

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

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**Arc welding equipment –  
Part 5: Wire feeders**

**Matériel de soudage à l'arc –  
Partie 5: Dévidoirs**





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ELECTROTECHNICAL  
COMMISSION

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## ARC WELDING EQUIPMENT –

## Part 5: Wire feeders

## FOREWORD

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International Standard IEC 60974-5 has been prepared by IEC technical committee 26: Electric welding.

This fourth edition cancels and replaces the third edition published in 2013 and constitutes a technical revision.

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

- changes induced by the publication of IEC 60974-1:2017;
- addition of requirements for welding circuit connections in 6.9;
- clarification of requirements and conformity in 6.3.1;
- clarification of thermal requirements in Clause 9;
- addition of requirements in relation to abnormal operation in Clause 10.

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

FDIS	Report on voting
26/672/FDIS	26/677/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 document, the following print types are used:

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

This International Standard is to be used in conjunction with IEC 60974-1:2017.

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

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- withdrawn,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.

## ARC WELDING EQUIPMENT –

### Part 5: Wire feeders

#### 1 Scope

This part of IEC 60974 specifies safety and performance requirements for industrial and professional equipment used in arc welding and allied processes to feed filler wire.

This document is applicable to WIRE FEEDERS and to WIRE-FEED CONTROLS that are start-up line (separate from the welding equipment), housed together in a single enclosure or housed in a single enclosure with other welding equipment. The WIRE FEEDER can be suitable for manually or mechanically guided torches.

This document is not applicable to spool-on torches, which are covered by IEC 60974-7.

NOTE 1 Typical allied processes are electric arc cutting and arc spraying.

NOTE 2 This document does not include electromagnetic compatibility (EMC) requirements, which are given in IEC 60974-10.

#### 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 60050-195, *International Electrotechnical Vocabulary (IEV) – Part 195: Earthing and protection against electric shock*

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

IEC 60974-1:2017, *Arc welding equipment – Part 1: Welding power sources*  
IEC 60974-1:2017/AMD1:2019

IEC 60974-7, *Arc welding equipment – Part 7: Torches*

IEC 60974-10, *Arc welding equipment – Part 10: Electromagnetic compatibility (EMC) requirements*

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

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60050-195, IEC 60974-1, IEC 60974-7, and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>