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Anläggningar för industriell elvärme och elektromagnetisk materialbehandling – Säkerhet –

Del 8: Särskilda fordringar på omsmältningsugnar med ledande slagg

*Safety in installations for electroheating and electromagnetic processing –
Part 8: Particular requirements for electroslag remelting furnaces*

Som svensk standard gäller europastandarden EN IEC 60519-8:2020. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 60519-8:2020.

Nationellt förord

Europastandarden EN IEC 60519-8:2020

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60519-8, Third edition, 2020 - Safety in installations for electroheating and electromagnetic processing - Part 8: Particular requirements for electroslag remelting furnaces**

utarbetad inom International Electrotechnical Commission, IEC.

Standarden ska användas tillsammans med SS-EN IEC 60519-1, utgåva 5:2020.

Tidigare fastställd svensk standard SS-EN 60519-8, utgåva 1, 2005, gäller ej fr o m 2023-06-11.

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English Version

**Safety in installations for electroheating and electromagnetic
processing - Part 8: Particular requirements for electroslag
remelting furnaces
(IEC 60519-8:2020)**

Sécurité dans les installations destinées au traitement
électrothermique et électromagnétique - Partie 8: Exigences
particulières pour fours de refusion sous laitier
électroconducteur
(IEC 60519-8:2020)

Sicherheit in Elektroerwärmungsanlagen und Anlagen für
elektromagnetische Bearbeitungsprozesse - Teil 8:
Besondere Anforderungen für Elektroschlacke-
Umschmelzöfen
(IEC 60519-8:2020)

This European Standard was approved by CENELEC on 2020-06-11. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard 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 CEN-CENELEC Management Centre has the same status as the official versions.

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



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document 27/1127/FDIS, future edition 3 of IEC 60519-8, prepared by IEC/TC 27 "Industrial electroheating and electromagnetic processing" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60519-8:2020.

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) 2021-03-11
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-06-11

This document supersedes EN 60519-8:2005 and all of its amendments and corrigenda (if any).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 60519-8:2020 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 60779 NOTE Harmonized as EN 60779

Annex ZA

(normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

NOTE 1 Where 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.

Clause 2 of IEC 60519-1:2020 is applicable with the following additions:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60519-1	-	Safety in installations for electroheating and electromagnetic processing - Part 1: General requirements	EN IEC 60519-1	-

CONTENTS

FOREWORD	3
INTRODUCTION	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	6
4 Classification and sub-division of equipment and installations	7
5 Risk assessment	7
6 General provisions	7
7 Protection against hazards from electric shock	7
8 Protection against hazards from electric or magnetic fields	8
9 Protection against hazards from radiation	8
10 Protection against hazards from thermal influences	8
11 Protection against hazards from fire	10
12 Protection against hazards from fluids	10
13 Specific requirements for components and subassemblies	10
14 Control of the installation or equipment	10
15 Protection against mechanical hazards	11
16 Protection against hazards resulting from use	12
17 EMC	12
18 Verification and testing	12
19 Information for use	13
Annex A (normative) List of significant hazards	15
Annex B (normative) Limits to touch currents	16
Annex C (normative) Non-coherent optical radiation – Limits and risks classes	17
Annex D (normative) Electric and magnetic fields	18
Annex E (normative) Surface temperature limits	19
Annex F (normative) EH, EPM and fire	20
Annex G (normative) Marking and warning	21
Annex H (informative) Guidelines on using this document	22
Annex I (informative) Connection with ISO 13577 (all parts)	23
Annex J (informative) Requirements specific to the EU and associated countries	24
Bibliography	25
Table A.1.101 – List of hazards dealt with in this document and added to Table A.1 of Part 1	15

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SAFETY IN INSTALLATIONS FOR ELECTROHEATING
AND ELECTROMAGNETIC PROCESSING –****Part 8: Particular requirements for electros slag remelting furnaces**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60519-8 has been prepared by IEC technical committee 27: Industrial electroheating and electromagnetic processing.

This third edition cancels and replaces the second edition published in 2005. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) the structure has been redrafted according to IEC 60519-1:2020;
- b) the Scope has been redrafted;
- c) the terms and definitions, normative references and bibliography have been updated and completed;
- d) all requirements and content from IEC 60519-8:2005 that have been included in IEC 60519-1:2020 have been removed to avoid any duplication.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
27/1127/FDIS	27/1129/RVD

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

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

A list of all parts in the IEC 60519 series, published under the general title *Safety in installations for electroheating and electromagnetic processing*, can be found on the IEC website.

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

This part of IEC 60519 is to be read in conjunction with Part 1. It supplements or modifies the corresponding clauses of Part 1. Where the text indicates a “modification” of, “addition” to or a “replacement” of the relevant provision of Part 1, these changes are made to the relevant text of Part 1. Where no change is necessary, the words “This clause of Part 1 is applicable” are used. When a particular subclause of Part 1 is not mentioned in this part, that subclause applies as far as is reasonable. When a particular subclause of Part 1 is not applicable, the word “Void” is used.

Additional specific provisions to those in Part 1, given as individual clauses or subclauses, are numbered starting from 101.

NOTE The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or subclause;
- additional annexes are lettered AA, BB, etc.

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

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

INTRODUCTION

The scope of this document covers very different types and designs of equipment used for many different purposes by the industry. It is intended to cover all industrial equipment based on electroslag heating of the workload, with examples described in Clause 1.

SAFETY IN INSTALLATIONS FOR ELECTROHEATING AND ELECTROMAGNETIC PROCESSING –

Part 8: Particular requirements for electroslag remelting furnaces

1 Scope

This clause of Part 1 is modified as follows.

Modification:

This part of IEC 60519 specifies particular safety requirements for electroslag remelting equipment and installations.

This document specifies safety requirements applicable to mainly electroheating installations for remelting and, in some cases, for refining processes of metals through direct resistance heating of a conductive slag.

The object of this document is to specify the particular requirements for the safety of persons in or around an electroslag remelting furnace. The general requirements are included in IEC 60519-1.

2 Normative references

This clause of Part 1 is applicable except as follows.

Addition:

IEC 60519-1, *Safety in installations for electroheating and electromagnetic processing – Part 1: General requirements*