

### SLOVENSKI STANDARD SIST EN ISO 17636-1:2013

01-september-2013

Nadomešča:

**SIST EN 1435:1998** 

SIST EN 1435:1998/A1:2003 SIST EN 1435:1998/A2:2004

Neporušitveno preskušanje zvarnih spojev - Radiografske preiskave - 1. del : X in gama žarki z uporabo filmov (ISO 17636-1:2013)

Non-destructive testing of welds - Radiographic testing - Part 1: X- and gamma-ray techniques with film (ISO 17636-1:2013) DARD PREVIEW

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Zerstörungsfreie Prüfung von Schweißverbindungen - Durchstrahlungsprüfung - Teil 1: Röntgen- und Gammastrahlungstechniken unter Anwendung von Filmen (ISO 17636-1:2013)

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Contrôle non destructif des assemblages soudés - Contrôle par radiographie - Partie 1: Techniques par rayons X ou gamma à l'aide de film (ISO 17636-1:2013)

Ta slovenski standard je istoveten z: EN ISO 17636-1:2013

ICS:

25.160.40 Varjeni spoji in vari Welded joints

SIST EN ISO 17636-1:2013 en,fr,de

## iTeh STANDARD PREVIEW (standards.iteh.ai)

**EUROPEAN STANDARD** 

**EN ISO 17636-1** 

NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

January 2013

ICS 25.160.40

Supersedes EN 1435:1997

#### **English Version**

## Non-destructive testing of welds - Radiographic testing - Part 1: X- and gamma-ray techniques with film (ISO 17636-1:2013)

Contrôle non destructif des assemblages soudés - Contrôle par radiographie - Partie 1: Techniques par rayons X ou gamma à l'aide de film (ISO 17636-1:2013)

Zerstörungsfreie Prüfung von Schweißverbindungen -Durchstrahlungsprüfung - Teil 1: Röntgen- und Gammastrahlungstechniken mit Filmen (ISO 17636-1:2013)

This European Standard was approved by CEN on 14 December 2012.

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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-CENELEC 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

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# iTeh STANDARD PREVIEW (standards.iteh.ai)

EN ISO 17636-1:2013 (E)

#### **Foreword**

This document (EN ISO 17636-1:2013) has been prepared by Technical Committee CEN/TC 121 "Welding" the secretariat of which is held by DIN, in collaboration with Technical Committee ISO/TC 44 "Welding and allied processes".

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 July 2013, and conflicting national standards shall be withdrawn at the latest by July 2013.

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 1435:1997.

According to the CEN/CENELEC Internal Regulations, the national standards organisations 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.

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# INTERNATIONAL STANDARD

ISO 17636-1

First edition 2013-01-15

## Non-destructive testing of welds — Radiographic testing —

Part 1:

X- and gamma-ray techniques with film

Contrôle non destructif des assemblages soudés — Contrôle par

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Partie 1: Techniques par rayons X ou gamma à l'aide de film (standards.iteh.ai)

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Reference number ISO 17636-1:2013(E)

ISO 17636-1:2013(E)

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Published in Switzerland

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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.

ISO 17636-1 was prepared by the European Committee for Standardization (CEN) in collaboration with ISO Technical Committee TC 44, *Welding and allied processes*, Subcommittee SC 5, *Testing and inspection of welds* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This first edition, together with ISO 17636-2; cancels and replaces ISO 17636:2003, of which it constitutes a technical revision.

ISO 17636 consists of the following parts, under the general title Non-destructive testing of welds—Radiographic testing:

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- Part 1: X- and gamma-ray techniques with film
- Part 2: X- and gamma-ray techniques with digital detectors

The main changes are that:

- the normative references have been updated;
- the document has been divided into two parts this part of ISO 17636 applies to radiographic testing with films:
- X-ray devices up to 1 000 kV have been included;
- the text has been editorially revised.

Requests for official interpretations of any aspect of this part of ISO 17636 should be directed to the Secretariat of ISO/TC 44/SC 5 via your national standards body. A complete listing of these bodies can be found at www.iso.org.

ISO 17636-1:2013(E)

#### Introduction

This International Standard specifies fundamental techniques of radiography with the object of enabling satisfactory and repeatable results to be obtained economically. The techniques are based on generally recognized practice and fundamental theory of the subject, inspection of fusion welded joints with industrial radiographic films.

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## iTeh STANDARD PREVIEW (standards.iteh.ai)

### Non-destructive testing of welds — Radiographic testing —

#### Part 1:

### X- and gamma-ray techniques with film

#### 1 Scope

This part of ISO 17636 specifies techniques of radiographic examination of fusion welded joints in metallic materials using industrial radiographic film techniques.

This part of ISO 17636 applies to the joints of plates and pipes. Besides its conventional meaning, "pipe" as used in this International Standard covers other cylindrical bodies such as tubes, penstocks, boiler drums, and pressure vessels.

NOTE This part of ISO 17636 complies with ISO 5579.<sup>[1]</sup>

This part of ISO 17636 does not specify acceptance levels for any of the indications found on the radiographs.

If contracting parties apply lower test criteria, it is possible that the quality achieved is significantly lower than when this part of ISO 17636 is strictly applied.

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#### 2 Normative references 6276a3b7859b/sist-en-iso-17636-1-2013

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 5576, Non-destructive testing — Industrial X-ray and gamma-ray radiology — Vocabulary

ISO 5580, Non-destructive testing — Industrial radiographic illuminators — Minimum requirements

ISO 9712, Non-destructive testing — Qualification and certification of NDT personnel

ISO 11699-1, Non-destructive testing — Industrial radiographic film — Part 1: Classification of film systems for industrial radiography

ISO 11699-2, Non-destructive testing — Industrial radiographic films — Part 2: Control of film processing by means of reference values

ISO 19232-1, Non-destructive testing — Image quality of radiographs — Part 1: Image quality indicators (wire type) — Determination of image quality value

ISO 19232-2, Non-destructive testing — Image quality of radiographs — Part 2: Image quality indicators (step/hole type) — Determination of image quality value

ISO 19232-4, Non-destructive testing — Image quality of radiographs — Part 4: Experimental evaluation of image quality values and image quality tables