

SLOVENSKI STANDARD
oSIST prEN ISO 13680:2019
01-april-2019

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/DIS 13680:2019)

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/DIS 13680:2019)

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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/DIS 13680:2019)

Ta slovenski standard je istoveten z: prEN ISO 13680

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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

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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 — 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

ICS: 77.140.75; 75.180.10

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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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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.

The committee responsible for this document is 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*.

This fourth edition cancels and replaces the third edition (ISO 13680:2010), with introduction of substantial changes. The main changes compared to the previous edition are as follows:

- change of title and scope for introduction of accessory material and group 5;
- deletion of former Annex F;
- introduction of new Annex F and associated Tables A.29, A.30, A.31, A.32, C.29, C.30, C.31 and C.32;
- introduction of new Annex H and Annex I;
- changes to warning statement; Clauses 1, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 13; Tables A.1, A.2, A.3, A.15, A.16, A.17, A.19, A.20, A.21, A.22, A.27, A.28, C.1, C.2, C.3, C.15, C.16, C.17, C.19, C.20, C.21, C.22, C.27 and C.28; Figures B.4 and B.8; Annex E; Annex G.

It is the intent of ISO/TC 67 that the third and fourth editions of ISO 13680 can both be applicable, at the option of the purchaser, for a period of twelve months from the first day of the calendar quarter immediately following the date of publication of this fourth edition, after which period the third edition will no longer be applicable.

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.

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Introduction

It is necessary that users of this document are 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 can be particularly applicable where there is 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.

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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 requirements in addition to those specified herewith to ensure that the product is adequate for the intended service environment. ISO 15156 (all parts) should be considered when making specific requirements for H₂S-containing environment; see Annex G. Other variables which can contribute to hydrogen embrittlement should be considered. There are other sources of hydrogen besides H₂S containing environments, which are not addressed by ISO 15156 (all parts).

NOTE For the purpose of this document, NACE MR0175 is equivalent to ISO 15156 (all parts).

1 Scope

This document specifies the technical delivery conditions for corrosion-resistant alloy seamless tubular products for casing, tubing, coupling stock and accessory material 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 resistant and cracking resistant for the environments and qualification method specified in ISO 15156 (all parts) and Annex G of this document.

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 ISO 15156 (all parts).

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.

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.