

Specification for

Essential data to be supplied with X-ray tubes and X-ray tube assemblies for medical use

[IEC title: Marking of and accompanying documents for X-ray
tubes and X-ray tube assemblies for medical use]

UDC 621.386.2:616 – 073.754

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Department of Trade
Electricity Supply Industry in England and Wales
Electronic Engineering Association
Institution of Electrical Engineers
Ministry of Defence*
United Kingdom Medical Equipment Industries Group

The organizations marked with an asterisk in the above list, together with the following, were directly represented on the Technical Committee entrusted with the preparation of this British Standard:

Association of X-ray Equipment Manufacturers
Bath Institute of Medical Engineering
British Dental Association
British Institute of Radiology
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Scientific Instrument Manufacturers' Association
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Society of Radiographers

This British Standard, having been prepared under the direction of the Light Electrical Engineering Standards Committee, was published under the authority of the Executive Board and comes into effect on 30 January 1981

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The following BSI references relate to the work on this standard:
Committee reference LEL/103
Draft for comment 78/21490 DC

ISBN 0 580 12011 2

Amendments issued since publication

Amd. No.	Date of issue	Comments

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National foreword

This British Standard has been prepared under the direction of the Light Electrical Engineering Standards Committee. It is identical with IEC Publication 637 “*Marking of and accompanying documents for X-ray tubes and X-ray tube assemblies for medical use*”, published in 1979 by the International Electrotechnical Commission (IEC).

Terminology and conventions. The text of the International Standard has been approved as suitable for publication as a British Standard without deviation. Some terminology and certain conventions are not identical with those used in British Standards; attention is specially drawn to the following.

Cross-references

International Standard	Corresponding British Standard
IEC 336:1970 ^a	BS 5269 <i>Medical electrical and radiological equipment</i> Part 1:1975 <i>Measurement of the dimensions of focal spots of diagnostic X-ray tubes using a pinhole method</i> (Technically equivalent)
IEC 526:1978	BS 6038:1981 <i>Specification for high-voltage cable plug and socket connections for medical X-ray equipment</i> (Identical)
IEC 536:1976	BS 2754:1976 <i>Memorandum. Construction of electrical equipment for protection against electric shock</i> (Technically equivalent)
IEC 613:1978 ^b	BS 6058:1981 <i>Method of specifying and verifying the characteristics of rotating anode X-ray tubes and X-ray tube assemblies used in medical diagnosis</i> (Identical)

^a IEC 336:1970 is currently being revised. It is anticipated that the revised edition will be issued as an identical British Standard.

^b For the convenience of users, the definitions in IEC 613 referred to in the present standard are given in National appendix Z.

There are no corresponding British Standards for IEC 407:1973 “*Radiation protection in medical X-ray equipment 10 kV to 400 kV*” or IEC 522:1976 “*Inherent filtration of an X-ray assembly*”. The technical committee has reviewed the provisions of IEC 407, to which reference is made in 7.4, and has decided that they are acceptable for the purposes of this standard. IEC 407 is currently being revised and it is anticipated that the revised edition will be issued as an identical British Standard.

The technical committee has reviewed the provisions of IEC 522, to which reference is made in 5.1 and 6.3. It has decided that the method specified in paragraph 1 of clause 4 is not acceptable for the purposes of this standard, but that the method described in note 2 of clause 4 is acceptable, subject (for the sake of clarification) to the deletion of the phrase “*X-ray tube housing*” in line 1 and the substitution of the phrase “*X-ray tube assembly*”.

Additional information. IEC/SC 62A has recently agreed to a change in terminology, deleting the phrase “potential difference” and substituting “voltage”.

In the latest draft of IEC Chapter 882 “*Medical radiology*”, the term and definition given in 4.1 of the National appendix of this standard have been redefined

X-ray tube voltage

Voltage applied to an X-RAY TUBE between the ANODE and CATHODE, usually expressed by its peak value in kilovolts (kV).

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 8, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.