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Electric welding equipment - Assessment of restrictions related to human exposure to electromagnetic fields (0 Hz to 300 GHz) - Part 2: Arc welding equipment

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. 02/17

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NORME EUROPÉENNE
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EN 62822-2

September 2016

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English Version

**Electric welding equipment - Assessment of restrictions related
to human exposure to electromagnetic fields (0 Hz to 300 GHz) -
Part 2: Arc welding equipment
(IEC 62822-2:2016)**

Matériels de soudage électrique - Évaluation des
restrictions relatives à l'exposition humaine aux champs
électromagnétiques (0 Hz à 300 GHz) -
Partie 2: Matériels de soudage à l'arc
(IEC 62822-2:2016)

Bewertung Elektrischer Schweißeinrichtungen in Bezug
auf Begrenzungen der Exposition von Personen gegenüber
Elektromagnetischen Feldern (0 Hz - 300 GHz) -
Teil 2: Grundnorm für Lichtbogenschweißeinrichtungen
(IEC 62822-2:2016)

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European foreword

The text of document 26/584/FDIS, future edition 1 of IEC 62822-2, prepared by IEC/TC 26 "Electric welding" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62822-2:2016.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2017-03-16
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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 62226-1	NOTE	Harmonized as EN 62226-1.
IEC 62226-2-1:2004	NOTE	Harmonized as EN 62226-2-1:2005 (not modified).
IEC 62311	NOTE	Harmonized as EN 62311.

Annex ZA
(normative)

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

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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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60050-851	2008	International Electrotechnical Vocabulary - - Part 851: Electric welding		-
IEC 60974-1	-	Arc welding equipment - Part 1: Welding power sources	EN 60974-1	-
IEC 60974-6	-	Arc welding equipment - Part 6: Limited duty equipment	EN 60974-6	-
IEC 61786-1	-	Measurement of DC magnetic, AC magnetic and AC electric fields from 1 Hz to 100 kHz with regard to exposure of human beings - Part 1: Requirements for measuring instruments	EN 61786-1	-
IEC 61786-2	-	Measurement of DC magnetic, AC magnetic and AC electric fields from 1 Hz to 100 kHz with regard to exposure of human beings - Part 2: Basic standard for measurements	EN 61788-2	-
IEC 62822-1	-	Electric welding equipment - Assessment of restrictions related to human exposure to electromagnetic fields (0 Hz to 300 GHz) - Part 1: Product family standard	EN 62822-1	-



INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Electric welding equipment – Assessment of restrictions related to human exposure to electromagnetic fields (0 Hz to 300 GHz) –
Part 2: Arc welding equipment**

**Matériels de soudage électrique – Évaluation des restrictions relatives à l'exposition humaine aux champs électromagnétiques (0 Hz à 300 GHz) –
Partie 2: Matériels de soudage à l'arc**





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INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Electric welding equipment – Assessment of restrictions related to human exposure to electromagnetic fields (0 Hz to 300 GHz) –
Part 2: Arc welding equipment**

**Matériels de soudage électrique – Évaluation des restrictions relatives à l'exposition humaine aux champs électromagnétiques (0 Hz à 300 GHz) –
Partie 2: Matériels de soudage à l'arc**

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CONTENTS

FOREWORD.....	4
1 Scope.....	6
2 Normative references.....	6
3 Terms, definitions and abbreviations	7
3.1 Terms and definitions	7
3.2 Quantities and units	8
3.3 Constants	8
4 Requirements	8
5 Assessment methods.....	8
5.1 General considerations.....	8
5.1.1 Time averaging	8
5.1.2 Spatial averaging of external field values.....	8
5.1.3 Spatial averaging of intracorporeal values	9
5.1.4 Equipment with pulsed or non-sinusoidal welding current.....	9
5.1.5 Considerations for spectral analysis	12
5.1.6 Uncertainty of assessment	13
5.2 Measurement of external field levels.....	14
5.2.1 General	14
5.2.2 Measurement equipment	14
5.3 Calculation of external field levels	14
5.3.1 General	14
5.3.2 Source model and calculation equation.....	14
5.4 Calculation of intracorporeal levels	15
5.4.1 General	15
5.4.2 Source model.....	15
5.4.3 Body model for analytical calculations	15
5.4.4 Anatomical body models for numerical calculations.....	17
6 Assessment conditions	18
6.1 Assessment configurations.....	18
6.1.1 General	18
6.1.2 Exposure of the head	18
6.1.3 Exposure of the trunk	21
6.1.4 Exposure of limbs	24
6.2 Welding current conditions	26
6.2.1 General	26
6.2.2 Single operating mode	27
6.2.3 Multiple operating modes	28
6.2.4 Worst case power source capability.....	28
6.2.5 Current ripple.....	28
7 EMF data sheet and assessment report.....	28
Annex A (informative) Example for EMF data sheet structure	30
Annex B (informative) Assessment example for maximum power-source capability.....	31
B.1 Equipment description	31
B.2 Welding current measurement and spectral analysis	31
B.3 Assessment of non-thermal effects	32
Annex C (informative) Summation with approximated and piecewise linear limit values	36

Annex D (informative) Coupling factors for various distances and disk radii.....	37
Bibliography	38
Figure 1 – Piecewise linear and approximated limit amplitudes	11
Figure 2 – Piecewise linear and approximated summation function phase angles	11
Figure 3 – Spectral synthesis for the validation of the analysis.....	12
Figure 4 – Equivalent waveform for non-repetitive signals.....	13
Figure 5 – Conducting disk in a uniform magnetic flux density.....	15
Figure 6 – Electrical conductivity for homogeneous body models	16
Figure 7 – Field measurement at head position.....	19
Figure 8 – Field calculation at head position.....	19
Figure 9 – Analytical calculation of intracorporeal metrics for the head.....	20
Figure 10 – Numerical calculation of intracorporeal metrics for the head	21
Figure 11 – Field measurement at trunk position.....	21
Figure 12 – Field calculation at trunk position	22
Figure 13 – Analytical calculation of intracorporeal metrics for the trunk.....	22
Figure 14 – Numerical calculation of intracorporeal metrics for the trunk	23
Figure 15 – Field measurement at limb positions, hand and thigh.....	24
Figure 16 – Field calculation at limb positions, hand and thigh	24
Figure 17 – Analytical calculation of intracorporeal metrics for hand and thigh	25
Figure 18 – Numerical calculation of intracorporeal metrics for hand and thigh	26
Figure B.1 – Example 1 – Current ripple	31
Figure B.2 – Example 1 – Maximum power-source capability	32
Figure B.3 – Example 1 – EI calculation element	33
Figure B.4 – Example 1 – EI calculation summary	34
Figure B.5 – Example 1 – EMF data sheet.....	35
Figure C.1 – EI comparison with approximated and piecewise linear values	36
Table 1 – Phase angles of weighting function or summation function.....	9
Table 2 – Radii and coupling factors for 2D disk models	16
Table D.1 – Coupling factors for various distances and disk radii	37

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTRIC WELDING EQUIPMENT – ASSESSMENT OF RESTRICTIONS RELATED TO HUMAN EXPOSURE TO ELECTROMAGNETIC FIELDS (0 Hz to 300 GHz) –

Part 2: Arc welding equipment

FOREWORD

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International Standard IEC 62822-2 has been prepared by IEC technical committee 26: Electric welding.

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

FDIS	Report on voting
26/584/FDIS	26/591/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.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 62822 series, published under the general title *Electric welding equipment – Assessment of restrictions related to human exposure to electromagnetic fields (0 Hz to 300 GHz)*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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ELECTRIC WELDING EQUIPMENT – ASSESSMENT OF RESTRICTIONS RELATED TO HUMAN EXPOSURE TO ELECTROMAGNETIC FIELDS (0 Hz to 300 GHz) –

Part 2: Arc welding equipment

1 Scope

This part of IEC 62822 applies to equipment for arc welding and allied processes designed for occupational use by professionals and for use by laymen.

NOTE 1 Typical allied processes are electric arc cutting and arc spraying.

This standard specifies procedures for the assessment of human exposure to magnetic fields produced by arc welding. It covers non-thermal biological effects in the frequency range from 0 Hz to 10 MHz and defines standardized test scenarios.

NOTE 2 The general term “field” is used throughout this document for “magnetic field”.

NOTE 3 For the assessment of exposure to electric fields and thermal effects, the methods specified in the Generic Standard IEC 62311 apply.

This standard does not define methods for workplace assessment regarding the risks arising from electromagnetic fields (EMF). However, the EMF data that results from the application of this standard can be used to assist in workplace assessment.

Other standards may apply to products covered by this standard. In particular this standard cannot be used to demonstrate electromagnetic compatibility with other equipment. It does not specify any product safety requirements other than those specifically related to human exposure to electromagnetic fields.

2 Normative references

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.

IEC 60050-851:2008, *International Electrotechnical Vocabulary – Part 851: Electric welding*

IEC 60974-1, *Arc welding equipment – Part 1: Welding power sources*

IEC 60974-6, *Arc welding equipment – Part 6: Limited duty equipment*

IEC 61786-1, *Measurement of DC magnetic, AC magnetic and AC electric fields from 1 Hz to 100 kHz with regard to exposure of human beings – Part 1: Requirements for measuring instruments*

IEC 61786-2, *Measurement of DC magnetic, AC magnetic and AC electric fields from 1 Hz to 100 kHz with regard to exposure of human beings – Part 2: Basic standard for measurements*

IEC 62822-1, *Electric welding equipment – Assessment of restrictions related to human exposure to electromagnetic fields (0 Hz to 300 GHz) – Part 1: Product family standard*