

<b>STN</b>	<b>Normalizovaný postup na označovanie zdravotníckych pomôcok a iných predmetov na účely bezpečnosti v prostredí magnetickej rezonancie.</b>	<b>STN EN 62570</b>  36 4801
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Standard practice for marking medical devices and other items for safety in the magnetic resonance environment

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. 11/15

Obsahuje: EN 62570:2015, IEC 62570:2014

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Úrad pre normalizáciu, metrológiu a skúšobníctvo SR, 2015  
Podľa zákona č. 264/1999 Z. z. v znení neskorších predpisov sa môžu slovenské technické normy rozmnožovať a rozširovať iba so súhlasom Úradu pre normalizáciu, metrológiu a skúšobníctvo SR.



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 62570**

May 2015

ICS 11.040.50; 11.040.55

English Version

**Standard practice for marking medical devices and other items  
for safety in the magnetic resonance environment  
(IEC 62570:2014)**

Pratiques normalisées relatives au marquage des appareils  
médicaux et des éléments de sûreté divers dédiés aux  
environnements de résonance magnétique  
(IEC 62570:2014)

Standardverfahren für die Kennzeichnung medizinischer  
Geräte und anderer Gegenstände zur Sicherheit in der  
Umgebung von Magnetresonanzeinrichtungen  
(IEC 62570:2014)

This European Standard was approved by CENELEC on 2015-04-14. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

## **Foreword**

The text of document 62B/933/FDIS, future edition 1 of IEC 62570, prepared by SC 62B "Diagnostic imaging equipment" of IEC/TC 62 "Electrical equipment in medical practice" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62570:2015.

The following dates are fixed:

- latest date by which the document has to be implemented at (dop) 2016-01-14  
national level by publication of an identical national  
standard or by endorsement
- latest date by which the national standards conflicting with (dow) 2018-04-14  
the document have to be withdrawn

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This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive 93/42/EEC, see informative Annex ZZ, which is an integral part of this document.

## **Endorsement notice**

The text of the International Standard IEC 62570:2014 was approved by CENELEC as a European Standard without any modification.

## Annex ZA

(normative)

### Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ASTM F2052	-	Standard Test Method for Measurement of Magnetically Induced Displacement Force on Medical Devices in the Magnetic Resonance Environment	-	-
ASTM F2119	-	Standard Test Method for Evaluation of MR Image Artifacts from Passive Implants	-	-
ASTM F2182	-	Standard Test Method for Measurement of Radio Frequency Induced Heating On or Near Passive Implants During Magnetic Resonance Imaging	-	-
ASTM F2213	-	Standard Test Method for Measurement of Magnetically Induced Torque on Medical Devices in the Magnetic Resonance Environment	-	-
IEC 60601-2-33	2010	Medical electrical equipment - Part 2-33: Particular requirements for the basic safety and essential performance of	EN 60601-2-33	2010
-	-	magnetic resonance equipment for medical diagnosis	+ corrigendum Oct.	2010
-	-		+ A11	2011
ISO 14971	-	Medical devices - Application of risk management to medical devices	EN ISO 14971	-
ISO/IEC Guide 51	-	Safety aspects - Guidelines for their inclusion in standards	-	-
ISO/TS 10974	-	Assessment of the safety of magnetic resonance imaging for patients with an active implantable medical device	-	-

## **Annex ZZ**

(informative)

### **Coverage of Essential Requirements of EU Directives**

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and within its scope the Standard covers all relevant essential requirements given in Annex I of EU Directive 93/42/EEC of 14 June 1993 concerning medical devices.

Compliance with this standard provides one means of conformity with the specified essential requirements of the Directive concerned.

**WARNING:** Other requirements and other EU Directives can be applied to the products falling within the scope of this standard.



IEC 62570

Edition 1.0 2014-02

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**Standard practice for marking medical devices and other items for safety in the magnetic resonance environment**

**Pratiques normalisées relatives au marquage des appareils médicaux et des éléments de sûreté divers dédiés aux environnements de résonance magnétique**



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IEC 62570

Edition 1.0 2014-02

# INTERNATIONAL STANDARD

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**Standard practice for marking medical devices and other items for safety in the magnetic resonance environment**

**Pratiques normalisées relatives au marquage des appareils médicaux et des éléments de sûreté divers dédiés aux environnements de résonance magnétique**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**STANDARD PRACTICE FOR MARKING MEDICAL DEVICES AND OTHER  
ITEMS FOR SAFETY IN THE MAGNETIC RESONANCE ENVIRONMENT**

## FOREWORD

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International Standard IEC 62570, integrating the unmodified text of ASTM F2503 - 13, has been developed by subcommittee 62B: Diagnostic imaging equipment, of IEC technical committee 62: Medical equipment in medical practice, in collaboration with ASTM.

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

FDIS	Report on voting
62B/933/FDIS	62B/934/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.

The committee has decided that the contents of this publication will remain unchanged until the stability 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

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F2503-13

## Standard Practice for Marking Medical Devices and Other Items for Safety in the Magnetic Resonance Environment<sup>1</sup>

This standard is issued under the fixed designation F2503 - 13; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

### 1. Scope

1.1 This international standard applies to the practice of marking of items that might be used in the magnetic resonance (MR) environment.

1.2 The purpose of this practice is to mark items that might be brought into the MR environment and to recommend information that should be included in the marking.

1.3 The standard specifies the permanent marking of items, which are used in an MR environment, by means of terms and icons.

1.4 MR image artifacts are not considered to be a performance issue and so are not addressed in this international standard practice (see X1.5).

1.5 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

1.6 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of his standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

### 2. Referenced Documents

2.1 The following referenced documents are indispensable for the application 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.

#### 2.2 *ASTM Standards:*<sup>2</sup>

F2052 Test Method for Measurement of Magnetically Induced Displacement Force on Medical Devices in the Magnetic Resonance Environment

F2119 Test Method for Evaluation of MR Image Artifacts from Passive Implants

F2182 Test Method for Measurement of Radio Frequency Induced Heating On or Near Passive Implants During Magnetic Resonance Imaging

F2213 Test Method for Measurement of Magnetically Induced Torque on Medical Devices in the Magnetic Resonance Environment

#### 2.3 *Other Standards:*

IEC 60601-2-33 Medical Electrical Equipment—Part 2-33: Particular Requirements for the Safety of Magnetic Resonance Equipment for Medical Diagnosis<sup>4</sup>

ISO 14971 *Medical Devices — Application of Risk Management to Medical Devices*

ISO/IEC Guide 51 *Safety Aspects — Guidelines for their Inclusion in Standards*

ISO TS 10974 Assessment of the Safety of Magnetic Resonance Imaging for Patients with an Active Implantable Medical Device

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

<sup>1</sup>This practice is under the jurisdiction of ASTM Committee F04 on Medical and Surgical Materials and Devices and is the direct responsibility of Subcommittee F04.15 on Material Test Methods.

Current edition approved Oct. 1, 2008. Published November 2008. Originally approved in 2005. Last previous edition approved in 2005 as F2503 – 05. DOI: 10.1520/F2503 - 08.

<sup>2</sup>For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.