Irish Standard
I.S. EN 60676:2012

Industrial electroheating equipment - Test methods for direct arc furnaces (IEC 60676:2011 (EQV))

I.S. EN 60676:2012

Incorporating amendments/corrigenda issued since publication:

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I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

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EN 60676

February 2012

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Supersedes EN 60676:2002

English version

Industrial electroheating equipment - Test methods for direct arc furnaces

(IEC 60676:2011)

Chauffage électrique industriel - Méthodes d'essai des fours à arc direct (CEI 60676:2011)

Industrielle Elektrowärmeanlagen - Prüfverfahren für Lichtbogen-Schmelzöfen (IEC 60676:2011)

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CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 60676:2012 E

Foreword

The text of document 27/816/FDIS, future edition 3 of IEC 60676, prepared by IEC/TC 27 "Industrial electroheating" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60676:2012.

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)	2012-09-13
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2014-12-13

This document supersedes EN 60676:2002.

EN 60676:2012 includes the following significant technical changes with respect to EN 60676:2002:

– Clause 1 (*Scope and object*) – types of furnaces are more clearly defined.

– Clause 2 (*Normative references*) and Clause 3 (*Terms and definitions*) have been updated and completed.

– New Clause 4 (*Features of the EAFsystem*) has been added; it mainly concentrates on the tests necessary for high-voltage / high-current electrical equipment in the installation.

– Clause 5 (*Type of tests and general conditions of their performance*) and Clause 6 (*Technical tests*) have been modified according to today's requirements for safe operation of an EAF.

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

Endorsement notice

The text of the International Standard IEC 60676:2011 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

[2]	IEC 60146-1-1:2009	NOTE	Harmonized as EN 60146-1-1:2010 (not modified).
[3]	IEC 60683:2011	NOTE	Harmonized as EN 60683:2012 (not modified).

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 When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 60398	1999	Industrial electroheating installations - General test methods	EN 60398	1999
IEC 60519-1	-	Safety in electroheating installations - Part 1: General requirements	EN 60519-1	-
IEC 60519-4	-	Safety in electroheat installations - Part 4: Particular requirements for arc furnace installations	EN 60519-4	-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

INDUSTRIAL ELECTROHEATING EQUIPMENT – TEST METHODS FOR DIRECT ARC 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 60676 has been prepared by IEC technical committee 27: Industrial electroheating.

This third edition cancels and replaces the previous edition published in 2002 and constitutes a technical revision.

Significant technical changes with respect to the previous edition are as follows:

– Clause 1 (*Scope and object*) – types of furnaces are more clearly defined.
– Clause 2 (*Normative references*) and Clause 3 (*Terms and definitions*) have been updated and completed.
– New Clause 4 (*Features of the EAFsystem*) has been added; it mainly concentrates on the tests necessary for high-voltage / high-current electrical equipment in the installation.
– Clause 5 (*Type of tests and general conditions of their performance*) and Clause 6 (*Technical tests*) have been modified according to today's requirements for safe operation of an EAF.

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

FDIS	Report on voting
27/816/FDIS	27/837/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.

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

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