SLOVENSKI STANDARD
SIST EN ISO 14324:2004

01-junij-2004

Uporovno toļ kovno varjenje - Poruġitveno preskuġanje zvarov - Metoda utrujenostnega preskuġanja toļ kovnih zvarnih spojev (ISO 14324:2003)

Resistance spot welding - Destructive tests of welds - Method for the fatigue testing of spot welded joints (ISO 14324:2003)

Widerstandspunktschweißen - Zerstörende Prüfung von Schweißungen - Schwingfestigkeitsprüfung von Punktschweißverbindungen (ISO 14324:2003)

Soudage par résistance - Essais destructifs des soudures - Méthode pour les essais de fatigue sur assemblages soudés par points (ISO 14324:2003)

Ta slovenski standard je istoveten z: EN ISO 14324:2003

ICS:

25.160.40 Varjeni spoji in vari Welded joints

SIST EN ISO 14324:2004 en

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 14324

July 2003

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English version

Resistance spot welding - Destructive tests of welds - Method for the fatigue testing of spot welded joints (ISO 14324:2003)

Soudage par résistance - Essais destructifs des soudures - Méthode pour les essais de fatigue sur assemblages soudés par points (ISO 14324:2003)

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This European Standard was approved by CEN on 5 June 2003.

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 Management Centre or to any CEN member.

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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

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

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Foreword

This document (EN ISO 14324:2003) has been prepared by Technical Committee ISO/TC 44 "Welding and allied processes" in collaboration with Technical Committee CEN/TC 121 "Welding", the secretariat of which is held by DS.

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 January 2004, and conflicting national standards shall be withdrawn at the latest by January 2004.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 14324:2003 has been approved by CEN as EN ISO 14324:2003 without any modifications.

NOTE Normative references to International Standards are listed in Annex ZA (normative).

Annex ZA
(normative)

Normative references to international publications with their relevant European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE Where an International Publication has been modified by common modifications, indicated by (mod.), the relevant EN/HD applies.

Publication	Year	Title	EN	Year
ISO 14271	2000	Vickers hardness testing of resistance spot, projection and seam welds (low load and microhardness)	EN ISO 14271	2001
ISO 14272	2000	Specimen dimensions and procedure for cross tension testing resistance spot and embossed projection welds	EN ISO 14272	2001
ISO 14273	2000	Specimen dimensions and procedure for shear testing resistance spot, seam and embossed projection welds	EN ISO 14273	2001
ISO 14329	2003	Resistance welding - Destructive tests of welds - Failure types and geometric measurements for resistance spot, seam and projection welds	EN ISO 14329	2003

INTERNATIONAL STANDARD

ISO 14324

First edition
2003-07-01

Resistance spot welding — Destructive tests of welds — Method for the fatigue testing of spot welded joints

Soudage par résistance — Essais destructifs des soudures — Méthode pour les essais de fatigue sur assemblages soudés par points

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

International Standard ISO 14324 was prepared in collaboration with the International Institute of Welding which has been approved by the ISO Council as an international standardizing body in the field of welding.

Resistance spot welding — Destructive tests of welds — Method for the fatigue testing of spot welded joints

1 Scope

This International Standard specifies test specimens and procedures for fatigue testing spot welds, at ambient conditions, under repeated tensile loading to produce either shear or cross-tension loading of the spot weld, in steel of sheet thicknesses of 0,5 mm to 6 mm. The test results are not, in general, directly applicable to the fatigue behaviour of a spot-welded component or structure. This procedure can be used for other materials provided proper test conditions (e.g., heating) have been determined.

2 Normative references

The following referenced documents are indispensable for the application 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 669, *Resistance welding — Resistance welding equipment — Mechanical and electrical requirements*

ISO 14271, *Vickers hardness testing of resistance spot, projection and seam welds (low load and microhardness)*

ISO 14272, *Specimen dimensions and procedure for cross tension testing resistance spot and embossed projection welds*

ISO 14273, *Specimen dimensions and procedure for shear testing resistance spot, seam and embossed projection welds*

ISO 14329, *Resistance welding — Destructive tests of welds — Failure types and geometric measurements for resistance spot, seam and projection welds*

3 Terms and definitions

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

3.1
cross-tension fatigue test
fatigue test that entails the application of a repeated tensile load to the cross-tension fatigue test specimen mounted between the jaws of the fatigue-testing machine

3.2
endurance limit
maximum load range at which the test specimen can endure a designated number of load cycles without failing

3.3
fatigue life
N
number of cycles that can be applied at a specified load before failure occurs