INTERNATIONAL STANDARD

ISO 11120

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

iTeh STAMENDMENT 1: Requirements for design of tubes for embrittling gases (standards.iteh.ai)

Bouteilles à gaz — Tubes en acier sans soudure rechargeables d'une contenance en eau de 150 l à 3 000 l pour le transport des https://standards.iteh.gaz.comprimés.isva Conception, construction et essais

06017 AMENDEMENT 1: Exigences de conception des tubes destinés aux gaz fragilisants



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ISO 11120:1999/Amd 1:2013 https://standards.iteh.ai/catalog/standards/sist/a3850718-b59e-43ba-bc31-06017643245f/iso-11120-1999-amd-1-2013



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The committee responsible for this document is ISO/TC 58, Gas cylinders, Subcommittee SC 3, Cylinder design.

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Page 3, Clause 4, Symbols

Add the following symbol and corresponding definition to the table:

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

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Page 11, 11.3

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Replace subclause 11:3;/assfollowish.ai/catalog/standards/sist/a3850718-b59e-43ba-bc31-06017643245f/iso-11120-1999-amd-1-2013

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:

$$F = \frac{f}{R_{\rm e} / R_{\rm g}}$$

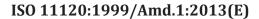
where

 $f = 0.65 \text{ for } R_{\text{m max}} \le 890 \text{ MPa}$

 $f = 0.61 \text{ for } 890 \text{ MPa} < R_{\text{m max}} \le 950 \text{ MPa}$

 $R_{\rm e}/R_{\rm g}$ 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 $R_{\rm m\,max}$, as above.



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