

<b>STN</b>	<b>Odporové zváranie</b> <b>Skúšanie tvrdosti podľa Vickersa (nízkym zaťažením a v rozmedzí mikrotvrdosti) zvarov zhotovených odporovým bodovým, výstupkovým a švovým zváraním (ISO 14271: 2017)</b>	<b>STN</b> <b>EN ISO 14271</b>  05 1137
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Resistance welding - Vickers hardness testing (low-force and microhardness) of resistance spot, projection, and seam welds (ISO 14271:2017)

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. 03/18

Obsahuje: EN ISO 14271:2017, ISO 14271:2017

Oznámením tejto normy sa ruší  
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EUROPEAN STANDARD

EN ISO 14271

NORME EUROPÉENNE

EUROPÄISCHE NORM

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Supersedes EN ISO 14271:2011

English Version

## Resistance welding - Vickers hardness testing (low-force and microhardness) of resistance spot, projection, and seam welds (ISO 14271:2017)

Soudage par résistance - Essais de dureté Vickers (force réduite et microdureté) sur soudures par résistance par points, par bossages et à la molette (ISO 14271:2017)

Widerstandsschweißen - Vickers-Härteprüfung (Kleinkraft- und Mikrohärtebereich) von Widerstandspunkt-, Buckel- und Rollenahtschweißverbindungen (ISO 14271:2017)

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**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

**EN ISO 14271:2017 (E)**

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## **European foreword**

This document (EN ISO 14271:2017) has been prepared by Technical Committee ISO/TC 114 "International Institute of Welding" 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of an identical text or by endorsement, at the latest by March 2018, and conflicting national standards shall be withdrawn at the latest by March 2018.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 14271:2011.

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.

### **Endorsement notice**

The text of ISO 14271:2017 has been approved by CEN as EN ISO 14271:2017 without any modification.

# INTERNATIONAL STANDARD

# ISO 14271

Third edition  
2017-08

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## **Resistance welding — Vickers hardness testing (low-force and microhardness) of resistance spot, projection, and seam welds**

*Soudage par résistance — Essais de dureté Vickers (force réduite et microdureté) sur soudures par résistance par points, par bossages et à la molette*



Reference number  
ISO 14271:2017(E)

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**ISO 14271:2017(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)).

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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).

This document was prepared by Technical Committee I1W, *International Institute of Welding*, Commission XIII, *Fatigue of welded components and structures*.

This third edition cancels and replaces the second edition (ISO 14271:2011), which has been technically revised with the following changes:

- correction of [Figure 4](#) a) and b);
- editorial improvements.

It also incorporates the Technical Corrigendum ISO 14271-201:2011/Cor 1:2012.

Requests for official interpretations of any aspect of this document should be directed to the ISO Central Secretariat, who will forward them to the I1W Secretariat for an official response.



# Resistance welding — Vickers hardness testing (low-force and microhardness) of resistance spot, projection, and seam welds

## 1 Scope

This document specifies the procedures for the hardness testing of etched cross-sections of resistance spot, projection, and seam welds.

The aim of the hardness tests is to determine the Vickers hardness, in the low-force or microhardness range, of the weld nugget, the heat affected zone, and parent material in ferrous or non-ferrous metals for welds made in sheets of thickness 0,5 mm to 6 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 6507-1, *Metallic materials — Vickers hardness test — Part 1: Test method*

ISO 6507-2, *Metallic materials — Vickers hardness test — Part 2: Verification and calibration of testing machines*

ISO 6507-3, *Metallic materials — Vickers hardness test — Part 3: Calibration of reference blocks*

ISO 6507-4, *Metallic materials — Vickers hardness test — Part 4: Tables of hardness values*

ISO 17677-1, *Resistance welding — Vocabulary — Part 1: Spot, projection and seam welding*

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