

SLOVENSKI STANDARD

SIST EN ISO 11114-4:2005

01-november-2005

Premične plinske jeklenke – Združljivost materialov za ventil in jeklenko s plinom –
4. del: Preskusne metode za izbiro materiala, odpornega proti vodikovi krhkosti
(ISO 11114-4:2005)

Transportable gas cylinders - Compatibility of cylinder and valve materials with gas contents - Part 4: Test methods for selecting metallic materials resistant to hydrogen embrittlement (ISO 11114-4:2005)

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Ortsbewegliche Gasflaschen - Verträglichkeit von Werkstoffen für Gasflaschen und Ventile mit den in Berührung kommenden Gasen Teil 4 Prüfverfahren zur Auswahl von metallischen Werkstoffen, die gegen Wasserstoffversprödung unempfindlich sind (ISO 11114-4:2005)

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Bouteilles a gaz transportables - Compatibilité des matériaux des bouteilles et des robinets avec les contenus gazeux - Partie 4: Méthodes d'essai pour le choix de matériaux métalliques résistants a la fragilisation par l'hydrogène (ISO 11114-4:2005)

Ta slovenski standard je istoveten z: **EN ISO 11114-4:2005**

ICS:

23.020.30	Tlačne posode, plinske jeklenke	Pressure vessels, gas cylinders
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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 11114-4

August 2005

ICS 23.020.30

English Version

Transportable gas cylinders - Compatibility of cylinder and valve materials with gas contents - Part 4: Test methods for selecting metallic materials resistant to hydrogen embrittlement (ISO 11114-4:2005)

Bouteilles à gaz transportables - Compatibilité des matériaux des bouteilles et des robinets avec les contenus gazeux - Partie 4: Méthodes d'essai pour le choix de matériaux métalliques résistants à la fragilisation par l'hydrogène (ISO 11114-4:2005)

Ortsbewegliche Gasflaschen - Verträglichkeit von Werkstoffen für Gasflaschen und Ventile mit den in Berührung kommenden Gasen - Teil 4: Prüfverfahren zur Auswahl von metallischen Werkstoffen, die gegen Wasserstoffversprödung unempfindlich sind (ISO 11114-4:2005)

This European Standard was approved by CEN on 22 July 2005.

THE STANDARD PREVIEW
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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 CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
 COMITÉ EUROPÉEN DE NORMALISATION
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Foreword

This document (EN ISO 11114-4:2005) has been prepared by Technical Committee ISO/TC 58 "Gas cylinders" in collaboration with 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 February 2006, and conflicting national standards shall be withdrawn at the latest by February 2006.

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

Endorsement notice

The text of ISO 11114-4:2005 has been approved by CEN as EN ISO 11114-4:2005 without any modifications, except as stated in normative annex NA.

NOTE Normative references to International Standards are listed in Annex ZA (normative).

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**Annex NA
(normative)
Specific European requirements**

With reference to the last paragraph of clause 4, the text of the last paragraph shall read as follows:

For the purposes of this European Standard, and for the qualification of a given steel for the manufacturing of gas cylinders, either method A), or method B) shall be used (see 5.1 and 5.2). Method C (see 5.3) shall not be used. Additionally, tensile tests shall be carried out (see 5.4).

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Annex ZA (normative)

Normative references to international publications with their relevant 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 Where 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</u>	<u>Year</u>
ISO 7539-1	1987	<i>Corrosion of metals and alloys — Stress corrosion testing — Part 1: General guidance on testing procedures</i>	EN ISO 7539-1	1995
ISO 7539-6	2003	<i>Corrosion of metals and alloys — Stress corrosion testing — Part 6: Preparation and use of pre-cracked specimens</i>	EN ISO 7539-6	2003
ISO 11114-1	1997	<i>Transportable gas cylinders — Compatibility of cylinder and valve materials with gas contents — Part 1: Metallic materials</i>	EN ISO 11114-1	1997
ISO 11120	1999	<i>Gas cylinders — Refillable seamless steel tubes for compressed gas transport, of water capacity between 150 l and 3 000 l — Design construction and testing</i>	EN ISO 11120	1999

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INTERNATIONAL
STANDARD

ISO
11114-4

First edition
2005-08-01

**Transportable gas cylinders —
Compatibility of cylinder and valve
materials with gas contents —**

**Part 4:
Test methods for selecting metallic
materials resistant to hydrogen**

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Bouteilles à gaz transportables — Compatibilité des matériaux des bouteilles et des robinets avec les contenus gazeux —

SIST EN ISO 11114-4:2005

Partie 4: Méthodes d'essai pour le choix de matériaux métalliques résistants à la fragilisation par l'hydrogène

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ISO 11114-4:2005(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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 11114-4 was prepared by Technical Committee ISO/TC 58, *Gas cylinders*.

ISO 11114 consists of the following parts, under the general title *Transportable gas cylinders — Compatibility of cylinder and valve materials with gas contents*:

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- *Part 1: Metallic materials*
- *Part 2: Non-metallic materials* [SIST EN ISO 11114-4:2005](#)
<https://standards.iteh.ai/catalog/standards/sist/2b5640dc-4b60-4c1f-baad-82001861>
- *Part 3: Autogenous ignition test in oxygen atmosphere* [iso-11114-4-2005](#)
- *Part 4: Test methods for selecting metallic materials resistant to hydrogen embrittlement*