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STANDARDS  
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# SVENSK STANDARD SS-EN ISO 10447:2007

Fastställd 2007-06-28

Utgåva 1

**Motståndssvetsning – Fläk- och mejselprovning  
av punkt- och presssvetsar (ISO 10447:2006)**

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

ICS 25.160.40

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Europastandarden EN ISO 10447:2007 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN ISO 10447:2007.

Denna standard ersätter SS-ISO 10447, utgåva 1.

The European Standard EN ISO 10447:2007 has the status of a Swedish Standard. This document contains the official English version of EN ISO 10447:2007.

This standard supersedes the Swedish Standard SS-ISO 10447, edition 1.

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EUROPEAN STANDARD

**EN ISO 10447**

NORME EUROPÉENNE

EUROPÄISCHE NORM

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ICS 25.160.40

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

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## **EN ISO 10447:2007 (E)**

### **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**

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

# 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)].

EN ISO 10447:2007 (E)

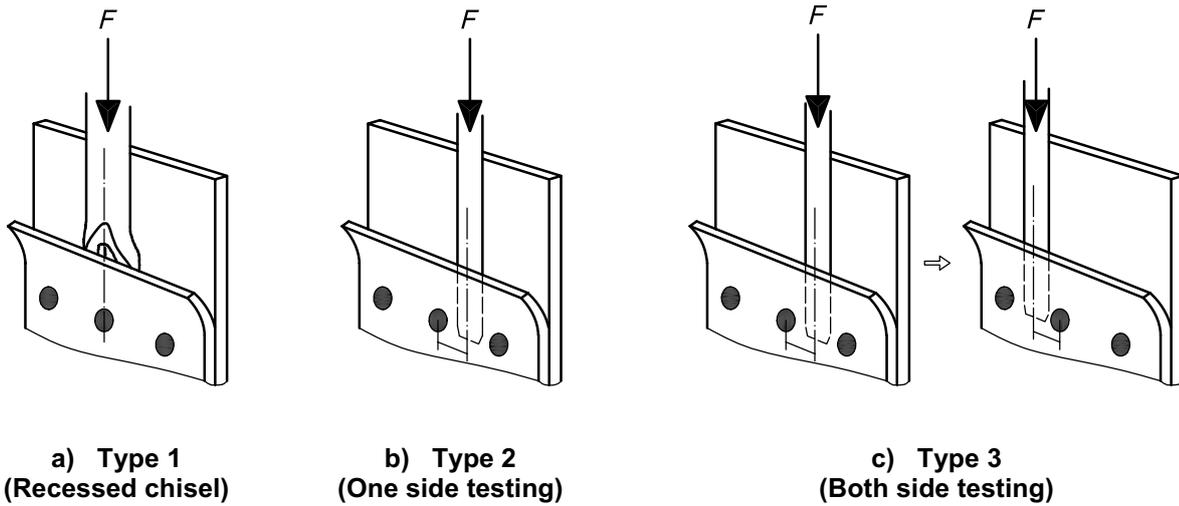


Figure 1 — Chisel routine test on resistance spot and protection welded joints

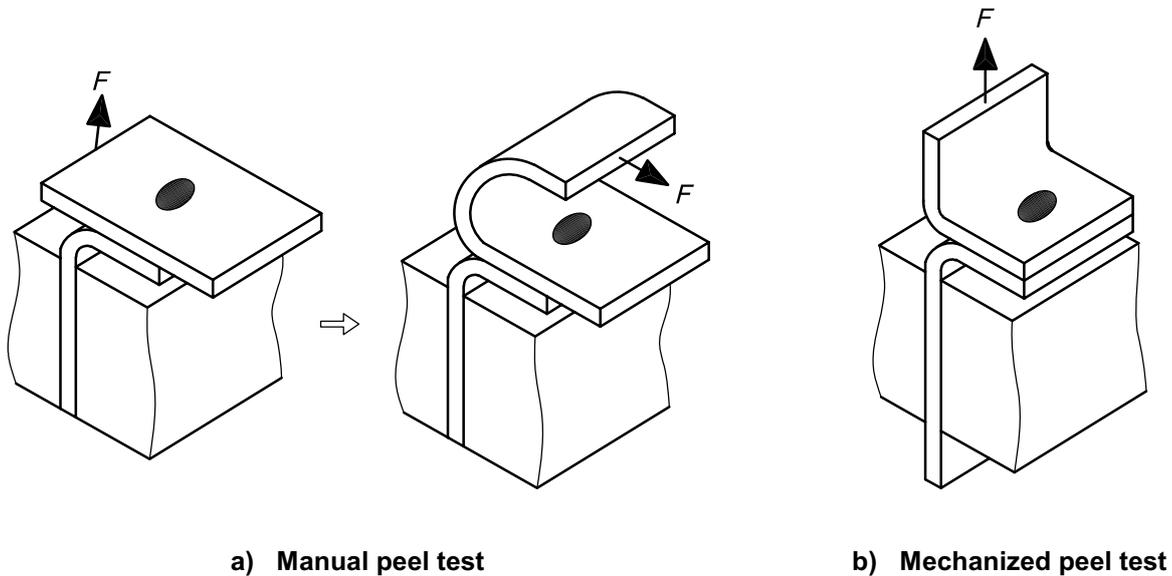


Figure 2 — Peel routine test on resistance spot and protection welded joints

#### 4 Test specimens

When used for quality control in production, tests shall be conducted on actual components or specimens taken from actual components.

When used for setting welding parameters, where it is not practicable to use actual components, separate welded test pieces may be used. The test pieces shall be produced from the same material as used for the component, and welded under conditions adapted to simulate and produce the same weld quality as observed in the component. The effects of different shunt or impedance conditions should be taken into account when producing the test pieces, by inserting sufficient material in the throat of the machine to approximate the magnetic effect of the work piece under production conditions.