SLOVENSKI STANDARD
SIST EN 61675-1:1998/A1:2008

01-oktober-2008

Naprave za slikanje z radionuklidi - Karakteristike in preskusni pogoji - 1. del: Pozitronski tomografi (IEC 61675-1:1998/A1:2008)

Radionuclide imaging devices - Characteristics and test conditions - Part 1: Positron emission tomographs (IEC 61675-1:1998/A1:2008)

Bildgebende Systeme in der Nuklearmedizin - Merkmale und Prüfbedingungen - Teil 1: Positronen-Emissions-Tomographen (IEC 61675-1:1998/A1:2008)

Dispositifs d'imagerie par radionucléides - Caractéristiques et conditions d'essai - Partie 1: Tomographes à émission de positrons (CEI 61675-1:1998/A1:2008)

Ta slovenski standard je istoveten z: **EN 61675-1:1998/A1:2008**

ICS:

11.040.50	Radiografska oprema	Radiographic equipment

SIST EN 61675-1:1998/A1:2008 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61675-1/A1

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English version

Radionuclide imaging devices - Characteristics and test conditions - Part 1: Positron emission tomographs
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Bildgebende Systeme in der Nuklearmedizin - Merkmale und Prüfbedingungen - Teil 1: Positronen-Emissions-Tomographen (IEC 61675-1:1998/A1:2008)

This amendment A1 modifies the European Standard EN 61675-1:1998; it was approved by CENELEC on 2008-05-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 Central Secretariat or to any CENELEC member.

This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC
European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Ref. No. EN 61675-1:1998/A1:2008 E

Foreword

The text of document 62C/419/CDV, future amendment 1 to IEC 61675-1:1998, prepared by SC 62C, Equipment for radiotherapy, nuclear medicine and radiation dosimetry, of IEC TC 62, Electrical equipment in medical practice, was submitted to the IEC-CENELEC Parallel Unique Acceptance Procedure and was approved by CENELEC as amendment A1 to EN 61675-1:1998 on 2008-05-01.

The following dates were fixed:

– latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2009-02-01
– latest date by which the national standards conflicting with the amendment have to be withdrawn	(dow)	2011-05-01

Endorsement notice

The text of amendment 1:2008 to the International Standard IEC 61675-1:1998 was approved by CENELEC as an amendment to the European Standard without any modification.

IEC 61675-1

Edition 1.0 2008-04

INTERNATIONAL STANDARD

AMENDMENT 1

Radionuclide imaging devices – Characteristics and test conditions – Part 1: Positron emission tomographs

FOREWORD

This amendment has been prepared by subcommittee 62C: Equipment for radiotherapy, nuclear medicine and radiation dosimetry, of IEC technical committee 62: Electrical equipment in medical practice.

The text of this amendment is based on the following documents:

Enquiry draft	Report on voting
62C/419/CDV	62C/432/RVC

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

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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

A bilingual version of this publication may be issued at a later date.

Introduction to this amendment

Further developments of POSITRON EMISSION TOMOGRAPHS allow most of the tomographs to be operated in fully 3D acquisition mode. To comply with this trend, this amendment describes test conditions in accordance with the acquisition characteristic. It is the intention to simulate 3D imaging without introducing new phantoms or new acquisition or processing protocols. The test does simulate more realistically count rate characteristics for whole body imaging. Measurement of SCATTER FRACTION is not intended with this test. Certain parts of the standard are amended as stated below.

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3.5.3 Method

Add, after the first paragraph, the following new text:

For scatter condition as simulated in 3.5.3.1.3, the total amount of ACTIVITY is the ACTIVITY in the body phantom.

3.5.3.1.3 Abdominal imaging

Replace the existing paragraph by the following:

The body phantom without any insert is homogeneously filled with ACTIVITY A_{ref} and centred in the FOV. The head phantom is filled with the same amount of ACTIVITY A_{ref} and is positioned in contact with the body phantom. The two arm phantoms are each filled with half the amount of ACTIVITY A_{ref} and are positioned in contact with the body phantom on the other side. All phantoms will rest on the patient couch. For details on the position of the phantoms and the location of the filling screws, see Figure 13. The arm phantoms are a first order approximation of the abdomen/ legs of the PATIENT.

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Add the following new Figure 13:

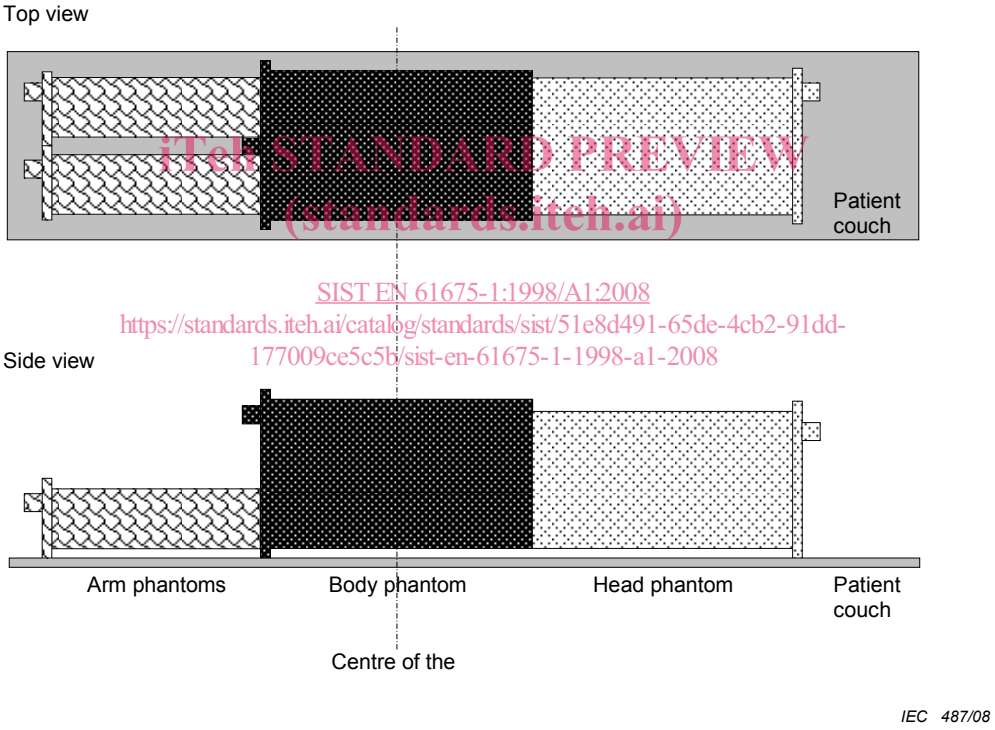

Figure 13 – Phantom position and location of screws for abdominal imaging (see 3.5.3.1.3)

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Index of defined terms

Add, to the existing list, the following term:

PATIENT.....rm-62-03

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