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INTERNATIONAL STANDARD

**Arc welding equipment –
Part 9: Installation and use**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ARC WELDING EQUIPMENT –

Part 9: Installation and use

FOREWORD

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International Standard IEC 60974-9 has been prepared by IEC technical committee 26: Electric welding.

This standard cancels and replaces IEC/TS 62081, published in 1999. This first edition constitutes a technical revision. The following major differences with respect to IEC/TS 62081:1999 are to be noted:

- 4.3.3 Welding cables: Now dimensions are recommended.
- 5 Electromagnetic compatibility (EMC): this is completely new.
- 6 Electromagnetic fields (EMF) : this is completely new.

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- 7.3 Inspection and maintenance of the welding installation: There is now a differentiation between periodical and routine inspection.

The text of this part of IEC 60974 is based on the following documents:

FDIS	Report on voting
26/404/FDIS	26/405/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 list of all the parts of the IEC 60974 series, under the general title *Arc welding equipment*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result 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- withdrawn,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.

A bilingual version of this standard may be issued at a later date.

ARC WELDING EQUIPMENT –

Part 9: Installation and use

1 Scope

This part of IEC 60974 is applicable to the installation and use of equipment for arc welding and allied processes designed in accordance with safety requirements of IEC 60974-1, IEC 60974-6 or equivalent.

This part of IEC 60974 is applicable for the guidance of instructors, operators, welders, managers, and supervisors in the safe installation and use of equipment for arc welding and allied processes and the safe performance of welding and cutting operations.

National and local regulations take precedence over this part of IEC 60974.

2 Normative references

The following referenced documents are indispensable for the application 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 60245-6, *Rubber insulated cables – Rated voltages up to and including 450/750 V – Part 6: Arc welding electrode cables*

IEC/TR 60755, *General requirements for residual current operated protective devices*

IEC 60974-1:2005, *Arc welding equipment – Part 1: Welding power sources*

IEC 60974-4, *Arc welding equipment – Part 4: In-service inspection and testing*

IEC 60974-6, *Arc welding equipment – Part 6: Limited duty manual metal arc welding power sources*

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

IEC 60974-11, *Arc welding equipment – Part 11: Electrode holders*

IEC 60974-12, *Arc welding equipment – Part 12: Coupling devices for welding cables*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

welding circuit

circuit that includes all conductive material through which the welding current is intended to flow