



**NSAI**  
Standards

Irish Standard  
I.S. EN ISO 14113:2013

Gas welding equipment - Rubber and plastics hose and hose assemblies for use with industrial gases up to 450 bar (45 MPa) (ISO 14113:2013)

## I.S. EN ISO 14113:2013

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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English Version

**Gas welding equipment - Rubber and plastics hose and hose assemblies for use with industrial gases up to 450 bar (45 MPa) (ISO 14113:2013)**

Matériel de soudage aux gaz - Tuyaux souples et flexibles en caoutchouc et en plastique pour des gaz industriels jusqu'à 450 bar (45 MPa) (ISO 14113:2013)

Gasschweißgeräte - Gummi- und Kunststoffschläuche und Schlauchleitungen für Industriegase bis zu einem Druck von 450 bar (45 MPa) (ISO 14113:2013)

This European Standard was approved by CEN on 3 September 2013.

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**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## **Foreword**

This document (EN ISO 14113:2013) has been prepared by Technical Committee ISO/TC 44 “Welding and allied processes” in collaboration with Technical Committee CEN/TC 121 “Welding and allied processes” the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2014, and conflicting national standards shall be withdrawn at the latest by April 2014.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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**Gas welding equipment — Rubber  
and plastics hose and hose assemblies  
for use with industrial gases up to  
450 bar (45 MPa)**

*Matériel de soudage aux gaz — Tuyaux souples et flexibles en caoutchouc  
et en plastique pour des gaz industriels jusqu'à 450 bar (45 MPa)*



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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2. [www.iso.org/directives](http://www.iso.org/directives)

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 44, *Welding and allied processes*, Subcommittee SC 8, *Equipment for gas welding, cutting and allied processes*.

This third edition cancels and replaces the second edition (ISO 14113:2007), of which it constitutes a minor revision with the following changes:

- correction of temperature value in [7.5](#);
- editorial revision.

Requests for official interpretations of any aspect of this International Standard should be directed to the Secretariat of ISO/TC 44/SC 8 via your national standards body. A complete listing of these bodies can be found at [www.iso.org](http://www.iso.org).

# Gas welding equipment — Rubber and plastics hose and hose assemblies for use with industrial gases up to 450 bar (45 MPa)

## 1 Scope

This International Standard specifies requirements for rubber and plastics hose and hose assemblies for use with compressed, liquefied, and dissolved gases up to a maximum working pressure of 450 bar (45 MPa), within the ambient temperature range of  $-20\text{ }^{\circ}\text{C}$  to  $+60\text{ }^{\circ}\text{C}$ .

This International Standard applies to hose assemblies used to connect industrial gas cylinders to manifolds or bundles prior to any pressure reduction stage.

This International Standard does not cover rubber or thermoplastic hoses for welding, cutting, and allied processes (see ISO 3821 and ISO 12170).

This International Standard does not apply to refrigerated liquefied gases or to liquefied petroleum gases (LPG).

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 105-A02:1993, *Textiles — Tests for colour fastness — Part A02: Grey scale for assessing change in colour*

ISO 1307:2006, *Rubber and plastics hoses — Hose sizes, minimum and maximum inside diameters, and tolerances on cut-to-length hoses*

ISO 1402, *Rubber and plastics hoses and hose assemblies — Hydrostatic testing*

ISO 1746:1998, *Rubber or plastics hoses and tubing — Bending tests*

ISO 1817, *Rubber, vulcanized — Determination of the effect of liquids*

ISO 4080:1991, *Rubber and plastic hoses and hose assemblies — Determination of permeability to gas*

ISO 4671, *Rubber and plastics hoses and hose assemblies — Methods of measurement of the dimensions of hoses and the lengths of hose assemblies*

ISO 4672:1997, *Rubber and plastics hoses — Sub-ambient temperature flexibility tests*

ISO 7326:2006, *Rubber and plastics hoses — Assessment of ozone resistance under static conditions*

ISO 8031, *Rubber and plastics hoses and hose assemblies — Determination of electrical properties*

ISO 8033:2006, *Rubber and plastics hoses — Determination of adhesion between components*

ISO 15296, *Gas welding equipment — Vocabulary — Terms used for gas welding equipment*

ISO 11114-3, *Transportable gas cylinders — Compatibility of cylinder and valve materials with gas contents — Part 3: Autogenous ignition test in oxygen atmosphere*

ISO 30013:2011, *Rubber and plastics hoses — Methods of exposure to laboratory light sources — Determination of changes in colour, appearance and other physical properties*

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