

SVENSK STANDARD

SS-EN ISO 11120/A1:2013

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**Gasflaskor – Återfyllningsbara sömlösa storflaskor av stål,
för transport av komprimerad gas, med vattenkapacitet mellan
150 l och 3000 l –**

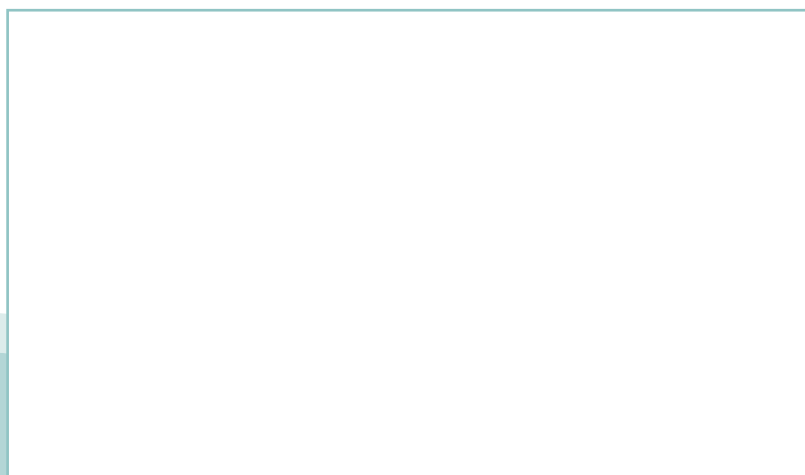
Konstruktion, tillverkning och provning –

**Tillägg 1: Krav på utformning av tuber för försprödande gaser
(EN ISO 11120:1999/Amd 1:2013)**

**Gas cylinders – Refillable seamless steel tubes for compressed
gas transport, of water capacity between 150 l and 3000 l –**

Design construction and testing –

**Amendment 1: Requirements for design of tubes for embrittling
gases (EN ISO 11120:1999/Amd 1:2013)**



Europastandarden EN ISO 11120:1999/A1:2013 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN ISO 11120:1999/A1:2013.

The European Standard EN ISO 11120:1999/A1:2013 has the status of a Swedish Standard. This document contains the official English version of EN ISO 11120:1999/A1:2013.

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Information about the content of the standard is available from the Swedish Standards Institute (SIS), telephone +46 8 555 520 00. Standards may be ordered from SIS Förlag AB, who can also provide general information about Swedish and foreign standards.

Standarden är framtagen av kommittén för Gasflaskor, SIS/TK 296.

Har du synpunkter på innehållet i den här standarden, vill du delta i ett kommande revideringsarbete eller vara med och ta fram andra standarder inom området? Gå in på www.sis.se - där hittar du mer information.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 11120:1999/A1

July 2013

ICS 23.020.30

English Version

Gas cylinders - Refillable seamless steel tubes for compressed gas transport, of water capacity between 150 l and 3000 l - Design construction and testing - Amendment 1: Requirements for design of tubes for embrittling gases (EN ISO 11120:1999/Amd 1:2013)

Bouteilles à gaz - Tubes en acier sans soudure rechargeables d'une contenance en eau de 150 l à 3000 l pour le transport des gaz comprimés - Conception, construction et essais - Amendement 1 - Exigences de conception des tubes destinés aux gaz fragilisants (EN ISO 11120:1999/Amd 1:2013)

Ortsbewegliche Gasflaschen - Nahtlose wiederbefüllbare Großflaschen aus Stahl für den Transport verdichteter Gase mit einem Fassungsvermögen (Wasser) zwischen 150 l und 3 000 l - Gestaltung, Konstruktion und Prüfung - Änderung 1: Anforderungen für die Gestaltung von Großflaschen für versprödende Gase (EN ISO 11120:1999/Amd 1:2013)

This amendment A1 modifies the European Standard EN ISO 11120:1999; it was approved by CEN on 22 June 2013.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This amendment 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 CEN-CENELEC Management Centre has the same status as the official versions.

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

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Foreword

This document (EN ISO 11120:1999/A1:2013) 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 Amendment to the European Standard EN ISO 11120:1999 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2014, and conflicting national standards shall be withdrawn at the latest by January 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.

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.

Endorsement notice

The text of ISO 11120:1999/Amd 1:2013 has been approved by CEN as EN ISO 11120:1999/A1:2013 without any modification.

Gas cylinders — Refillable seamless steel tubes for compressed gas transport, of water capacity between 150 l and 3 000 l — Design construction and testing

AMENDMENT 1: Requirements for design of tubes for embrittling gases

Page 3, Clause 4, Symbols

Add the following symbol and corresponding definition to the table:

$R_{m \max}$	guaranteed maximum value of tensile strength, in megapascals
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Page 11, 11.3

Replace subclause 11.3, as follows:

11.3 Design

The guaranteed minimum thickness of the cylindrical shell shall be calculated by the Lamé-von Mises formula in accordance with 7.1 except that:

$$F = \frac{f}{R_e / R_g}$$

where

$$f = 0,65 \text{ for } R_{m \max} \leq 890 \text{ MPa}$$

$$f = 0,61 \text{ for } 890 \text{ MPa} < R_{m \max} \leq 950 \text{ MPa}$$

$$R_e/R_g \text{ shall not exceed } 0,85.$$

The value of f shall be fixed at the time of designing the tube and shall not be established or changed retrospectively when the tube has been heat treated and qualified by physical testing. The value of f shall be defined according to guaranteed maximum strength $R_{m \max}$, as above.

