

STN	Nedeštruktívne skúšanie. Skúšanie kovových materiálov prežarovaním pomocou filmu a röntgenového alebo gama žiarenie. Základné pravidlá (ISO 5579: 2013).	STN EN ISO 5579 01 5014
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Non-destructive testing - Radiographic testing of metallic materials using film and X- or gamma rays - Basic rules (ISO 5579:2013)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Obsahuje: EN ISO 5579:2013, ISO 5579:2013

Oznámením tejto normy sa ruší
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English Version

Non-destructive testing - Radiographic testing of metallic materials using film and X- or gamma rays - Basic rules (ISO 5579:2013)

Essais non destructifs - Contrôle radiographique des matériaux métalliques au moyen de film et de rayons X et gamma - Règles de base (ISO 5579:2013)

Zerstörungsfreie Prüfung - Durchstrahlungsprüfung von metallischen Werkstoffen mit Film und Röntgen- oder Gammastrahlen - Grundlagen (ISO 5579:2013)

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Foreword

The text of ISO 5579:2013 has been prepared by Technical Committee ISO/TC 135 “Non-destructive testing” of the International Organisation for Standardization (ISO) and has been taken over as EN ISO 5579:2013 by Technical Committee CEN/TC 138 “Non-destructive testing” the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by June 2014, and conflicting national standards shall be withdrawn at the latest by June 2014.

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Endorsement notice

The text of ISO 5579:2013 has been approved by CEN as EN ISO 5579:2013 without any modification.

**Non-destructive testing —
Radiographic testing of metallic
materials using film and X- or gamma
rays — Basic rules**

*Essais non destructifs — Contrôle radiographique des matériaux
métalliques au moyen de film et de rayons X et gamma — Règles de base*





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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the rules given in the ISO/IEC Directives, Part 2. www.iso.org/directives

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The committee responsible for this document is ISO/TC 135, *Non-destructive testing*, Subcommittee SC 5, *Radiation methods*.

This third edition cancels and replaces the second edition (ISO 5579:1998), which has been technically revised.

Changes from the second edition include:

- introduction of film in the title — this International Standard is valid only for NDT films as image detectors and not for digital radiographic detectors;
- reference to the state-of-the-art image quality detectors, according to ISO 19232-1 to ISO 19232-4;
- omission of figures with test arrangements (these test arrangements are described in the corresponding application standards);
- extension of applicable X-ray voltages from 500 kV up to max. 1 000 kV, depending on the penetrated wall thickness and material;
- modification of the nomogram of minimum source distances for focal spot sizes from 0,1 mm up to 8 mm;
- update of film system classes (old ISO classes T2 and T3 have been replaced by new classes C3 to C5, according to ISO 11699-1:2008);
- several editorial changes.

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 accepted practice and the fundamental theory of the subject.

Standards relating to specific applications should conform to these basic rules.

Non-destructive testing — Radiographic testing of metallic materials using film and X- or gamma rays — Basic rules

1 Scope

This International Standard outlines the general rules for industrial X- and gamma-radiography for flaw-detection purposes, using film techniques, applicable to the inspection of metallic products and materials.

It does not lay down acceptance criteria of the imperfections.

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 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: Determination of the image quality value using wire-type image quality indicators*

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

ISO 19232-3, *Non-destructive testing — Image quality of radiographs — Part 3: Image quality classes*

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

EN 12543 (all parts), *Non-destructive testing — Characteristics of focal spots in industrial X-ray systems for use in non-destructive testing — Part 2: Pinhole camera radiographic method*

EN 12679, *Non-destructive testing — Determination of the size of industrial radiographic sources — Radiographic method*

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