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Responsible committee: WEE/6 Electric arc welding equipment

Interested committees:

Title: BS EN IEC 60974-4 Arc welding equipment

Part 4: Periodic inspection and testing

Please notify the secretary if you are aware of any keywords that might assist in classifying or identifying the standard or if the content of this standard

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- ii) affects other national standard(s)
- 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.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

## 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 Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.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

- **Annotated drafts are not acceptable and will be rejected.**
- 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 |
|------------------|------------------------|

| 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.                                       |                                                    |



26/753/CD

COMMITTEE DRAFT (CD)

PROJECT NUMBER:

**IEC 60974-4 ED4**

DATE OF CIRCULATION:

**2023-10-27**

CLOSING DATE FOR COMMENTS:

**2024-01-19**

SUPERSEDES DOCUMENTS:

**26/742/RR**

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:

**Arc welding equipment - Part 4: Periodic inspection and testing**

NOTE FROM TC/SC OFFICERS:

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## ARC WELDING EQUIPMENT –

## Part 4: Periodic inspection and testing

## FOREWORD

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International Standard IEC 60974-4 has been prepared by IEC technical committee 26: Electric welding.

This fourth edition cancels and replaces the third edition published in 2016. It constitutes a technical revision.

The main significant technical changes with respect to the previous edition are the following:

•

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

| FDIS | Report on voting |
|------|------------------|
|      |                  |

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.

112 The list of all the parts of the IEC 60974 series, under the general title *Arc welding equipment*,  
113 can be found on the IEC website.

114 In this standard, the following print types are used:

- 115 • *conformity statements: in italic type.*

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

- 119 • reconfirmed,  
120 • withdrawn,  
121 • replaced by a revised edition, or  
122 • amended.

123

124

## ARC WELDING EQUIPMENT –

### Part 4: Periodic inspection and testing

#### 1 Scope

This part of IEC 60974 specifies test procedures for periodic inspection and, after repair, to ensure electrical safety. These test procedures are also applicable for maintenance.

This standard is applicable to power sources for arc welding and allied processes designed in accordance with IEC 60974-1 or IEC 60974-6. Stand-alone ancillary equipment designed in accordance with other parts of IEC 60974 may be tested in accordance with relevant requirements of this part of IEC 60974.

NOTE 1 The welding power source can be tested with any ancillary equipment fitted that can affect the test results. This standard is not applicable to testing of new power sources or engine-driven power sources.

NOTE 2 For a power source not built in accordance with IEC 60974-1, see Annex C.

#### 2 Normative references

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..

IEC 60050-151, *International Electrotechnical Vocabulary – Part 151: Electrical and magnetic devices*

IEC 60050-192, *International Electrotechnical Vocabulary – Part 192 - Dependability*

IEC 60050-195, *International Electrotechnical Vocabulary – Part 195: Earthing and protection against electric shock*

IEC 60050-426, *International Electrotechnical Vocabulary – Part 426: Equipment for explosive atmospheres*

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

IEC 60974-1:2021, *Arc welding equipment – Part 1: Welding power sources*

IEC 60974-6:2015, *Arc welding equipment – Part 6: Limited duty equipment*

IEC 61140, *Protection against electric shock – Common aspects for installation and equipment*

IEC 61557-1:2019, *Electrical safety in low voltage distribution systems up to 1 000 V AC and 1 500 V DC - Equipment for testing, measuring or monitoring of protective measures - Part 1: General requirements*

IEC 61557-2:2019, *Electrical safety in low voltage distribution systems up to 1 000 V AC and 1 500 V DC - Equipment for testing, measuring or monitoring of protective measures - Part 2: Insulation resistance*

IEC 61557-4:2021, *Electrical safety in low voltage distribution systems up to 1 000 V AC and 1 500 V DC - Equipment for testing, measuring or monitoring of protective measures - Part 4: Resistance of earth connection and equipotential bonding*

IEC 61557-16:2014, *Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c - Equipment for testing, measuring or monitoring of protective measures - Part 16:*