPÄISCHE NORM

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English Version

Petroleum, petrochemical and natural gas industries - Qualification testing and acceptance criteria for protective coating systems under insulation (ISO 19277:2018)

Industries du pétrole, de la pétrochimie et du gaz naturel - Essais de qualification des systèmes de revêtement protecteurs sous isolation (ISO 19277:2018)

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Contents

Page

European foreword

This document (EN ISO 19277:2018) 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of an identical text or by endorsement, at the latest by June 2019, and conflicting national standards shall be withdrawn at the latest by June 2019.

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Endorsement notice

The text of ISO 19277:2018 has been approved by CEN as EN ISO 19277:2018 without any modification.

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Contents

Page

Foreword

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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*.

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

Unprotected carbon steel in insulated service with the presence of water and concentrating contaminants from the atmosphere or surrounding sources can cause accelerated corrosion and lead to severe metal loss. Additionally, unprotected austenitic and duplex stainless steels can suffer external chloride-induced stress corrosion cracking if contaminates, such as chlorides from the atmosphere and or the insulation, are present at the steel surface. Therefore, steel structures under insulation are normally protected to prevent corrosion-related damage during the operational life required of the equipment.

There are different ways of protecting steel structures from corrosion under insulation. This document deals with protection by use of coating when used as part of a system, including insulation and cladding materials, which can work together to prevent corrosion under insulation (CUI). All components of the corrosion prevention system are important in achieving adequate corrosion protection. This document only deals with the coating part of the corrosion protection system with focus on typical CUI coating environments. Further, this document focuses on accelerated testing protocols and acceptance criteria, so that interested parties can make informed decisions.

In order to ensure effective corrosion protection of steel structures and equipment, it is necessary for owners of such structures, planners, consultants, companies carrying out corrosion protection work, inspectors of protective coatings and manufacturers of coating materials to have at their disposal state-of-the-art information in a concise form on corrosion protection by coating systems. Such information has to be as complete as possible, unambiguous and easily understandable to avoid difficulties and misunderstandings between the interested parties with the practical implementation of protection work.

This document is intended to give the abovementioned information to people who have some technical knowledge of coatings and the process operations of the equipment. It is assumed that the user of this document is familiar with other relevant International Standards, in particular those dealing with surface preparation, inspection/testing of coatings, and relevant regulations.

Future parts of this document are planned to be developed and can include other subjects like higher temperature, cyclic and intermittent service, testing of coatings for maintenance and repair, tape-applied coating materials, etc.