

<b>STN</b>	<b>Nedeštruktívne skúšanie Rádiografické skúšanie Určenie veľkosti priemyselných rádionuklidov (ISO 32679: 2024)</b>	<b>STN EN ISO 32679</b>  01 5028
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Non-destructive testing - Radiographic testing - Determination of the size of industrial radiographic gamma sources (ISO 32679:2024)

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 01/26

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EUROPEAN STANDARD

**EN ISO 32679**

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2025

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Supersedes EN 12679:2018

English Version

**Non-destructive testing - Radiographic testing -  
Determination of the size of industrial radiographic  
gamma sources (ISO 32679:2024)**

Essais non destructifs - Contrôle radiographique -  
Détermination de la dimension des sources de  
radiographie industrielle gamma (ISO 32679:2024)

Zerstörungsfreie Prüfung - Durchstrahlungsprüfung -  
Bestimmung der Strahlergrößen von industriell  
genutzten Radio-Nukliden (ISO 32679:2024)

This European Standard was approved by CEN on 29 September 2025.

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**EN ISO 32679:2025 (E)**

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## **European foreword**

The text of ISO 32679:2024 has been prepared by Technical Committee ISO/TC 135 "Non-destructive testing" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 32679:2025 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of an identical text or by endorsement, at the latest by April 2026, and conflicting national standards shall be withdrawn at the latest by April 2026.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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## **Endorsement notice**

The text of ISO 32679:2024 has been approved by CEN as EN ISO 32679:2025 without any modification.



# International Standard

**ISO 32679**

## **Non-destructive testing — Radiographic testing — Determination of the size of industrial radiographic gamma sources**

*Essais non destructifs — Contrôle radiographique —  
Détermination de la dimension des sources de radiographie  
industrielle gamma*

**First edition  
2024-06**

## ISO 32679:2024(en)



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**ISO 32679:2024(en)****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 document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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This document was prepared by Technical Committee CEN/TC 138, *Non-destructive testing* (as EN 12679:2018) and was adopted (without modification other than that (those) given below) by Technical Committee ISO/TC 135, *Non-destructive testing*, Subcommittee SC 5, *Radiographic testing*.

The main changes are as follows:

- revised definitions [3.1](#), [3.3](#) and [3.4](#);
- deleted definition 3.5;
- added [Formula \(1\)](#) defining the geometrical magnification factor;
- updated figures;
- editorial corrections.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

# Non-destructive testing — Radiographic testing — Determination of the size of industrial radiographic gamma sources

## 1 Scope

This document specifies a test procedure for determination of the size of industrial radiographic gamma sources of 0,5 mm or greater, made from the radionuclides Iridium 192, Ytterbium 169, Selenium 75 or Cobalt 60, by a radiography method with X-rays. The source size of a gamma radiation source is an important factor which affects the image quality of gamma ray images.

The source size is determined with an accuracy of  $\pm 10\%$  but typically not better than  $\pm 0,1$  mm.

The source size is provided by the manufacturer as the mechanical dimension of the source insert. A measurement can be required if the manufacturing process is validated or monitored after implementation of the source into the holder.

This document can be used for other radionuclides after validation.

The standard test method ASTM E1114 provides further information on the measurement of the Ir-192 source size, the characterization of the source shape, and its correct assembly and packaging.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 19232-5, *Non-destructive testing — Image quality of radiographs — Part 5: Determination of the image unsharpness value using duplex wire-type image quality indicators*

ISO 16371-1, *Non-destructive testing — Industrial computed radiography with storage phosphor imaging plates — Part 1: Classification of systems*

ASTM E 2002 - 22, *Standard Practice for Determining Total Image Unsharpness and Basic Spatial Resolution in Radiography and Radioscopy*

ASTM E 2597/2597M - 22, *Standard Practice for Manufacturing Characterization of Digital Detector Arrays*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**