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ANSI/NEMA/IEC 60974-8-2009 (R2020)

Arc Welding Equipment— Part 8: Gas Consoles for Welding and Plasma Cutting Systems

Published by

National Electrical Manufacturers Association 1300 North 17th Street, Suite 900 Rosslyn, Virginia 22209

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FOREWORD FOR U.S. ADOPTION

This American National Standard is an adoption of IEC 60974-8 edition 1, *Arc welding equipment—Part 8: Gas consoles for welding and plasma cutting systems*, and was developed and approved in accordance with procedures set forth by the American National Standards Institute. It is the intention that this American National Standard be a standalone document, replacing the use of IEC 60974-8 in the U.S. As such, any reference in this standard to an IEC 60974 part is understood to mean a reference to the equivalent ANSI/NEMA/IEC 60974 part, where it exists.

ANSI/NEMA/IEC 60974-8-2009 (R2020) is a reaffirmation of ANSI/NEMA/IEC 60974-8-2009. No substantive changes were made to the document during this reaffirmation.

This standard contains all the original text as-is from IEC 60974-8, edition 1, in addition to a number of U.S. Differences to the IEC standard that were identified by Accredited Standards Committee W1, *Requirements for Apparatus Designed for Use in Arc Welding, Plasma Arc Cutting, and Allied Processes.* Each U.S. Difference is found both in a compilation of U.S. Differences following this foreword, and inserted in the appropriate place(s) in the standard relating to the difference. Each insertion is in red text and is marked on its left by three lines (two thin, one thick). Each U.S. Difference is identified with the following format:

[Clause/Subclause Number]DV.[Number of Difference for the Given Clause/Subclause]

Following this format, the example 17.1DV.3 signifies that it is the third U.S. Difference to subclause 17.1.

Suggestions for the improvement of this standard are welcome and should be submitted to the Secretariat of Accredited Standards Committee W1 as follows:

Khaled Masri, ASC W1 Secretary c/o National Electrical Manufacturers Association 1300 North 17th Street, Suite 900 Rosslyn, VA 22209 Fax 703-841-3226 Email khaled.masri@nema.org

This standard was processed and approved by the Accredited Standards Committee W1. Committee approval does not necessarily imply that all Committee members voted for its approval. At the time this standard was approved, Accredited Standards Committee W1 consisted of the following members:

Greg Corban, Chair Mike Madsen, Vice-Chair Khaled Masri, Secretary

			voting	
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David	Werba	American Welding Society	Voting	ANSI - GEN INTEREST
David	Beneteau	CenterLine (Windsor) Limited	Voting	ANSI - GEN INTEREST
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Ramana	Tangirala	CSA Group - Standards	Alt. Voting	ANSI - USER
Sam	Zaffino	CSA Group - Certification	Alt. Voting	ANSI - USER
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Carlos	De Lima	ESAB Welding & Cutting Products	Voting	ANSI - PRODUCER
Gregory	Corban	Hypertherm Incorporated	Voting	ANSI - PRODUCER

Voting

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Christopher	Doty	UL LLC	Voting	ANSI - USER

CONTENTS

1	Scop	De	.16
2	Norm	native references	.16
3	Terms and definitions		
4	Envii	ronmental conditions	.18
5	Test	conditions	. 18
	5.1	Type tests	. 18
	5.2	Routine tests	. 18
		5.2.1 External gas console	. 18
		5.2.2 Internal gas console	. 18
6	Com	ponents	.19
7	Prote	ection against electric shock	20
	7.1	Insulation	.20
	7.2	Protection against electric shock in normal service (direct contact)	20
		7.2.1 Protection provided by the enclosure	20
		7.2.2 Capacitors	
	7.3	Protection against electric shock in case of a fault condition (indirect contact)	
8	Ther	mal requirements	
	8.1	Heating test	
	8.2	Maximum temperature	
9		nections for plasma cutting torches	
10		hanical requirements	
		Protection against fire or explosion	
		Gas line purging	
	10.3	Enclosure	
		10.3.1 Design requirements	
		10.3.2 Enclosure purging	
		10.3.3 Intrinsically safe design	
		10.3.4Safe design of gas console10.3.5Open structure	
	10 4	External gas console	
		Internal gas console	
11		lines	
		Gas hoses and tubing	
		Gas fittings	
		Leak test	
12		rol circuits	
13		uctions and markings	
-	13.1		
		Marking	

14 Rating plate	27
14.1 Internal gas console	27
14.2 Warning	27
Annex A (informative) Mechanized plasma system diagram	29
Annex B (informative) Electrical apparatus for gas consoles (potential explosion)	31
Annex C (informative) Example of a rating plate	33
Bibliography	34
Figure A.1 – Example of a mechanized plasma system	29
Figure B.1 – Example of an internal gas console	32
Figure C.1 – Principle of a rating plate	33
Table 1 – Colour coding and marking	25

- 14 -

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ARC WELDING EQUIPMENT –

Part 8: Gas consoles for welding and plasma cutting systems

FOREWORD

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International Standard IEC 60974-8 has been prepared by IEC technical committee 26: Electric welding.

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

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

FDIS	Report on voting
26/272/FDIS	26/279/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 committee has decided that the contents of this publication will remain unchanged until 2006. At this date, the publication will be

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

ForewordDV.1 Modify the foreword by adding the following:

The numbering system in this standard uses a space instead of a comma to indicate thousands and uses a comma instead of a period to indicate a decimal point. For example, 1 000 means 1,000 and 1,01 means 1.01.

- 16 -

ARC WELDING EQUIPMENT -

Part 8: Gas consoles for welding and plasma cutting systems

GlobalDV.1 Throughout this document, replace the phrase "this part of IEC 60974" to "this part of ANSI/NEMA/IEC 60974"

1 Scope

This part of IEC 60974 specifies safety and performance requirements for gas consoles intended to be used with combustible gases or oxygen. These gas consoles are designed to supply gases for use in arc welding, plasma cutting, gouging and allied processes in non-explosive atmospheres.

The gas console can be external or internal to the power source enclosure. In the latter case, this standard also applies to the power source.