



INF. 4

13 November 2019

(English and German only)

RID: 11th Session of the RID Committee of Experts' standing working group
(Vienna, 25 to 29 November 2019)

Subject: Stress resistance of tank-wagons in accordance with RID 6.8.2.1.2

Proposal from the International Union of Wagon Keepers (UIP)

1. Reference is made to the final report of the working group on tank and vehicle technology (document OTIF/RID/CE/GTT/2019-A) and the discussion reported in paragraphs 34 to 41 and in Annex I on the stress resistance of tank-wagons.
2. UIP supports the proposal from Germany to clarify the interface in the approval procedure between the wagon and the tank.
3. With regard to the text amendment proposed in Annex I to report OTIF/RID/CE/GTT/2019-A, UIP would nevertheless like to propose some minor amendments in order that the standardisation bodies can then discuss the details.
4. The amendments are justified as follows:
5. The text in brackets ("test pressure/1.3") should be understood more as a pointer for tanks that do not display a working pressure.
6. The reference to permissible stresses according to standard EN 12663 reflects the result of the discussion at last year's meeting of the standing working group. This was confirmed by the German ad hoc working group and should accordingly deal with the question that was raised in 2018 as to which maximum permissible strength values have to be set.
7. The reference to the maximum permissible elongations of "brittle inner coatings" was drafted more as a point of information, and the specification of the elongation values that occur in the tank walls was deleted, because there are hardly any tolerable elongation values for such coatings and the design in this case is based rather on empirical evidence. In connection with this, the wording of standard EN 14025 should be made more specific when the standard is revised, and CEN TC 256 and CEN TC 296 should be mandated

accordingly.

Proposal

8. The following new wording is proposed for the text contained in Annex I to report OTIF/RID/CE/GTT/2019-A (amendments are in bold and underlined, deleted wording is crossed out and underlined).

¹ This requirement is deemed to be met if

(a)

- the notified body in charge of verifying compliance with the technical specification for interoperability (TSI) relating to the subsystem "rolling stock – freight wagons" of the rail system in the European Union (Commission Regulation (EU) No 321/2013 of 13 March 2013) or
- the assessing entity in charge of verifying compliance with the uniform technical prescriptions (UTP) applicable to the Rolling Stock subsystem: FREIGHT WAGONS – (Ref. A 94-02/2.2012 of 1 January 2014)

has successfully evaluated ~~compliance with the provisions of RID~~ the requirements listed below, in addition to the requirements of the TSI or UTP mentioned above, and has confirmed this compliance by a relevant certificate:

- (1) That the maximum working pressure of the tank (**test pressure/1.3**) has been superimposed on the load cases applicable to the assessment of the ability to withstand stresses
- (2) That the operating temperature range of the tank has been taken into account in the load cases applicable to the assessment of the ability to withstand stresses
- (3) That the minimum wall thickness of the tank in accordance with RID 6.8.2.1 and 6.8.2.6 has been taken into account in the load cases applicable to the assessment of the ability to withstand stresses
- (4) Special provisions TE 22 and TE 25 in accordance with RID 6.8.4

To evaluate points (1) to (3), the procedures specified in standard EN 12663-2:2014 and the associated maximum permissible stresses in accordance with this standard are applicable.

and for tanks with a liner

(b)

And for tanks with a liner, that the competent authority for the design type test in accordance with RID 6.8.2.3.1 or a body designated by that authority has **tested assessed** and certified the **ability suitability** of the liner, **particularly those with weaker elastic properties than the tank walls, e.g. hard rubber or enamel, to withstand the stresses** in the load cases applicable to the assessment of the tank's ability to withstand stresses. ~~The necessary data on the assessment of the ability to withstand stresses (particularly the maximum elongations in the tank walls for all relevant load cases and, if necessary, their combinations) shall be made available to the competent authority.~~"