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Responsible committee: WEE/6 Electric arc welding equipment

Interested committees:

Title: BS EN IEC 60974-1/A1 Amendment 1 - Arc welding equipment

Part 1: Welding power sources

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- iii) requires additional national guidance or information

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

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UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

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- All comments should be submitted online at <https://standardsdevelopment.bsigroup.com/>. You will need to register in order to comment.

Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/Figure/ Table/Note	Type of comment	Commend (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	



26/763/CD

COMMITTEE DRAFT (CD)

PROJECT NUMBER:
IEC 60974-1/AMD1 ED6

DATE OF CIRCULATION:
2024-06-21

CLOSING DATE FOR COMMENTS:
2024-08-16

SUPERSEDES DOCUMENTS:
26/756/CD, 26/759A/CC

IEC TC 26 : ELECTRIC WELDING	
SECRETARIAT: Austria	SECRETARY: Mr Josef Feichtinger
OF INTEREST TO THE FOLLOWING COMMITTEES:	PROPOSED HORIZONTAL STANDARD: ☐ Other TC/SCs are requested to indicate their interest, if any, in this CD to the secretary.
FUNCTIONS CONCERNED: ☐ EMC ☐ ENVIRONMENT ☐ QUALITY ASSURANCE ☒ SAFETY	

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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.

Recipients of this document are invited to submit, with their comments, notification of any local regulations or technical reasons that may exist and should be considered should this proposal proceed, recognizing that failure to address such requirements could result in the need for new or existing "In Some Countries" clauses. (SEE [AC/22/2007](#) OR [NEW GUIDANCE DOC](#)).

TITLE:

Amendment 1 - Arc welding equipment - Part 1: Welding power sources

NOTE FROM TC/SC OFFICERS:

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ARC WELDING EQUIPMENT –

Part 1: Welding power sources

AMENDMENT 1

FOREWORD

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Amendment 1 to IEC 60974-1:2021 has been prepared by IEC technical committee 26: Electric welding.

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

Draft	Report on voting
XX/XX/FDIS	XX/XX/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this Amendment is English.

54 This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in
55 accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available
56 at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are
57 described in greater detail at www.iec.ch/publications.

58 In this document, the following print types are used:

- 59 – *conformity statements*: in *italic* type.
- 60 – terms used throughout this document which have been defined in Clause 3: SMALL ROMAN
61 CAPITALS.

62 A list of all parts of the IEC 60974 series can be found, under the general title *Arc welding*
63 *equipment*, on the IEC website.

64 The committee has decided that the contents of this document will remain unchanged until the
65 stability date indicated on the IEC website under webstore.iec.ch in the data related to the
66 specific document. At this date, the document will be

- 67 • reconfirmed,
- 68 • withdrawn,
- 69 • replaced by a revised edition, or
- 70 • amended.
- 71

3.1 General terms and definitions

Clause 3.1.40 replace bullet b) of Note 1 to entry with the following new bullet b):

- b) POLLUTION DEGREE 2: Only non-conductive pollution occurs except that occasionally a temporary conductivity caused by condensation is to be expected. This condensation may occur during periods of on-off cycles of the equipment.

Clause 3.1.66 replace the definition with the following new definition:

3.1.66

idle state

NON-OPERATING STATE in which the power is switched on and the WELDING CIRCUIT is not energized

Note 1 to entry: For some types of equipment there is no IDLE STATE, but a welding state preceding arc striking.

Note 2 to entry: For a power source in a mechanised system, the configuration to achieve IDLE STATE is defined by the manufacturer.

Note 3 to entry: An IDLE STATE can include a low energy state in which a welding process cannot be started without automatic or manual reactivation.

Add new definition to clause 3.1.67

3.1.67

non-operating state, <of an item>

state of not performing any required function

Note 1 to entry: The adjective "non-operating" designates an item in a non-operating state.

[SOURCE: IEC 60050-192:2015, 192-02-06]

4 Environmental conditions

Delete paragraph 7 and add new Note 3:

NOTE 3 WELDING POWER SOURCES should withstand storage and transport at an ambient air temperature of -20 °C to +55 °C without any damage to function and performance.

5.3 Conformity of components

Replace paragraph 3 with the following new paragraph:

For example, if components meet the safety requirements of IEC 62368-1 but are rated for a less severe environment than the applicable environment of Clause 4 and 6.1.1, they shall also meet relevant additional requirements of this document.

5.4 TYPE TESTS

Replace the last paragraph with the following new paragraph:

The other tests included in this document and not listed here shall be carried out, but may be completed in any convenient sequence.

5.5 ROUTINE TESTS

Replace the last sentence of bullet e) with the following new sentence:

The manufacturer may select CONVENTIONAL LOAD, short circuit load or other test conditions.