

<b>STN</b>	<b>Deštruktívne skúšky zvarov kovových materiálov Makroskopický a mikroskopický rozbor zvarov (ISO 17639: 2022)</b>	<b>STN EN ISO 17639</b>  05 1107
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Destructive tests on welds in metallic materials - Macroscopic and microscopic examination of welds (ISO 17639:2022)

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 04/22

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EUROPEAN STANDARD

**EN ISO 17639**

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2022

ICS 25.160.40

Supersedes EN ISO 17639:2013

English Version

**Destructive tests on welds in metallic materials -  
Macroscopic and microscopic examination of welds (ISO  
17639:2022)**

Essais destructifs des soudures sur matériaux  
métalliques - Examens macroscopique et  
microscopique des assemblages soudés (ISO  
17639:2022)

Zerstörende Prüfung von Schweißverbindungen an  
metallischen Werkstoffen - Makroskopische und  
mikroskopische Untersuchungen von Schweißnähten  
(ISO 17639:2022)

This European Standard was approved by CEN on 1 February 2022.

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EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

**EN ISO 17639:2022 (E)**

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## **European foreword**

This document (EN ISO 17639:2022) 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of an identical text or by endorsement, at the latest by August 2022, and conflicting national standards shall be withdrawn at the latest by August 2022.

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 17639:2013.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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 17639:2022 has been approved by CEN as EN ISO 17639:2022 without any modification.



INTERNATIONAL  
STANDARD

ISO  
17639

Second edition  
2022-01

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**Destructive tests on welds in metallic  
materials — Macroscopic and  
microscopic examination of welds**

*Essais destructifs des soudures sur matériaux métalliques — Examens  
macroscopique et microscopique des assemblages soudés*



Reference number  
ISO 17639:2022(E)

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# ISO 17639:2022(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 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](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 5, *Testing and inspection of welds*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 121, *Welding and allied processes*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 17639:2003), which has been technically revised.

The main changes are as follows:

- [Clause 2](#) has been updated;
- the designations according to ISO/TR 15608 have been updated in [Clause 10](#).

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](http://www.iso.org/members.html).

Official interpretations of ISO/TC 44 documents, where they exist, are available from this page: <https://committee.iso.org/sites/tc44/home/interpretation.html>.

# Destructive tests on welds in metallic materials — Macroscopic and microscopic examination of welds

## 1 Scope

This document gives recommendations for specimen preparation, test procedures and their main objectives for macroscopic and microscopic examination.

## 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 6520-1, *Welding and allied processes — Classification of geometric imperfections in metallic materials — Part 1: Fusion welding*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**