
**ECONOMIC COMMISSION FOR EUROPE
INLAND TRANSPORT COMMITTEE**

Joint Meeting of the RID Safety Committee and the
Working Party on the Transport of Dangerous Goods
(Bern, 26-30 March, 2007)
Item 6 of the provisional agenda

Chapter 6.2

Proposal on the referencing of standards in 6.2.2 and 6.2.4

Submitted by the WG Standards

1. Based on the outcome of the discussion of plenary on ECE/TRANS/WP.15/AC.1/2007/18 (Report of the informal working group on the revision of Chapter 6.2) the working group did address the issues identified by the chairman, where further guidance was sought to arrive at agreeable formulations for the referencing of standards:
 - Identification of those ISO standards in the tables of subsection 6.2.2 for which EN versions are available, whose alternative application shall be allowed, indicated by a footnote;
 - Check the adequacy of Note 1 under 6.2.4, as proposed in ECE/TRANS/WP.15/AC.1/2007/18;
 - Check the correctness of standard numbers in the table under 6.2.4, where Standards including amendments are referenced.
2. First of all, the working group realized, that European versions of ISO standards may contain additions to the ISO text to the effect, that the ISO standards are complied with if the EN ISO text is followed, but not vice versa.
The legal impact of an EN ISO standard was recalled, in difference to the one of ISO standard.
3. With respect to the identification of ISO standards for which EN versions are available, the group did take account of the work in progress. In cases where a completion of the EN version may be accomplished till the autumn session of the Joint Meeting, the footnote is put in square brackets.
4. Based on this common view the working group recommends the following:
 - 4.1. Add a footnote to the tables of 6.2.2.1 as indicated thereafter with the following wording:
“The EN version of this ISO standard may also be used.”

“6.2.2 *Requirements for UN pressure receptacles*

In addition to the general requirements of section 6.2.1, UN pressure receptacles shall comply with the requirements of this section, including the standards, as applicable.

NOTE: With the agreement of the competent authority, more recently published versions of the standards, if available, may be used.

6.2.2.1 Design, construction and initial inspection and test

6.2.2.1.1 The following standards apply for the design, construction, and initial inspection and test of UN cylinders, except that inspection requirements related to the conformity assessment system and approval shall be in accordance with 6.2.2.5:

ISO 9809-1:1999	Gas cylinders – Refillable seamless steel gas cylinders – Design, construction and testing – Part 1: Quenched and tempered steel cylinders with tensile strength less than 1100 Mpa NOTE[1]: The note concerning the <i>F</i> factor in section 7.3 of this standard shall not be applied for UN cylinders. [NOTE 2: The EN version of this ISO standard may also be used.]
ISO 9809-2:2000	Gas cylinders – Refillable seamless steel gas cylinders – Design, construction and testing – Part 2: Quenched and tempered steel cylinders with tensile strength greater than or equal to 1100 MPa [NOTE: The EN version of this ISO standard may also be used.]
ISO 9809-3:2000	Gas cylinders – Refillable seamless steel gas cylinders – Design, construction and testing – Part 3: Normalized steel cylinders [NOTE: The EN version of this ISO standard may also be used.]
ISO 7866:1999	Gas cylinders – Refillable seamless aluminium alloy gas cylinders – Design, construction and testing NOTE: The note concerning the <i>F</i> factor in section 7.2 of this standard shall not be applied for UN cylinders. Aluminium alloy 6351A – T6 or equivalent shall not be authorized. [NOTE: The EN version of this ISO standard may also be used.]
ISO 11118:1999	Gas cylinders – Non-refillable metallic gas cylinders – Specification and test methods
ISO11119-1:2002	Gas cylinders of composite construction – Specification and test methods – Part 1: Hoop wrapped composite gas cylinders
ISO11119-2:2002	Gas cylinders of composite construction – Specification and test methods – Part 2: Fully wrapped fibre reinforced composite gas cylinders with load-sharing metal liners
ISO11119-3:2002	Gas cylinders of composite construction – Specification and test methods – Part 3: Fully wrapped fibre reinforced composite gas cylinders with non-load-sharing metallic or non-metallic liners

NOTE 1: In the above referenced standards composite cylinders shall be designed for unlimited service life.

NOTE 2: After the first 15 years of service, composite cylinders manufactured according to these standards, may be approved for extended service by the competent authority which was responsible for the original approval of the cylinders and which will base its decision on the test information supplied by the manufacturer or owner or user.

6.2.2.1.2 The following standards apply for the design, construction, and initial inspection and test of UN tubes, except that inspection requirements related to the conformity assessment system and approval shall be in accordance with 6.2.2.5:

ISO 11120:1999	Gas cylinders – Refillable seamless steel tubes for compressed gas transport, of water capacity between 150 l and 3000 l – Design, construction and testing <i>NOTE 1: The note concerning the F factor in section 7.1 of this standard shall not be applied for UN tubes</i> <i>NOTE 2: The EN version of this ISO standard may also be used.</i>
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6.2.2.1.3 The following standards apply for the design, construction and initial inspection and test of UN acetylene cylinders, except that inspection requirements related to the conformity assessment system and approval shall be in accordance with 6.2.2.5:

For the cylinder shell:

ISO 9809-1:1999	Gas cylinders – Refillable seamless steel gas cylinders – Design, construction and testing – Part 1: Quenched and tempered steel cylinders with tensile strength less than 1100 MPa <i>NOTE [1]: The note concerning the F factor in section 7.3 of this standard shall not be applied for UN cylinders.</i> <i>[NOTE 2: The EN version of this ISO standard may also be used.]</i>
ISO 9809-3:2000	Gas cylinders – Refillable seamless steel gas cylinders – Design, construction and testing – Part 3: Normalized steel cylinders <i>[NOTE: The EN version of this ISO standard may also be used.]</i>

For the porous material in the cylinder:

ISO 3807-1:2000	Cylinders for acetylene – Basic requirements – Part 1: Cylinders without fusible plugs
ISO 3807-2:2000	Cylinders for acetylene – Basic requirements – Part 2: Cylinders with fusible plugs

6.2.2.1.4 The following standards apply for the design, construction, and initial inspection and test of UN cryogenic receptacles, except that inspection requirements related to the conformity assessment system and approval shall be in accordance with 6.2.2.5:

ISO 21029-1:2004	Cryogenic vessels – Transportable vacuum insulated vessels of not more than 1000 l volume – Part 1: Design, fabrication, inspection and tests
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6.2.2.2 **Materials**

In addition to the material requirements specified in the pressure receptacle design and construction standards, and any restrictions specified in the applicable packing instruction for the gas(es) to be ~~transported~~ carried (e.g. packing instruction P200), the following standards apply to material compatibility:

ISO 11114-1:1997	Transportable gas cylinders – Compatibility of cylinder and valve
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	materials with gas contents – Part 1: Metallic materials <i>NOTE: The EN version of this ISO standard may also be used.</i>
ISO 11114-2:2000	Transportable gas cylinders – Compatibility of cylinder and valve materials with gas contents – Part 2: Non-metallic materials <i>NOTE: The EN version of this ISO standard may also be used.</i>

6.2.2.3 *Service equipment*

The following standards apply to closures and their protection:

ISO 11117:1998	Gas cylinders – Valve protection caps and valve guards for industrial and medical gas cylinders – Design, construction and tests <i>[NOTE: The EN version of this ISO standard may also be used.]</i>
ISO 10297:1999	Gas cylinders – Refillable gas cylinder valves – Specification and type testing <i>NOTE: The EN version of this ISO standard may also be used.</i>

6.2.2.4 *Periodic inspection and test*

The following standards apply to the periodic inspection and testing of UN cylinders:

ISO 6406:2005	Periodic inspection and testing of seamless steel gas cylinders
ISO 10461:2005	Seamless aluminium – alloy gas cylinders – Periodic inspection and testing
ISO 10462:2005	Cylinders for dissolved acetylene – Periodic inspection and maintenance
ISO 11623:2002	Transportable gas cylinders – Periodic inspection and testing of composite gas cylinders <i>NOTE: The EN version of this ISO standard may also be used.</i>

4.2 The addition of Note 1 under 6.2.4. is not supported.

4.3 Amendments to standards, such as for EN 1442:1998 in the table under 6.2.4 shall be quoted throughout the regulation as follows:

EN 1442:1998 + A2:2005 instead of EN 1442:1998/A2:2005
