



**SLOVENSKI STANDARD**  
**SIST EN 60974-7:2001**  
**01-september-2001**

**BUXca Yý U**  
**SIST EN 50078:1996**

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**Arc welding equipment - Part 7: Torches**

Arc welding equipment -- Part 7: Torches

Lichtbogenschweißeinrichtungen -- Teil 7: Brenner

Matériel de soudage à l'arc -- Partie 7: Torches

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**Ta slovenski standard je istoveten z: EN 60974-7:2000**

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EUROPEAN STANDARD  
 NORME EUROPÉENNE  
 EUROPÄISCHE NORM

**EN 60974-7**

April 2000

ICS 25.160.30

Supersedes EN 50078:1993 & EN 50192:1995

English version

**Arc welding equipment**  
**Part 7: Torches**  
 (IEC 60974-7:2000)

Matériel de soudage à l'arc  
 Partie 7: Torches  
 (CEI 60974-7:2000)

Lichtbogenschweißeinrichtungen  
 Teil 7: Brenner  
 (IEC 60974-7:2000)

This European Standard was approved by CENELEC on 1999-12-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

**CENELEC**

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

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

### Foreword

The text of document 26/174/FDIS, future edition 1 of IEC60974-7, prepared by IEC TC 26, Electric welding, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60974-7 on 1999-12-01.

This European Standard, together with EN 60974-1:1998/A1:2000, replaces EN 50078:1993 and EN 50192:1995.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2001-01-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2002-12-01

Annexes designated "normative" are part of the body of the standard.

Annexes designated "informative" are given for information only.

In this standard, annexes B and ZA are normative and annexes A, C, D, E and F are informative.

Annex ZA has been added by CENELEC.

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### Endorsement notice

The text of the International Standard IEC 60974-7:2000 was approved by CENELEC as a European Standard without any modification.

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**Annex ZA (normative)****Normative references to international publications  
with their corresponding European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60050-151	1978	International Electrotechnical Vocabulary (IEV) Chapter 151: Electrical and magnetic devices	-	-
IEC 60050-851	1991	Chapter 851: Electric welding	-	-
IEC 60051-2	1984	Direct acting indicating analogue electrical measuring instruments and their accessories Part 2: Special requirements for ammeters and voltmeters	EN 60051-2	1989
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529 + corr. May	1991 1993
IEC 60664-1 (mod)	1992	Insulation coordination for equipment within low-voltage systems Part 1: Principles, requirements and tests	HD 625.1 S1 + corr. November	1996 1996
IEC 60974-1	1998	Arc welding equipment Part 1: Welding power sources	EN 60974-1	1998
IEC 61558-1 (mod)	1997	Safety of power transformers, power supply units and similar Part 1: General requirements and tests	EN 61558-1	1997

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INTERNATIONALE  
INTERNATIONAL  
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**60974-7**

Première édition  
First edition  
2000-03

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**Matériel de soudage à l'arc –**

**Partie 7:  
Torches**

**Arc welding equipment –**

**Part 7:  
Torches**

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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

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For price, see current catalogue

## CONTENTS

	Page
FOREWORD .....	7
Clause	
1 Scope .....	11
2 Normative references .....	11
3 Definitions .....	13
4 Environmental conditions .....	17
5 Classification .....	17
5.1 Process .....	17
5.2 Method of guidance .....	17
5.3 Type of cooling .....	17
5.4 Method of striking the main arc for plasma processes .....	19
6 Test conditions .....	19
6.1 Type tests .....	19
6.2 Routine tests .....	19
7 Protection against electric shock .....	19
7.1 Voltage rating .....	19
7.2 Insulation resistance .....	21
7.3 Dielectric strength .....	21
7.4 Protection against electric shock in normal service (direct contact) .....	23
7.4.1 Additional requirements for plasma cutting torches .....	23
8 Thermal rating .....	25
8.1 Temperature rise .....	25
8.2 Heating test .....	25
8.2.1 Metal inert/active gas (MIG/MAG) and self-shielded flux cored arc welding torch .....	27
8.2.2 Tungsten inert gas (TIG) and plasma arc welding torch .....	31
8.2.3 Plasma cutting torch .....	35
9 Pressure of the cooling liquid system .....	35
10 Resistance to hot objects .....	35
11 Impact resistance .....	37
12 Marking .....	39
13 Instructions for use .....	39
Annex A (informative) – Additional terminology .....	43
Annex B (normative) – Position of the welding torches for the heating test .....	47
Annex C (informative) – Cooled copper block .....	49
Annex D (informative) – Copper block with a hole .....	51
Annex E (informative) – Copper bars with a slot .....	53
Annex F (informative) – Alphabetical summary of defined terms .....	55

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SIST EN 60974-7:2001

<https://standards.iteh.ai/catalog/standards/sist/4d80503f-1bcb-4aab-8f20-72aca5be9f40/sist-en-60974-7-2001>



Table 1 – Voltage rating of torches .....	21
Table 2 – Test values for metal inert gas arc welding (MIG) of aluminium alloys.....	29
Table 3 – Test values for metal active gas arc welding (MAG) of mild steel .....	29
Table 4 – Test values for metal active gas arc welding (MAG) with flux-cored wire.....	31
Table 5 – Test values for self-shielded flux-cored arc welding of mild steel .....	31
Table 6 – Test values for tungsten inert gas arc welding (TIG) .....	33
Table 7 – Test values for plasma arc welding .....	33
Figure 1 – Device for testing the resistance to hot objects.....	37
Figure 2 – Device for the impact test .....	39

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SIST EN 60974-7:2001

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## ARC WELDING EQUIPMENT –

## Part 7: Torches

## FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60974-7 has been prepared by IEC technical committee 26: Electric welding.

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

FDIS	Report on voting
26/174/FDIS	26/188/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 3.

Annex B forms an integral part of this standard.

Annexes A, C, D, E and F are for information only.

The committee has decided that the contents of this publication will remain unchanged until 2005-12. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

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## ARC WELDING EQUIPMENT –

### Part 7: Torches

#### 1 Scope

This part of IEC 60974 specifies safety and construction requirements for torches for arc welding and allied processes.

In this standard, a torch consists of the torch body, the cable-hose assembly and other components.

This standard is not applicable to electrode holders for manual metal arc welding or torches for air-arc cutting/gouging.

#### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60974. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 60974 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60050(151):1978, *International Electrotechnical Vocabulary – Chapter 151: Electrical and magnetic devices*

IEC 60050(851):1991, *International Electrotechnical Vocabulary – Chapter 851: Electric welding*

IEC 60051-2:1984, *Direct acting indicating analogue electrical measuring instruments and their accessories – Part 2: Special requirements for ammeters and voltmeters*

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

IEC 60664-1:1992, *Insulation coordination for equipment within low-voltage systems – Part 1: Principles, requirements and tests*

IEC 60974-1:1998, *Arc welding equipment – Part 1: Welding power sources*

IEC 61558-1:1997, *Safety of power transformers, power supply units and similar – Part 1: General requirements and tests*

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