



ORGANISATION INTERGOUVERNEMENTALE POUR LES TRANSPORTS INTERNATIONAUX FERROVIAIRES

ZWISCHENSTAATLICHE ORGANISATION FÜR DEN INTERNATIONALEN EISENBAHNVERKEHR

INTERGOVERNMENTAL ORGANISATION FOR INTERNATIONAL CARRIAGE BY RAIL

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RID/ADR

Joint Meeting of the RID Safety Committee and the Working Party on the Transport of Dangerous Goods (Geneva, 11 – 15 September 2006)

TANKS/STANDARDISATION

Sub-sections 6.8.2.6 and 6.8.2.7, Chapter 6.7

Proposal transmitted by Germany

SUMMARY

Executive summary:

Sub-sections 6.8.2.6 and 6.8.2.7 of RID/ADR contain requirements for tanks that are designed, built or tested in accordance with standards or a technical code.

However, Chapter 6.7 on portable tanks only contains requirements in conjunction with a technical code. Tanks in accordance with Chapter 6.7 are equated with those in accordance with Chapter 6.8, i.e. they may operate without restriction within the scope of RID/ADR. A decision must be taken as to whether mandatory standards should also apply to these tanks and whether existing EN standards should be adapted. In making this decision, it must be remembered that many of these tanks are approved in accordance with both Chapter 6.7 and Chapter 6.8.

Decision to be taken:

Clarification of the question as to whether mandatory standards should also apply to portable tanks and whether existing EN standards should be adapted.

Related documents:

Standard EN 14025 "Tanks for the transport of dangerous goods - Metallic pressure tanks – Design and construction"

For reasons of cost, only a limited number of copies of this document have been made. Delegates are asked to bring their own copies of documents to meetings. OTIF only has a small number of copies available.

Introduction

For the design and construction of tanks in accordance with RID/ADR Chapter 6.8, standards which are to replace existing nationally recognised technical codes by 2009 at the latest have now been drafted (RID/ADR 6.8.2.6 and 6.8.2.7). No comparable solution exists for portable tanks in accordance with RID/ADR Chapter 6.7.

The provisions of Chapters 6.7 and 6.8 on construction and equipment are only partly harmonised. The following list gives an overview of the current differences that do not permit the existing standard for pressure tanks (EN 14025) to be applied to portable tanks. Working group 3 of CEN/TC 296 has asked the representatives of Germany to present the problem to the Joint Meeting and the tank working group.

In the opinion of CEN/TC 296-WG3, clarification of how to proceed is also necessary because of the application of standard EN 14025 to the conformity assessment of portable pressure equipment in accordance with Directive 1999/36/EC.

Tanks with a maximum working pressure of 50 kPa (tank code letter G) are not covered by Chapter 6.7 and are not therefore part of the considerations. This also applies to the various requirements for pieces of equipment (e.g. tanks in accordance with Chapter 6.7 must always be equipped with safety devices).

Requirements for tanks in accordance with Chapters 6.7 and 6.8 (extract)

| Subject | Chapter 6.8 | Chapter 6.7 | Comments |
|---------------------|---|--|--|
| Definitions | 1.2.1: maximum work- ing pressure Calculation pressure | 6.7.2: maximum allow- able working pressure Design pressure | |
| | Determining the test pressure of tanks for liquefied gases, diame- ter > 1.8 m, not insu- lated: vapour pressure at 65°C | Determining the test pressure of tanks for liquefied gases, diameter > 1.8 m, not insulated: 1.3 times the vapour pressure at 50°C | Chapter 6.7 pro- duces a higher value |
| Design/construction | Increased calculation pressure 10, 15, 21 bar | Prescribed minimum wall thicknesses 6, 8, 10 mm | For very dangerous substances. Direct comparison not possible. |
| | Ratio of test pressure to working pressure 1.3 | Ratio of test pressure to calculation pressure 1.3/1.5*) | *) Gases/liquids or solids |
| | Reduction of wall thickness allowed in principle if there is ad- ditional protection | Reduction of wall thick- ness only allowed for tanks with test pres- sures below 2.65 bar (T1/T2) | |
| | Suitability of the material (design temperature – 40 °C) | Suitability of the material (design temperature – 20 °C) | |

Proposal

The Joint Meeting is asked to decide whether

- for the design and construction of tanks in accordance with Chapter 6.7 the existing standard EN 14025 should be supplemented, e.g. by an appropriate section or
- a new standard should be developed for this type of tank or
- tanks should continue to be built and designed exclusively in accordance with a nationally recognised code.