



NSAI
Standards

Irish Standard
I.S. EN ISO 14114:2018

Gas welding equipment - Acetylene manifold systems for welding, cutting and allied processes - General requirements (ISO 14114:2017)

I.S. EN ISO 14114:2018

Incorporating amendments/corrigenda/National Annexes issued since publication:

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Údarás um Chaighdeáin Náisiúnta na hÉireann

National Foreword

I.S. EN ISO 14114:2018 is the adopted Irish version of the European Document EN ISO 14114:2018, Gas welding equipment - Acetylene manifold systems for welding, cutting and allied processes - General requirements (ISO 14114:2017)

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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EUROPEAN STANDARD

EN ISO 14114

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2018

ICS 25.160.30

Supersedes EN ISO 14114:2014

English Version

**Gas welding equipment - Acetylene manifold systems for
welding, cutting and allied processes - General
requirements (ISO 14114:2017)**

Matériel de soudage aux gaz - Centrales de détente
pour la distribution d'acétylène pour le soudage, le
coupage et les techniques connexes - Exigences
générales (ISO 14114:2017)

Gasschweißgeräte - Acetylenflaschen-Batterieanlagen
für Schweißen, Schneiden und verwandte Verfahren -
Allgemeine Anforderungen (ISO 14114:2017)

This European Standard was approved by CEN on 29 October 2017.

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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EN ISO 14114:2018 (E)

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European foreword

This document (EN ISO 14114:2018) 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of an identical text or by endorsement, at the latest by July 2018, and conflicting national standards shall be withdrawn at the latest by July 2018.

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

This document supersedes EN ISO 14114:2014.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 14114:2017 has been approved by CEN as EN ISO 14114:2018 without any modification.

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INTERNATIONAL STANDARD

**ISO
14114**

Third edition
2017-11

Gas welding equipment — Acetylene manifold systems for welding, cutting and allied processes — General requirements

*Matériel de soudage aux gaz — Centrales de détente pour la
distribution d'acétylène pour le soudage, le coupage et les techniques
connexes — Exigences générales*



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ISO 14114:2017(E)

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 (see 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 voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee 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 14114:2014), which has been technically revised with the following changes:

- a) [Clause 3](#) has been restructured;
- b) [4.1](#) has been revised;
- c) [5.3](#) has been revised;
- d) [Clause 6](#) has been revised;
- e) [Clause 7](#) has been revised;
- f) [Table A.1](#) has been revised;
- g) [Figures A.2](#) and [A.4](#) have been revised and Figure A.5 has been deleted;
- h) the title of [Annex B](#) has been modified.

Requests for official interpretations of any aspect of this document 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.

Gas welding equipment — Acetylene manifold systems for welding, cutting and allied processes — General requirements

1 Scope

This document applies to acetylene cylinder manifold systems extending from the cylinder valve or the bundle outlet connections to the outlet connection of the main shut-off valve. It specifies requirements for design, materials and testing of cylinder manifold systems for the supply of acetylene for use in welding, cutting and allied processes.

This document applies to acetylene cylinder manifold systems in which acetylene single cylinders or acetylene bundles are coupled for collective gas withdrawal.

NOTE National regulations exist regarding limitation of the amount of single cylinders/bundles of acetylene on a single location (e.g. in warehouse or connected to a manifold system).

This document also covers a test procedure for decomposition blockers.

2 Normative references

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.

ISO 5175 (all parts), *Gas welding equipment — Safety devices*

ISO 7291:2010, *Gas welding equipment — Pressure regulators for manifold systems used in welding, cutting and allied processes up to 30 MPa (300 bar)*. Amended by ISO 7291:2010/Amd 1:2015

ISO 9090, *Gas tightness of equipment for gas welding and allied processes*

ISO 9539, *Gas welding equipment — Materials for equipment used in gas welding, cutting and allied processes*.

ISO 10961, *Gas cylinders — Cylinder bundles — Design, manufacture, testing and inspection*

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

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

ISO 15615:2013, *Gas welding equipment — Acetylene manifold systems for welding, cutting and allied processes — Safety requirements in high-pressure devices*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 15296 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

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