



IEC 60974-11

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REDLINE VERSION

# INTERNATIONAL STANDARD



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**Arc welding equipment –  
Part 11: Electrode holders**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## ARC WELDING EQUIPMENT –

## Part 11: Electrode holders

## 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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**This redline version of the official IEC Standard allows the user to identify the changes made to the previous edition IEC 60974-11:2010. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.**

International Standard IEC 60974-11 has been prepared by IEC technical committee 26: Electric welding.

This fourth edition cancels and replaces the third edition, published in 2010. This edition constitutes a technical revision.

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

- Modify 3.6 type A to category A;
- Modify 3.7 type B to category B;
- Modify 8.1 to clarify reference to IEC 60529;
- Modification of 10.1 for clarification purposes;
- Added Bibliography.

This part of IEC 60974 is to be used in conjunction with IEC 60974-1.

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

FDIS	Report on voting
26/716/FDIS	26/721/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.

In this standard, the following print types are used:

- conformity statements: in *italic type*.
- terms defined in Clause 3: in SMALL ROMAN CAPITALS.

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

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- reconfirmed,
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## ARC WELDING EQUIPMENT –

### Part 11: Electrode holders

#### 1 Scope

This part of IEC 60974 is applicable to ELECTRODE HOLDERS for manual metal arc welding with electrodes up to 10 mm in diameter.

It is not applicable to ELECTRODE HOLDERS for underwater welding.

This document specifies safety and performance requirements of ELECTRODE HOLDERS.

#### 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 60050-151:2001, *International Electrotechnical Vocabulary (IEV) – Part 151: Electrical and magnetic devices*

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IEC 60529:1989, *Degrees of protection provided by enclosures (IP Code)*

IEC 60529:1989/AMD1:1999

IEC 60529:1989/AMD2:2013

IEC 60974-1:2017, *Arc welding equipment – Part 1: Welding power sources*

IEC 60974-1:2017/AMD1:2019

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

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**Arc welding equipment –  
Part 11: Electrode holders**

**Matériel de soudage à l'arc –  
Partie 11: Porte-électrodes**

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IEC 60974-1:2017, *Arc welding equipment – Part 1: Welding power sources*

IEC 60974-1:2017/AMD1:2019

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## COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

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### MATÉRIEL DE SOUDAGE À L'ARC –

#### Partie 11: Porte-électrodes

##### AVANT-PROPOS

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La Norme internationale IEC 60974-11 a été établie par le comité d'études 26 de l'IEC: Soudage électrique.

Cette quatrième édition annule et remplace la troisième édition parue en 2010. Cette édition constitue une révision technique.

Les modifications majeures par rapport à l'édition précédente sont les suivantes:

- modification du 3.6: type A devenant catégorie A;
- modification du 3.7: type B devenant catégorie B;
- modification du 8.1 aux fins de clarification de la référence à l'IEC 60529;
- modification du 10.1 à des fins de clarification;
- ajouts dans la Bibliographie.

La présente partie de l'IEC 60974 doit être utilisée conjointement avec l'IEC 60974-1.

La présente version bilingue (2021-08) correspond à la version anglaise monolingue publiée en 2021-04.

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## MATÉRIEL DE SOUDAGE À L'ARC –

### Partie 11: Porte-électrodes

#### 1 Domaine d'application

La présente partie de l'IEC 60974 s'applique aux porte-électrodes pour le soudage manuel électrique à l'arc avec des électrodes jusqu'à 10 mm de diamètre.

Elle ne s'applique pas aux porte-électrodes pour le soudage sous l'eau.

Le présent document de l'IEC 60974 spécifie les exigences de sécurité et de performance des porte-électrodes.

#### 2 Références normatives

Les documents suivants sont cités dans le texte de sorte qu'ils constituent, pour tout ou partie de leur contenu, des exigences du présent document. Pour les références datées, seule l'édition citée s'applique. Pour les références non datées, la dernière édition du document de référence s'applique (y compris les éventuels amendements).

IEC 60050-151:2001, *Vocabulaire Électrotechnique International – Partie 151: Dispositifs électriques et magnétiques*

IEC 60050-151:2001/AMD1:2013

IEC 60050-151:2001/AMD2:2014

IEC 60050-151:2001/AMD3:2019

IEC 60050-151:2001/AMD4:2020

IEC 60529:1989, *Degrés de protection procurés par les enveloppes (Code IP)*

IEC 60529:1989/AMD1:1999

IEC 60529:1989/AMD2:2013

IEC 60974-1:2017, *Matériel de soudage à l'arc – Partie 1: Sources de courant de soudage*

IEC 60974-1:2017/AMD1:2019