Resistance welding - Peel and chisel testing of resistance spot and projection welds

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO
10447:2007 sisaldab Euroopa standardi
EN ISO 10447:2007 ingliskeelset teksti.

This Estonian standard EVS-EN ISO 10447:2007 consists of the English text of the European standard EN ISO 10447:2007.

Käesolev dokument on jõustatud 21.08.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

This document is endorsed on 21.08.2007 with the notification being published in the official publication of the Estonian national standardisation organisation.

Standard on kättesaadav Eesti standardiorganisatsioonist.

The standard is available from Estonian standardisation organisation.

Käsitlusala:

This International Standard specifies the procedure and recommended tooling to be used for testing resistance spot and projection welds by means of peel and chisel tests. The standard applies to welds made in two or more sheets in the thickness range of 0,5 mm to 3,0 mm.

Scope:

This International Standard specifies the procedure and recommended tooling to be used for testing resistance spot and projection welds by means of peel and chisel tests. The standard applies to welds made in two or more sheets in the thickness range of 0,5 mm to 3,0 mm.

ICS 25.160.40

Võtmesõnad:

EUROPEAN STANDARD NORME EUROPÉENNE

EUROPÄISCHE NORM

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English Version

Resistance welding - Peel and chisel testing of resistance spot and projection welds (ISO 10447:2006)

Soudage par résistance - Essais de déboutonnage au burin et de pelage appliqués aux soudures par résistance par points et par bossages (ISO 10447:2006)

Widerstandsschweißen - Schäl-, Meißel- und Keilprüfung von Widerstandspunkt- und Buckelschweißverbindungen (ISO 10447:2006)

This European Standard was approved by CEN on 19 May 2007.

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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 CEN Management Centre has the same status as the official versions.

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Foreword

The text of ISO 10447:2006 has been prepared by IIW, International Institute of Welding, and has been taken over as EN ISO 10447:2007 by 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 December 2007, and conflicting national standards shall be withdrawn at the latest by December 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Endorsement notice

Vas. The text of ISO 10447:2006 has been approved by CEN as a EN ISO 10447:2007 without any modification.

INTERNATIONAL **STANDARD**

ISO 10447

Second edition 2006-07-15

Resistance welding — Peel and chisel testing of resistance spot and projection welds

e p. ppliqu. Soudage par résistance — Essais de pelage et de déboutonnage au burin appliqués aux soudures par résistance par points et par bossages



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Foreword

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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.

ISO 10447 was prepared by Technical Committee ISO/TC IIW, *International Institute of Welding*, recognized as an international standardizing body in the field of welding in accordance with Council Resolution 42/1999.

This second edition cancels and replaces the first edition (ISO 10447:1991), 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.

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Resistance welding — Peel and chisel testing of resistance spot and projection welds

1 Scope

This International Standard specifies the procedure and recommended tooling to be used for testing resistance spot and projection welds by means of peel and chisel tests. It applies to welds made in two or more sheets in the thickness range of 0,5 mm to 3,0 mm.

The aim of these tests is to determine:

- weld size and failure type when the tests are used as destructive tests, and
- verification of welds when the tests are used as non-destructive tests.

NOTE In the previous edition of this International Standard, seam welds were included. The preferred method of peel testing seam welds (mechanized peel testing) is now covered in ISO 14270.

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 14270, Specimen dimensions and procedure for mechanized peel 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 terms and definitions given in ISO 14329 and the following apply.

3.1

chisel test

destructive or non-destructive test in which welds are tested by applying a predominantly tensile force that results in stresses primarily normal to the surface of the joint interface

NOTE The force is applied using a chisel (see Figure 1).

3.2

peel test

destructive test in which welds are tested by applying a peel force that results in stresses primarily normal to the surface of the joint interface

NOTE The test can be accomplished either manually [see Figure 2 a)], or it can be mechanized using a tensile testing machine or other suitable mechanized equipment [see Figure 2 b)].