

### SLOVENSKI STANDARD SIST EN ISO 11118:2016

01-februar-2016

Nadomešča:

**SIST EN 12205:2002** 

SIST EN ISO 13340:2002

Plinske jeklenke - Kovinske plinske jeklenke za enkratno polnitev - Specifikacija in preskusne metode (ISO 11118:2015)

Gas cylinders - Non-refillable metallic gas cylinders - Specification and test methods (ISO 11118:2015)

### iTeh STANDARD PREVIEW

Gasflaschen - Metallische Einwegflaschen - Spezifikation und Prüfmethoden (ISO 11118:2015)

#### SIST EN ISO 11118:2016

Bouteilles à gaz - Bouteilles à gaz métalliques non rechargeables - Spécifications et méthodes d'essai (ISO 11118:2015)

Ta slovenski standard je istoveten z: EN ISO 11118:2015

ICS:

23.020.30 Tlačne posode, plinske

e Pressure vessels, gas

jeklenke

cylinders

**SIST EN ISO 11118:2016** 

en,fr,de

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## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

**EN ISO 11118** 

October 2015

ICS 23.020.30

Supersedes EN ISO 13340:2001

#### **English Version**

## Gas cylinders - Non-refillable metallic gas cylinders - Specification and test methods (ISO 11118:2015)

Bouteilles à gaz - Bouteilles à gaz métalliques non rechargeables - Spécifications et méthodes d'essai (ISO 11118:2015)

Gasflaschen - Metallische Einwegflaschen -Festlegungen und Prüfverfahren (ISO 11118:2015)

This European Standard was approved by CEN on 22 August 2015.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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

#### EN ISO 11118:2015 (E)

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### **European foreword**

This document (EN ISO 11118:2015) has been prepared by Technical Committee ISO/TC 58 "Gas cylinders" in collaboration with the Technical Committee CEN/TC 23 "Transportable gas cylinders" the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by April 2016, and conflicting national standards shall be withdrawn at the latest by April 2016.

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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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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom, TANDARD PREVIEW

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**Endorsement notice** 

SIST EN ISO 11118:2016

The text of ISO 11118:2015 has been approved by CEN as EN ISO 11118:2015 without any modification.

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# INTERNATIONAL STANDARD

ISO 11118

Second edition 2015-09-15

# Gas cylinders — Non-refillable metallic gas cylinders — Specification and test methods

Bouteilles à gaz — Bouteilles à gaz métalliques non rechargeables — Spécifications et méthodes d'essai

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Reference number ISO 11118:2015(E)

ISO 11118:2015(E)

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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 (see <a href="www.iso.org/directives">www.iso.org/directives</a>).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

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 58, Gas cylinders, Subcommittee SC 3, Cylinder design.

SIST EN ISO 111182016

This second edition cancels and replaces the first edition (ISO-IIII-8:1999) and ISO 13340:2001, which have been technically revised with the following changes 8-2016

- removed references to dissolved gases from the Scope;
- the edition aligns ISO 11118 and EN 12205;
- incorporates ISO 13340 in ISO 11118;
- incorporated new titles of ISO referenced documents;
- incorporated definitions and use of  $R_{ea}$ ,  $R_{eg}$ ,  $R_{ma}$ , and  $R_{mg}$ ;
- clarified requirements for the processing of carbon steel to avoid strain aging;
- added pierceable metal membranes to cylinder non-refillability;
- added test requirement for aluminium materials for intercrystalline corrosion for seamless and welded aluminium cylinders;
- included alternative temperatures for artificial aging of carbon steel cylinder prior to burst testing;
- modified markings to align with UN requirements;
- clarified inspection criteria for each cylinder;
- corrected references to correct Annexes;
- modified burst pressure to align with other ISO Standards;
- aligned test pressure requirement of non-refillable sealing device to the same as the cylinder;

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- modified <u>Annex B</u> for completeness;
- deleted existing Annex C since it was not needed and inserted a new Annex C for accuracy;
- added new informative Annex D for informational purposes on yield point elongation (YPE).

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ISO 11118:2015(E)

#### Introduction

This International Standard addresses the general requirements on design, construction, and initial inspection and testing of non-refillable metallic gas cylinders and their non-refillable sealing devices of the United Nations Recommendations on the Transport of Dangerous Goods: Model Regulations. The purpose of this International Standard is to provide a specification for the design, manufacture, inspection, and testing of non-refillable metallic gas cylinders for worldwide safe use, handling, and transport.

The objective is to balance design and economic efficiency against international acceptance and universal utility.

This International Standard aims to eliminate the concern about climate, duplicate inspections, and restrictions currently existing because of lack of definitive International Standards. This International Standard does not reflect on the suitability of the practice of any nation or region.

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