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# French standard

**NF EN ISO 17636-1**  
13 March 2013

Classification index: **A 89-510-1**

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**ICS: 25.160.40; 77.040.20**

## **Non-destructive testing of welds — Radiographic testing — Part 1: X- and gamma-ray techniques with film**

F : Contrôle non destructif des assemblages soudés — Contrôle par radiographie —  
Partie 1 : Techniques par rayons X ou gamma à l'aide de film  
D : Zerstörungsfreie Prüfung von Schweißverbindungen — Durchstrahlungsprüfung —  
Teil 1: Röntgen- und Gammastrahlungstechniken mit Filmen

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### ***French standard approved***

by decision of the Director General of AFNOR.

With the approved standard NF EN ISO 17636-2 of March 2013, replaces the approved standard NF EN 1435 of October 1997 and its amendments A1 of June 2003 and A2 of July 2004.

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### ***Correspondence***

The European standard EN ISO 17636-1:2013 has the status of French standard and reproduces in full the international standard ISO 17636-1:2013.

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### ***Summary***

This document specifies techniques of radiographic examination of fusion welded joints of plates and pipes in metallic materials using industrial radiographic film techniques.

For these radiographic techniques, which are divided into two classes (basic techniques and improved techniques), it defines the general requirements for surface preparation, radiographs, marking, collection of films, and image quality, and provides the recommendations for taking radiographs.

It thus complements the series of existing standards on radiographic examination of welded joints: NF EN ISO 17636-2, NF EN 12517-1, and NF EN 12517-2.

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### ***Descriptors***

**Technical International Thesaurus:** fusion welding, butt welds, steels, steel tubes, aluminium, aluminium, titanium, copper alloys, nickel alloys, quality control, nondestructive tests, radiographic analysis, acceptability.

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### ***Modifications***

With respect to the replaced documents, the principal modifications are the following:

- the division of the document into two parts, this part applying to radiographic examination using a film and part 2 to digital radiography by X-ray and gamma ray;
  - the addition of X-ray equipment up to 1000 kV.
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### ***Corrections***

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## Standards

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**Standards** are designed to serve as a basis in relations between economic, scientific, technical and social partners.

By nature, application of a standard is voluntary. When stipulated in a contract, it is binding on the parties. Legislation may require all or part of a standard to become compulsory.

**The standard is a document defined by consensus** within a standardisation body involving representatives of all stakeholders. It is submitted for public consultation prior to adoption.

The standard is regularly reviewed to assess its appropriateness over time.

Any standard is considered to be effective as from the date presented on the first page.

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## Understanding standards

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The reader's attention is drawn to the following points:

Only the verbal form **shall** is used to express one or more requirements that shall be satisfied in order to comply with this document. Such requirements may be contained in the body of the standard or in a so-called "normative" annex. For test methods, the use of the imperative corresponds to a requirement.

Expressions involving the verbal form **should** are used to express a possibility that, while preferred, is not actually necessary in order to comply with this document. The verbal form **may** is used to express practical, but not mandatory advice or suggestions, or permission.

Furthermore, this document may provide additional information aimed at making certain elements easier to understand or use, or at clarifying how such elements are applied, but without actually defining a requirement. These elements are presented as **notes or informative annexes**.

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## Standardisation commission

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Acting within a given field of activity, a standardisation commission features the necessary expertise for preparing French standards and defining France's positions in European and international draft standards. The commission may also prepare experimental standards and technical reports.

**If you would like to provide feedback on this document, make suggested changes or take part in the document's revision**, write to "norminfo@afnor.org".

The composition of the standardisation commission that prepared this document is provided below. If experts are representing a body other than the body to which they habitually belong, this information is presented using the following convention: body of membership (body represented).

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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.

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

CEN members are the national standards bodies of 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 United Kingdom.



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