SLOVENSKI STANDARD
SIST EN ISO 13680:2020

01-september-2020

Nadomešča:
SIST EN ISO 13680:2012

Industrija za predelavo nafte in zemeljskega plina - Nevarjeni cevasti izdelki iz korozijsko odpornih zlitin, ki se uporabljajo kot zaščitne, proizvodne in priključne cevi ter pribor - Tehnični dobavni pogoji (ISO 13680:2020)

Petroleum and natural gas industries - Corrosion-resistant alloy seamless tubular products for use as casing, tubing, coupling stock and accessory material - Technical delivery conditions (ISO 13680:2020)

Erdöl- und Erdgasindustrie - Nahtlose Rohre aus korrosionsbeständigen Legierungen zur Verwendung als Futter- oder Steigrohre sowie Muffenvorrohre - Technische Lieferbedingungen (ISO 13680:2020)

Industries du pétrole et du gaz naturel - Tubes sans soudure en acier allié résistant à la corrosion utilisés comme tubes de cuvelage, tubes de production et tubes-ébauches pour manchons - Conditions techniques de livraison (ISO 13680:2020)

Ta slovenski standard je istoveten z: **EN ISO 13680:2020**

ICS:

75.180.10	Oprema za raziskovanje, vrtanje in odkopavanje	Exploratory, drilling and extraction equipment
77.140.75	Jeklene cevi in cevni profili za posebne namene	Steel pipes and tubes for specific use

SIST EN ISO 13680:2020 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 13680

June 2020

ICS 75.180.10; 77.140.75

Supersedes EN ISO 13680:2010

English Version

Petroleum and natural gas industries - Corrosion-resistant alloy seamless tubular products for use as casing, tubing, coupling stock and accessory material - Technical delivery conditions (ISO 13680:2020)

Industries du pétrole et du gaz naturel - Produits tubulaires sans soudure en acier allié résistant à la corrosion utilisés comme tubes de cuvelage, tubes de production, tubes-ébauches pour manchons et matériau pour accessoires - Conditions techniques de livraison (ISO 13680:2020)

Erdöl- und Erdgasindustrie - Nahtlose Rohre aus korrosionsbeständigen Legierungen zur Verwendung als Futter- oder Steigrohre sowie Muffenvorrohre - Technische Lieferbedingungen (ISO 13680:2020)

This European Standard was approved by CEN on 24 April 2020.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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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

Ref. No. EN ISO 13680:2020 E

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European foreword

This document (EN ISO 13680:2020) 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 December 2020, and conflicting national standards shall be withdrawn at the latest by December 2020.

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.

This document supersedes EN ISO 13680:2010.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 13680:2020 has been approved by CEN as EN ISO 13680:2020 without any modification.

INTERNATIONAL STANDARD

ISO 13680

Fourth edition
2020-05

Petroleum and natural gas industries — Corrosion-resistant alloy seamless tubular products for use as casing, tubing, coupling stock and accessory material — Technical delivery conditions

Industries du pétrole et du gaz naturel — Produits tubulaires sans soudure en acier allié résistant à la corrosion utilisés comme tubes de cuvelage, tubes de production, tubes-ébauches pour manchons et matériau pour accessoires — Conditions techniques de livraison

Reference number
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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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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 67, *Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries*, Subcommittee SC 5, *Casing, tubing and drill pipe*, 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).

This fourth edition cancels and replaces the third edition (ISO 13680:2010), which has been technically revised. The main changes compared to the previous edition are as follows:

— change of title and scope so that it includes accessory material and group 5;

— deletion of Annex F;

— addition of new Annex F, Annex H and Annex I;

— update of warning statement;

— complete revision of the technical content.

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

Users of this document should be aware that further or differing requirements can be needed for individual applications. This document is not intended to inhibit a vendor from offering, or the purchaser from accepting, alternative equipment or engineering solutions for the individual application. This is particularly relevant to innovative or developing technology. Where an alternative is offered, it is the responsibility of the vendor to identify any variations from this document and provide details.

In this document, the following verbal forms are used:

a) “shall” indicates a requirement;

b) “should” indicates a recommendation;

c) “may” indicates a permission;

d) “can” indicates a possibility or a capability.

Information marked as “NOTE” is for guidance in understanding or clarifying the associated requirement. “Notes to entry” used in Clause 3 provide additional information that supplements the terminological data and can contain provisions relating to the use of a term.

Petroleum and natural gas industries — Corrosion-resistant alloy seamless tubular products for use as casing, tubing, coupling stock and accessory material — Technical delivery conditions

WARNING — It is the purchaser's responsibility to specify the product specification level (PSL), corrosion-resistant alloy (CRA) group, category, grade, delivery conditions and any other requirement in addition to those specified herewith to ensure that the product is adequate for the intended service environment. The ISO 15156 series should be considered when making specific requirements for H_2S-containing environment; see Annex G. Other variables which can contribute to hydrogen embrittlement should be considered. There are other sources of hydrogen besides H_2S containing environments, which are not addressed by the ISO 15156 series.

1 Scope

This document specifies the technical delivery conditions for corrosion-resistant alloy seamless tubular products for casing, tubing, coupling stock and accessory material (including coupling stock and accessory material from bar) for two product specification levels:

— PSL-1, which is the basis of this document;

— PSL-2, which provides additional requirements for a product that is intended to be both corrosion and cracking resistant for the environments and qualification method specified in Annex G and in the ISO 15156 series.

At the option of the manufacturer, PSL-2 products can be provided in lieu of PSL-1.

NOTE 1 The corrosion-resistant alloys included in this document are special alloys in accordance with ISO 4948-1 and ISO 4948-2.

NOTE 2 For the purpose of this document, NACE MR0175 is equivalent to the ISO 15156 series.

NOTE 3 Accessory products can be manufactured from coupling stock and tubular material, or from solid bar stock or from bored and heat heat-treated bar stock as covered in Annex F.

This document contains no provisions relating to the connection of individual lengths of pipe.

This document contains provisions relating to marking of tubing and casing after threading.

This document is applicable to the following five groups of products:

a) group 1, which is composed of stainless alloys with a martensitic or martensitic/ferritic structure;

b) group 2, which is composed of stainless alloys with a ferritic-austenitic structure, such as duplex and super-duplex stainless alloy;

c) group 3, which is composed of stainless alloys with an austenitic structure (iron base);

d) group 4, which is composed of nickel-based alloys with an austenitic structure (nickel base);

e) group 5, which is composed of bar only (Annex F) in age-hardened (AH) nickel-based alloys with austenitic structure.

NOTE 4 Not all PSL-1 categories and grades can be made cracking resistant in accordance with the ISO 15156 series and are, therefore, not included in PSL-2.