Resistance welding - Testing of welds - Peel and chisel testing of resistance spot and projection welds (ISO 10447:2015)



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# ICS 25.160.40

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# EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

# **EN ISO 10447**

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Supersedes EN ISO 10447:2007

#### **English Version**

# Resistance welding - Testing of welds - Peel and chisel testing of resistance spot and projection welds (ISO 10447:2015)

Soudage par résistance - Essais des soudures - Essais de pelage et de déboutonnage au burin appliqués aux soudures par résistance par points et par bossages (ISO 10447:2015) Widerstandsschweißen - Schäl- und Meißelprüfung von Widerstandspunkt- und Buckelschweißverbindungen (ISO 10447:2015)

This European Standard was approved by CEN on 12 December 2014.

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

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# **Foreword**

This document (EN ISO 10447:2015) 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of an identical text or by endorsement, at the latest by August 2015, and conflicting national standards shall be withdrawn at the latest by August 2015.

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### **Endorsement notice**

The text of ISO 10447:2015 has been approved by CEN as EN ISO 10447:2015 without any modification.

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# Introduction

as edition of . This edition of ISO 10447 includes figures showing failure types and fracture modes of resistance spot and embossed projection welds in accordance with ISO 14329:2003.

The previous edition of ISO 10447 was revised to align it with ISO 17677-1.

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

# 1 Scope

This International Standard specifies the procedures and recommended tooling to be used for peel and chisel testing of resistance spot and projection welds. This International Standard 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 welds are destructively tested, and
- verification of welds by non-destructive chisel tests.

NOTE The preferred method of peel testing seam welds (mechanized peel testing) is covered in ISO 14270.

# 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 14270, Specimen dimensions and procedure for mechanized peel testing resistance spot, seam and embossed projection welds

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

# 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 17677-1 and the following apply.

#### 3.1

## chisel test

destructive test with a chisel 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 1 to entry: 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 1 to entry: See Figure 2a and Figure 2b.