

SLOVENSKI

**SIST EN 60601-2-
37:2002/oprA2:2005**

PREDSTANDARD

april 2005

**Medicinska električna oprema – 2-37.del: Posebne varnostne zahteve za
ultrazvočno medicinsko diagnostično in nadzorovalno opremo**

Medical electrical equipment - Part 2-37: Particular requirements for the safety of
ultrasonic medical diagnostic and monitoring equipment

ICS 11.040.55; 17.140.50

Referenčna številka
SIST EN 60601-2-
37:2002/oprA2:2005(en)



62B/557/CDV

COMMITTEE DRAFT FOR VOTE (CDV) PROJET DE COMITÉ POUR VOTE (CDV)

Project number Numéro de projet		IEC 60601-2-37 Amd.2 Ed. 1.0	
IEC/TC or SC: SC 62B CEI/CE ou SC:	Date of circulation Date de diffusion 2005-02-11	Closing date for voting (Voting mandatory for P-members) Date de clôture du vote (Vote obligatoire pour les membres (P)) 2005-07-15	
Titre du CE/SC:		TC/SC Title: DIAGNOSTIC IMAGING EQUIPMENT	
Secretary: Norbert Bischof Secrétaire:			
Also of interest to the following committees Intéresse également les comités suivants TC 87		Supersedes document Remplace le document 62B/519/CD and 62B/545/CC	
Functions concerned Fonctions concernées <input checked="" type="checkbox"/> Safety Sécurité <input type="checkbox"/> EMC CEM <input type="checkbox"/> Environment Environnement <input type="checkbox"/> Quality assurance Assurance qualité			

CE DOCUMENT EST TOUJOURS À L'ÉTUDE ET SUSCEPTIBLE DE MODIFICATION. IL NE PEUT SERVIR DE RÉFÉRENCE.

THIS DOCUMENT IS STILL UNDER STUDY AND SUBJECT TO CHANGE. IT SHOULD NOT BE USED FOR REFERENCE PURPOSES.

LES RÉCIPIENDAIRES DU PRÉSENT DOCUMENT SONT INVITÉS À PRÉSENTER, AVEC LEURS OBSERVATIONS, LA NOTIFICATION DES DROITS DE PROPRIÉTÉ DONT ILS AURAIENT ÉVENTUELLEMENT CONNAISSANCE ET À FOURNIR UNE DOCUMENTATION EXPLICATIVE.

RECIPIENTS OF THIS DOCUMENT ARE INVITED TO SUBMIT, WITH THEIR COMMENTS, NOTIFICATION OF ANY RELEVANT PATENT RIGHTS OF WHICH THEY ARE AWARE AND TO PROVIDE SUPPORTING DOCUMENTATION.

Titre :

Title : **Medical electrical equipment - Part 2-37: Particular requirements for the safety of ultrasonic medical diagnostic and monitoring equipment**

Introductory note

The Maintenance Team IEC/62B/MT34 has prepared this 2nd amendment of IEC 60601-2-37. It is intended to introduce the bilingual version with the FDIS.

In subclause 35.4, line 60 the text "and results from clinical evaluations" has been crossed out. There was a discussion in the group whether or not this piece of text was necessary and clear. Convenor and Secretary are in favour of a cancellation. The term "clinical evaluations" is not clear within the standards referenced while ISO14971 puts clear requirements.

National committees are requested to comment whether or not the text part crossed out should be included in the standard.

ATTENTION	ATTENTION
CDV soumis en parallèle au vote (CEI) et à l'enquête (CENELEC)	Parallel IEC CDV/CENELEC Enquiry

Copyright © 2005 International Electrotechnical Commission, IEC. All rights reserved. It is permitted to download this electronic file, to make a copy and to print out the content for the sole purpose of preparing National Committee positions. You may not copy or "mirror" the file or printed version of the document, or any part of it, for any other purpose without permission in writing from IEC.

1 **INTERNATIONAL ELECTROTECHNICAL COMMISSION**

2
3
4 **MEDICAL ELECTRICAL EQUIPMENT –**

5
6 **Part 2-37: Particular requirements for the safety**
7 **of ultrasonic diagnostic and monitoring equipment**

8
9
10 **FOREWORD**

11
12 This amendment to International Standard IEC 60601-2-37 has been prepared by
13 subcommittee 62B: Diagnostic imaging equipment, of IEC technical committee 62: Electrical
14 equipment in medical practice.

15 The text of this standard is based on the following documents:

FDIS	Report on voting

16
17 Full information on the voting for the approval of this standard can be found in the report on
18 voting indicated in the above table.

19 This publication has been drafted in accordance with the ISO/IEC Directives, Part 3.

20 In this Particular Standard, the following print types are used:

- 21 – requirements, compliance with which can be tested, and definitions: in roman type
22 – notes, explanations, advice, introductions, general statements, exceptions, and references: in smaller type
23 – *test specifications: in italic type*
24 – TERMS USED THROUGHOUT THIS PARTICULAR STANDARD THAT HAVE BEEN DEFINED IN CLAUSE
25 2 AND IEC 60601-1: IN SMALL CAPITALS.

26 The committee has decided that the contents of this publication may remain unchanged until
27 December 2006. At or before this date, the publication will be

- 28 • reconfirmed;
29 • withdrawn;
30 • replaced by a revised edition, or
31 • amended.

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

34 The numbering of sections, clauses, and subclauses of this Amendment corresponds to that
35 of the Particular Standard. The changes to the text of the Particular Standard are specified by
36 the use of the following words:

37 **“Replace in the Particular Standard”**: means that the clause or subclause of the
38 Particular Standard is replaced completely by the text of this Amendment.

39 **“Add to the Particular Standard”**: means that the text of this Amendment is additional
40 to the requirements of the Particular Standard.

41 **“Change the Particular Standard”**: means that the clause or subclause of the
42 Particular Standard is changed as indicated by the text of this Amendment.

43

44 **1.3.101 Related international standards**

45 **Add to the Particular Standard:**

46 ISO 14971:2000, Application of risk management to medical devices
47 Amendment 1 (2003)

48

49 **6.8.2 INSTRUCTIONS FOR USE**

50 aa) INSTRUCTIONS FOR USE shall contain the following:

51 **Add to the Particular Standard:**

52 14) declaration of output limits as selected according to clause 35.4. For MULTI-
53 PURPOSE ULTRASONIC EQUIPMENT the output limits shall be declared for each
54 application.

55

56 **35 Acoustical energy (including ultrasonic)**

57 **Add to the Particular Standard:**

58 **35.4.** Acoustic output shall be limited based on RISK ASSESSMENT and RISK MANAGEMENT
59 following ISO 14971 using the safety parameters defined in this standard and other
60 relevant information such as clinical experience ~~and results from clinical evaluations~~.

61 NOTE: for guidance on the relevance of the safety parameters defined in this standard, see
62 Annex HH.

63 When applicable, the MANUFACTURER shall address the risks associated with
64 ultrasound acoustic output in the RISK MANAGEMENT process.

65

66

67

68
69

Annex BB
(informative)

70

Guidance and rationale for particular subclauses

71

72 **Concerning 35 Acoustical energy (including ultrasonic)**

73

Add to the Particular Standard:

74 While this Particular Standard places no upper limits on permitted levels of acoustic output, all
75 EQUIPMENT is limited for technical reasons, compliance with local regulatory requirements, or
76 reasons resulting from the MANUFACTURER'S RISK MANAGEMENT. On the one hand the
77 MANUFACTURERS should continuously track the scientific discussions on safety of ultrasonic
78 fields for diagnostic ultrasound, on the other hand the USERS should know about the – possibly
79 application-dependent – limits of their EQUIPMENT as selected by the MANUFACTURER.

80 Compliance with subclause 35.4 may be checked by inspection of the relevant documentation
81 of the results of RISK MANAGEMENT process provided by the MANUFACTURER, including the
82 results of the clinical evaluations.