

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Industrial non-destructive testing equipment – Electron linear accelerator

**Appareils destinés aux essais non destructifs pour le secteur industriel –
Accélérateur électronique linéaire**





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CONTENTS

FOREWORD.....	4
1 Scope.....	6
2 Normative references	6
3 Terms and definitions	6
4 Equipment sets, names and work conditions.....	8
4.1 Equipment sets	8
4.2 Name convention	8
4.3 Operating conditions	9
4.3.1 Environmental requirement.....	9
4.3.2 Power supply.....	9
5 Technical requirements	9
5.1 Appearance	9
5.2 Control system.....	9
5.2.1 Design principle.....	9
5.2.2 Operation of start and stop	9
5.2.3 Functions of control system	9
5.3 Performance	10
5.3.1 X-ray beam energy	10
5.3.2 X-ray homogeneity.....	10
5.3.3 X-ray beam air kerma rate	10
5.3.4 X-ray beam focal spot.....	11
5.3.5 X-ray beam asymmetry	11
5.3.6 X-ray sensitivity	11
5.3.7 Dose leakage	12
5.4 Electrical safety	12
5.4.1 Protective grounding.....	12
5.4.2 Insulation resistance.....	12
5.4.3 Dielectric strength.....	12
5.4.4 Protection against electric shock	12
5.5 Reliability.....	12
5.5.1 Continuous operation.....	12
5.5.2 Recovery	12
5.5.3 Restart	12
6 Test methods.....	12
6.1 General requirements	12
6.1.1 Testing conditions	12
6.1.2 Instruments and devices	13
6.2 Visual inspection.....	14
6.3 Control system test.....	14
6.4 Performance test	14
6.4.1 X-ray beam energy	14
6.4.2 X-ray homogeneity.....	15
6.4.3 X-ray beam air kerma rate	16
6.4.4 X-ray beam focal spot.....	16
6.4.5 X-ray beam asymmetry	18
6.4.6 X-ray sensitivity	18

6.4.7	Leakage dose rate	18
6.5	Electrical safety testing	19
6.5.1	Protective grounding	19
6.5.2	Insulation resistance	19
6.5.3	Dielectric strength	19
6.5.4	Protection against electric shock	19
6.6	Reliability test	19
6.6.1	Continuous operation	19
6.6.2	Recovery	19
6.6.3	Restart	19
7	Inspection rules	20
7.1	Inspection classification	20
7.2	Inspection items	20
7.3	Criterion rule	20
8	Marking, packaging, transportation, storage and accompanying documents	20
8.1	Marking	20
8.1.1	Accelerator signs	20
8.1.2	Component nameplates	21
8.1.3	Labels	21
8.1.4	Warning signs	21
8.2	Packaging	21
8.3	Transportation	21
8.4	Storage	21
8.5	Accompanying documents	22
8.5.1	Instructions	22
8.5.2	Product certification	22
8.5.3	Other documents	22
	Figure 1 – Naming convention	8
	Figure 2 – Sketch map of the test module	13
	Figure 3 – Sketch map of the copper block with a swivelling edge	14
	Figure 4 – Schematic diagram of X ray beam radial uniformity measurement	15
	Figure 5 – Schematic diagram of the testing module in front of the detector	16
	Figure 6 – Schematic diagram of the “Sandwich” test module placement	17
	Figure 7 – Schematic diagram of the copper block test module placement	17
	Figure 8 – Diagram of leakage dose measurement points	19
	Table 1 – Specifications of several commonly used accelerator models	9
	Table 2 – Half value layer of materials corresponding to commonly used X-ray beam energies	10
	Table 3 – X-ray homogeneity of commonly used X-ray beam energies	10
	Table 4 – X-ray beam air kerma rate of different models	11
	Table 5 – Detection range of equivalent steel thickness corresponding to commonly used X-ray beam energies	11
	Table 6 – Testing conditions	13
	Table 7 – Inspection items of the accelerator	20

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**INDUSTRIAL NON-DESTRUCTIVE TESTING EQUIPMENT –
ELECTRON LINEAR ACCELERATOR**
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The text of this standard is based on the following documents:

FDIS	Report on voting
45/821/FDIS	45/824/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

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- reconfirmed,
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- replaced by a revised edition, or
- amended.

INDUSTRIAL NON-DESTRUCTIVE TESTING EQUIPMENT – ELECTRON LINEAR ACCELERATOR

1 Scope

This document gives the rules of naming, technical requirements, test methods, inspection, marking, packaging, transportation, storage and accompanying documents for electron linear accelerator equipment for Non-Destructive Testing (NDT).

This document applies to NDT electron linear accelerator equipment in the X-ray energy range of 1 MeV to 15 MeV, including the accelerator equipment for radiographic film, computed radiography with imaging plates, real-time imaging, digital detector array and industrial computerized tomography.

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/IEC Guide 37:2012, *Instructions for use of products by consumers*

ISO 780:2015, *Packaging – Distribution packaging – Graphical symbols for handling and storage of packages*

ISO 19232-1:2013, *Non-destructive testing – Image quality of radiographs – Part 1: Determination of the image quality value using wire-type image quality indicators*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

target

area on the surface of accelerating tube outlet on which the electron beam impinges and from which the primary beam of X-rays is emitted

3.2

linear electron accelerator

LINAC

apparatus for producing high energy electrons by accelerating them along a waveguide. The electrons strike a target to produce X-rays

Note 1 to entry: NDT electron linear accelerator, hereinafter referred to as the accelerator.

[SOURCE: ISO 5576:1997, 2.84]