



SLOVENSKI STANDARD SIST EN ISO 11960:2011

01-november-2011

Nadomešča:

SIST EN ISO 11960:2005

SIST EN ISO 11960:2005/AC:2007

Industrija za predelavo nafte in zemeljskega plina - Jeklene cevi, ki se uporabljajo kot zaščitne cevi ali cevovodi za vrtine (ISO 11960:2011)

Petroleum and natural gas industries - Steel pipes for use as casing or tubing for wells (ISO 11960:2011)

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Erdöl- und Erdgasindustrie - Stahlrohre zur Verwendung als Futter- oder Steigrohre für Bohrungen (ISO 11960:2011)

[SIST EN ISO 11960:2011](http://standards.iteh.ai/catalog/standards/sist/1b41073-1629-47ba-a9bc-9f10d95e8c2/sist-en-iso-11960-2011)

Industries du pétrole et du gaz naturel - Tubes d'acier utilisés comme cuvelage ou tubes de production dans les puits (ISO 11960:2011)

Ta slovenski standard je istoveten z: EN ISO 11960:2011

ICS:

75.180.10	Oprema za raziskovanje in odkopavanje	Exploratory 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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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 11960

June 2011

ICS 75.180.10; 77.140.75

Supersedes EN ISO 11960:2004

English Version

Petroleum and natural gas industries - Steel pipes for use as casing or tubing for wells (ISO 11960:2011)

Industries du pétrole et du gaz naturel - Tubes d'acier utilisés comme cuvelage ou tubes de production dans les puits (ISO 11960:2011)

Erdöl- und Erdgasindustrie - Stahlrohre zur Verwendung als Futter- oder Steigrohre für Bohrungen (ISO 11960:2011)

This European Standard was approved by CEN on 17 December 2010.

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Foreword

This document (EN ISO 11960:2011) 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 AFNOR.

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of an identical text or by endorsement, at the latest by December 2011, and conflicting national standards shall be withdrawn at the latest by December 2011.

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

This document supersedes EN ISO 11960:2004.

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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

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INTERNATIONAL
STANDARD

ISO
11960

Fourth edition
2011-06-15

**Petroleum and natural gas industries —
Steel pipes for use as casing or tubing for
wells**

*Industries du pétrole et du gaz naturel — Tubes d'acier utilisés comme
cuvelage ou tubes de production dans les puits*

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Reference number
ISO 11960:2011(E)

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Published in Switzerland

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 11960 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*.

This fourth edition cancels and replaces the third edition (ISO 11960:2004) and its Technical Corrigendum ISO 11960:2004/Cor.1:2006, which have been extensively technically revised.

It is the intention of ISO/TC 67 that either this edition or the previous edition of ISO 11960 be applicable, at the option of the purchaser (as defined in 4.1.39), for a period of six months from the first day of the calendar quarter immediately following the date of publication of this edition, after which period the previous edition will no longer be applicable.

This International Standard has also been published in a marked version indicating changes from the previous edition.

Introduction

This International Standard is based on API Spec 5CT.

Users of this International Standard are advised that further or differing requirements can be needed for individual applications. This International Standard 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 advisable that the vendor identify any variations from this International Standard and provide details.

This International Standard includes requirements of various nature. These are identified by the use of certain verbal forms:

- SHALL is used to indicate that a provision is MANDATORY;
- SHOULD is used to indicate that a provision is not mandatory, but RECOMMENDED as good practice;
- MAY is used to indicate that a provision is OPTIONAL.

Details of the major changes (additions, modifications and deletions) agreed by the committee, and which affect the performance of the products or the technical requirements applicable to the products, are provided for information in Annex L. While efforts have been made to ensure the accuracy of the changes indicated, the user of this International Standard is advised to consider the total technical content and not only the changes identified. *The user is ultimately responsible for recognising any differences between this edition and the previous edition of this International Standard. ISO expressly disclaims any liability or responsibility for loss or damage resulting from inappropriate use of this International Standard on the basis of any inaccuracy in the changes identified.*

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Petroleum and natural gas industries — Steel pipes for use as casing or tubing for wells

1 Scope

1.1 This International Standard specifies the technical delivery conditions for steel pipes (casing, tubing and pup joints), coupling stock, coupling material and accessory material and establishes requirements for three Product Specification Levels (PSL-1, PSL-2, PSL-3). The requirements for PSL-1 are the basis of this International Standard. The requirements that define different levels of standard technical requirements for PSL-2 and PSL-3, for all Grades except H-40, L-80 9Cr and C110, are contained in Annex H.

For pipes covered by this International Standard, the sizes, masses and wall thicknesses as well as grades and applicable end-finishes are listed in Tables C.1 and C.2 and Tables E.1 and E.2.

By agreement between the purchaser and manufacturer, this International Standard can also be applied to other plain-end pipe sizes and wall thicknesses.

This International Standard is applicable to the following connections in accordance with API Spec 5B:

- short round thread casing (SC);
- long round thread casing (LC); [SIST EN ISO 11960:2011](https://standards.iteh.ai/catalog/standards/sist/c1b410e3-1629-47ba-a9bc-9f10d9f5e8c2/sist-en-iso-11960-2011)
- buttress thread casing (BC); [9f10d9f5e8c2/sist-en-iso-11960-2011](https://standards.iteh.ai/catalog/standards/sist/c1b410e3-1629-47ba-a9bc-9f10d9f5e8c2/sist-en-iso-11960-2011)
- non-upset tubing (NU);
- external upset tubing (EU);
- integral tubing connections (IJ).

For such connections, this International Standard specifies the technical delivery conditions for couplings and thread protection. Supplementary requirements that can optionally be agreed for enhanced leak resistance connections (LC) are given in A.11 SR22.

This International Standard can also be applied to tubulars with connections not covered by ISO/API standards.

1.2 The four groups of products to which this International Standard is applicable include the following grades of pipe:

- Group 1: All casing and tubing in Grades H, J, K, N and R;
- Group 2: All casing and tubing in Grades C, L, M and T;
- Group 3: All casing and tubing in Grade P;
- Group 4: All casing in Grade Q.