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STN	**Odporové zváranie. Postup na bodové odporové zváranie nízkouhlíkovej ocele s vrstvou povlaku a bez vrstvy povlaku (ISO 14373:2015).**	**STN EN ISO 14373** 05 2631

Resistance welding - Procedure for spot welding of uncoated and coated low carbon steels (ISO 14373:2015)

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. 07/15

Obsahuje: EN ISO 14373:2015, ISO 14373:2015

Oznámením tejto normy sa ruší
STN EN ISO 14373 (05 2631) z decembra 2007

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 14373

March 2015

ICS 25.160.10

Supersedes EN ISO 14373:2007

English Version

Resistance welding - Procedure for spot welding of uncoated and coated low carbon steels (ISO 14373:2015)

Soudage par résistance - Mode opératoire pour le soudage par points des aciers à bas carbone revêtus et non revêtus (ISO 14373:2015)

Widerstandsschweißen - Verfahren zum Punktschweißen von niedriglegierten Stählen mit oder ohne metallischem Überzug (ISO 14373:2015)

This European Standard was approved by CEN on 3 January 2015.

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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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Foreword

This document (EN ISO 14373:2015) has been prepared by IIW “International Institute of Welding“ in collaboration with Technical Committee CEN/TC 121 “Welding” 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of an identical text or by endorsement, at the latest by September 2015, and conflicting national standards shall be withdrawn at the latest by September 2015.

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 14373:2007.

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 14373:2015 has been approved by CEN as EN ISO 14373:2015 without any modification.

INTERNATIONAL STANDARD

ISO 14373

Second edition
2015-03-15

Resistance welding — Procedure for spot welding of uncoated and coated low carbon steels

Soudage par résistance — Mode opératoire pour le soudage par points des aciers à bas carbone revêtus et non revêtus

Reference number
ISO 14373:2015(E)

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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).

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).

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

ISO 14373 was prepared by IIW, *International Institute of Welding*, Commission III. 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.

This second edition cancels and replaces the first edition (ISO 14373:2006), which has been technically revised to align it with ISO 17677-1.

Introduction

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

INTERNATIONAL STANDARD ISO 14373:2015(E)

Resistance welding — Procedure for spot welding of uncoated and coated low carbon steels

1 Scope

This International Standard specifies requirements for resistance spot welding in the fabrication of assemblies of uncoated and metallic coated low carbon steel, comprising two or three sheets of metal, where the maximum single sheet thickness of components to be welded is within the range 0,4 mm to 3 mm, for the following materials:

— uncoated steels;

— hot-dip zinc or iron-zinc alloy (galvannealed) coated steel;

— electrolytic zinc, zinc-iron, or zinc-nickel coated steel;

— aluminium coated steel;

— zinc-aluminium coated steel.

This International Standard is applicable to welding of sheets of the same or dissimilar thickness, where the thickness ratio is less than or equal to 3:1. It applies to the welding of three thicknesses, where the total thickness is less than or equal to 9 mm.

Welding with the following types of equipment is within the scope of this International Standard:

a) pedestal welding equipment;

b) gun welders;

c) automatic welding equipment where the components are fed by robots or automatic feeding equipment;

d) multi welders;

e) robotic welders.

Information on appropriate welding equipment is given in Annex A, and information on spot welding conditions is given in Annex B. This information is provided for guidance only.

Depending on the service conditions of the fabrication, the type of welding equipment, the characteristics of the secondary circuit, the electrode material, and the shape, it is possible that certain modifications are necessary. In such cases, further information can be obtained from the relevant application standard, where one exists.

The welding of organic coated or primer coated steels is not within the scope of this International Standard.

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 5182, *Resistance welding — Materials for electrodes and ancillary equipment*

ISO 10447, *Resistance welding — Peel and chisel testing of resistance spot and projection welds*

ISO 14270, *Resistance welding — Specimen dimensions and procedure for mechanized peel testing resistance spot, seam and embossed projection welds*

ISO 15609-5, *Specification and qualification of welding procedures for metallic materials — Welding procedure specification — Part 5: Resistance welding*

ISO 15614-12, *Specification and qualification of welding procedures for metallic materials — Welding procedure test — Part 12: Spot, seam and projection welding*

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

ISO 18278-1, *Resistance welding — Weldability — Part 1: Assessment of weldability for resistance spot, seam and projection welding of metallic materials*

ISO 18272-2, *Resistance welding — Weldability — Part 2: Alternative procedures for the assessment of sheet steels for spot welding*