



# SLOVENSKI STANDARD SIST EN ISO 9017:2018

01-oktober-2018

Nadomešča:  
SIST EN ISO 9017:2013

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**Porušitveno preskušanje zvarov na kovinskih materialih - Prelomni preskus (ISO 9017:2017)**

Destructive tests on welds in metallic materials - Fracture test (ISO 9017:2017)

Zerstörende Prüfung von Schweißverbindungen an metallischen Werkstoffen - Bruchprüfung (ISO 9017:2017)

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Essais destructifs des soudures sur matériaux métalliques - Essai de texture (ISO 9017:2017)

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**Ta slovenski standard je istoveten z: EN ISO 9017:2018**

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**ICS:**

25.160.40      Varjeni spoji in vari      Welded joints and welds

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EUROPEAN STANDARD

EN ISO 9017

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2018

ICS 25.160.40

Supersedes EN ISO 9017:2013

English Version

## Destructive tests on welds in metallic materials - Fracture test (ISO 9017:2017)

Essais destructifs des soudures sur matériaux métalliques - Essai de texture (ISO 9017:2017)

Zerstörende Prüfung von Schweißverbindungen an metallischen Werkstoffen - Bruchprüfung (ISO 9017:2017)

This European Standard was approved by CEN on 15 January 2018.

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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**

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## European foreword

This document (EN ISO 9017:2018) has been prepared by Technical Committee ISO/TC 44 "Welding and allied processes" in collaboration with Technical Committee CEN/TC 121 "Welding and allied processes" the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by July 2018, and conflicting national standards shall be withdrawn at the latest by July 2018.

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 9017:2013.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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INTERNATIONAL  
STANDARD

ISO  
9017

Second edition  
2017-11

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**Destructive tests on welds in metallic  
materials — Fracture test**

*Essais destructifs des soudures sur matériaux métalliques — Essai  
de texture*

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Reference number  
ISO 9017:2017(E)

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Ch. de Blandonnet 8 • CP 401  
CH-1214 Vernier, Geneva, Switzerland  
Tel. +41 22 749 01 11  
Fax +41 22 749 09 47  
[copyright@iso.org](mailto:copyright@iso.org)  
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## ISO 9017:2017(E)

### 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](http://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](http://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 on 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 the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html). (standards.iteh.ai)

This document was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 5, *Testing and inspection of welds*.

This second edition cancels and replaces the first edition (ISO 9017:2001), which has been revised to update the normative references.

Request for official interpretations of any aspect of this document should be directed to the Secretariat of ISO/TC 44/SC 5 via your national standards body. A complete listing of these bodies can be found at [www.iso.org](http://www.iso.org).

# Destructive tests on welds in metallic materials — Fracture test

## 1 Scope

This document specifies the sizes of test specimen and the procedures for carrying out fracture tests in order to obtain information about types, sizes and distribution of internal imperfections such as porosities, cracks, lack of fusion, lack of penetration and solid inclusions on the fracture surface.

This document applies to metallic materials in all forms of product with joints made by any fusion welding process with a thickness greater or equal to 2 mm.

## 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 5817, *Welding — Fusion-welded joints in steel, nickel, titanium and their alloys (beam welding excluded) — Quality levels for imperfections*

ISO 10042, *Welding — Arc-welded joints in aluminium and its alloys — Quality levels for imperfections*

ISO 17637, *Non-destructive testing of welds — Visual testing of fusion-welded joints*

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## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

### 3.1 examination length

$L_f$

length of the test specimen measured along the weld axis between any side notches

Note 1 to entry: See [Figure 6](#).

### 3.2 total examination length

$\Sigma L_f$

sum of the lengths of all the test specimens comprising the test piece, measured along the weld axis, of the fracture faces between the side notches of the test specimens

Note 1 to entry: See [Figure 6](#).