

<b>STN</b>	<b>Odporové zvaranie. Deštruktívne skúšanie zvarov. Rozmery skúšobných vzoriek a postup na mechanizované skúšanie odlupovaním odporových bodových, lisovaných výstupkových a švových zvarov (ISO 14270: 2016).</b>	<b>STN EN ISO 14270</b>
		05 1127

Resistance welding - Destructive testing of welds - Specimen dimensions and procedure for mechanized peel testing resistance spot, seam and embossed projection welds (ISO 14270:2016)

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. 08/16

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Oznámením tejto normy sa ruší  
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Podľa zákona č. 264/1999 Z. z. v znení neskorších predpisov sa môžu slovenské technické normy rozmnožovať a rozširovať iba so súhlasom Úradu pre normalizáciu, metrológiu a skúšobníctvo SR.

EUROPEAN STANDARD

**EN ISO 14270**

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2016

ICS 25.160.40

Supersedes EN ISO 14270:2001

English Version

**Resistance welding - Destructive testing of welds -  
Specimen dimensions and procedure for mechanized peel  
testing resistance spot, seam and embossed projection  
welds (ISO 14270:2016)**

Soudage par résistance - Essais destructifs des  
soudures - Dimensions des éprouvettes et mode  
opératoire pour l'essai de pelage mécanisé des  
soudures par résistance par points, à la molette et par  
bossages (ISO 14270:2016)

Widerstandsschweißen - Zerstörende Prüfung von  
Schweißverbindungen - Probenmaße und Verfahren  
für die mechanisierte Schälprüfung an  
Widerstandspunkt-, Rollennaht- und  
Buckelschweißungen mit geprägten Buckeln (ISO  
14270:2016)

This European Standard was approved by CEN on 13 December 2015.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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

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## European foreword

This document (EN ISO 14270:2016) has been prepared by IIW 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 September 2016, and conflicting national standards shall be withdrawn at the latest by September 2016.

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 14270:2001.

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

### Endorsement notice

The text of ISO 14270:2016 has been approved by CEN as EN ISO 14270:2016 without any modification.

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**Resistance welding — Destructive testing of welds — Specimen dimensions and procedure for mechanized peel testing resistance spot, seam and embossed projection welds**

*Soudage par résistance — Essais destructifs des soudures — Dimensions des éprouvettes et mode opératoire pour l'essai de pelage mécanisé des soudures par résistance par points, à la molette et par bossages*





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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](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 meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/IIW, *International Institute of Welding*, Commission III.

This second edition cancels and replaces the first edition (ISO 14270:2000), which has been technically revised.

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



## Introduction

This edition of ISO 14270 no longer includes figures showing failure types and modes for tensile shear and cross tension testing in accordance with ISO 14329.

ISO 14270 has been revised to align it with ISO 17677-1. This edition of ISO 14270 is now applicable to testing of welds made in high strength materials including ultra-high strength materials as well as ordinary strength materials. Some of the figures related to the failure types and modes have been revised in accordance with ISO 17677-1.

# Resistance welding — Destructive testing of welds — Specimen dimensions and procedure for mechanized peel testing resistance spot, seam and embossed projection welds

## 1 Scope

This International Standard specifies specimen dimensions and a testing procedure for mechanized peel testing of single spot, seam and embossed projection welds, in overlapping sheets, in any metallic material of thickness 0,5 mm to 3 mm, where the welds have a maximum diameter of  $7\sqrt{t}$  (where  $t$  is the sheet thickness in mm).

For welds of diameter between  $5\sqrt{t}$  and  $7\sqrt{t}$ , the peel strength values obtained may be lower than expected when using the recommended test specimen dimensions because the test specimen width is designed for welds of diameter of  $5\sqrt{t}$  or less.

The object of mechanized peel testing is to determine the peel strength that the test specimen can sustain.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 7500-1, *Metallic materials — Verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Verification and calibration of the force-measuring system*

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

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