

Arc welding equipment - Part 14: Calibration, validation
and consistency testing

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 60974-14:2018 sisaldab Euroopa standardi EN IEC 60974-14:2018 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 60974-14:2018 consists of the English text of the European standard EN IEC 60974-14:2018.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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English Version

**Arc welding equipment - Part 14: Calibration, validation and
consistency testing
(IEC 60974-14:2018)**

Matériel de soudage à l'arc - Partie 14: Étalonnage,
validation et essais de consistance
(IEC 60974-14:2018)

Lichtbogenschweißeinrichtungen - Teil 14: Kalibrierung,
Validierung und Konsistenzprüfung
(IEC 60974-14:2018)

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document 26/661/FDIS, future edition 1 of IEC 60974-14, prepared by IEC/TC 26 "Electric welding" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60974-14:2018.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2019-08-23
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-11-23

This document supersedes EN 50504:2008.

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Endorsement notice

The text of the International Standard IEC 60974-14:2018 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60974-4	NOTE	Harmonized as EN 60974-4
IEC 60974-5	NOTE	Harmonized as EN 60974-5
IEC 60974-6	NOTE	Harmonized as EN 60974-6
IEC 60974-9	NOTE	Harmonized as EN IEC 60974-9
ISO 17662	NOTE	Harmonized as EN ISO 17662

Annex ZA

(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60974-1	2017	Arc welding equipment - Part 1: Welding power sources	EN IEC 60974-1	2018

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ARC WELDING EQUIPMENT –

Part 14: CALIBRATION, VALIDATION and CONSISTENCY TESTING

FOREWORD

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International Standard IEC 60974-14 has been prepared by IEC technical committee TC 26: Electric welding.

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

FDIS	Report on voting
26/661/FDIS	26/666/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:

- terms used throughout this standard which have been defined in clause 3: SMALL ROMAN CAPITALS.

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

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

INTRODUCTION

This document is the first international edition for CALIBRATION, VALIDATION and CONSISTENCY TESTING of arc welding equipment. It is based on the European Standard EN 50504:2008 and will replace it. A brief history helps to understand the origin and development of this document.

In Great Britain, BS 7570:1992, *Code of practice for the validation of arc welding equipment*, was published and it became the equivalent European pre-standard ENV 50184:1996 (withdrawn).

The revised second edition of BS 7570 was published in 2000 and was later replaced by the equivalent EN 50504:2008.

For quality management in the field of welding, this document should be used in conjunction with ISO 17662.

The significant changes in respect to EN 50504:2008 are the following:

- terms VERIFICATION and VALIDATION aligned to ISO/IEC Guide 99:2007;
- wire feed equipment moved from the annex to main part of the document;
- new preferred requirement for digital instrument CALIBRATION with fixed tolerance values;
- flow charts for determination of VERIFICATION methods and sample reports added;
- EN 50504:2008 Annex E *Validation of ancillary components in a welding system* and Annex F *Voltage drops in the welding circuit* deleted.