RID/ADR


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"
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)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Chapter 6.8</th>
<th>Chapter 6.7</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitions</td>
<td>1.2.1: maximum working pressure</td>
<td>6.7.2: maximum allowable working pressure</td>
<td></td>
</tr>
<tr>
<td>Calculation pressure</td>
<td>Design pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Determining the test pressure of tanks for liquefied gases, diameter &gt; 1.8 m, not insulated: vapour pressure at 65°C</td>
<td>Determining the test pressure of tanks for liquefied gases, diameter &gt; 1.8 m, not insulated: 1.3 times the vapour pressure at 50°C</td>
<td>Chapter 6.7 produces a higher value</td>
<td></td>
</tr>
<tr>
<td>Design/construction</td>
<td>Increased calculation pressure 10, 15, 21 bar</td>
<td>Prescribed minimum wall thicknesses 6, 8, 10 mm</td>
<td>For very dangerous substances. Direct comparison not possible.</td>
</tr>
<tr>
<td>Ratio of test pressure to working pressure 1.3</td>
<td>Ratio of test pressure to calculation pressure 1.3/1.5*)</td>
<td>*) Gases/liquids or solids</td>
<td></td>
</tr>
<tr>
<td>Reduction of wall thickness allowed in principle if there is additional protection</td>
<td>Reduction of wall thickness only allowed for tanks with test pressures below 2.65 bar (T1/T2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suitability of the material (design temperature – 40 °C)</td>
<td>Suitability of the material (design temperature – 20 °C)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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.