



**Economic and Social
Council**

Distr.
GENERAL

TRANS/WP.15/AC.1/2001/11
1 March 2001

Original: ENGLISH

**ECONOMIC COMMISSION FOR EUROPE
INLAND TRANSPORT COMMITTEE**

Working Party on the Transport of Dangerous Goods

**Joint Meeting of the RID Safety Committee and the
Working Party on the Transport of Dangerous Goods**
(Bern, 28 May – 1 June 2001)

**PROPOSAL REGARDING THE REFERENCE TO STANDARDS IN SECTION 6.8.5.2:
TEST REQUIREMENTS FOR THE MATERIAL USED FOR WELDED PRESSURE TANKS
(PT > 10 BAR) AND FOR TANKS FOR REFRIGERATED LIQUEFIED GASES**

Transmitted by the European Committee for Standardisation (CEN) */

1. Background

At the request of CEN, the Joint Meeting agreed to refer to EN 1252-1: 1998 *Cryogenic vessels - Materials - Part 1: Toughness requirements for temperature below -80°C* in the table of 6.2.2.

On reflection, CEN is of the opinion that this standard and its second part (EN 1252-2: 2001 *Cryogenic vessels - Materials - Part 2: Toughness requirements for temperature between -80°C and – 20°C*) should better be referred to in section 6.8.5 where the requirements for impact strength of the material are to be found.

The reason for referring originally to the standard in 6.2 was because the same provisions for impact strength were also reproduced as part of Annex A2/ Appendix IIB of the ADR/RID. In the restructured version, these duplicated provisions have been eliminated and replaced by a cross reference to 6.8.5 in 6.2.3.4.1.

*/ Circulated by the Central Office for International Carriage by Rail (OCTI) under the symbol OCTI/RID/GT/III/2001/11.

2. Proposals

Proposal 1

CEN proposes to add to a new sub-section **6.8.5.4 Reference to standards** with the following text:

“The requirements of 6.8.5.2 and 6.8.5.3 shall be deemed to have been complied with if the following relevant standards have been applied:

EN 1252-1: 1998 *Cryogenic vessels - Materials - Part 1: Toughness requirements for temperature below -80°C*

[prEN 1252-2: 2000 *Cryogenic vessels - Materials - Part 2: Toughness requirements for temperature between -80°C and -20°C*]“.

The assessment of part 2 of the standard is in the Appendix. The standard has recently been ratified by CEN and will be published by its members within 6 months. The reference to the standard is put between brackets until it has been adopted as a reference document by the Joint Meeting.

Proposal 2

If proposal 1 is adopted, the consequential amendment is to delete the reference of EN 1252-1 in the table of 6.2.2.

A requirement to refer in 6.2.1 to the requirements of 6.8.5 for the cryogenic receptacles will be included in the proposal of EIGA to incorporate the texts adopted in the UN recommendations for chapter 6.2.

Annex 1: Synopses of assessment of standards proposed for references in RID/ADR

EN 1252-2:2000 Cryogenic vessels - Materials - Part 2: Toughness requirements for temperature between -80°C and -20°C

Conclusions:

The structure and content of this second part of the standard is different from the first part (for temperatures below -80°C). It refers directly to standards for mechanical testing instead of reproducing the technical requirements of ADR/RID as the first part did. This second part limits itself in defining the acceptance criteria and the impact test temperature.

The acceptance criteria are in line with ADR/RID requirements; however, for determining the impact test temperature, it uses the concept of an “adjusted” impact test temperature. The adjusted impact test temperature may lead for low thickness material at low level of stress to test temperatures much higher than the actual lowest working temperature, in this case equal to -80°C, as defined for the test temperature in ADR/RID.

This concept of adjusted impact test temperature is coming from prEN13445-2, the new technical code for the construction of pressure equipment in compliance with the PED. This standard has been assessed satisfactorily as a candidate for harmonization under the PED.

**Table of concordance between essential requirements of RID/ADR
and clauses of prEN 1252-2**

Marginal(s) of RID/ADR	Clauses of standard
6.8.5.2.1 test temperature: The materials used for the manufacture of shells and the weld beads, shall be at their lowest working temperature, but at least at -20°C....	3.2, 3.3 and 3.4 no minimum temperature
6.8.5.3 Test methods	Reference to EN 10045 and EN 288 4.1, 5
