RID: 9th Session of the RID Committee of Experts’ standing working group
(Berne, 28 - 30 May 2018)

Subject: Guidelines on how to apply EN 13094:2015

Proposal transmitted by the Secretariat


2. The report of the working group on tanks in informal document INF.47 from the last Joint Meeting has the following to say on this issue:

ITEM 5: ECE/TRANS/WP.15/AC.1/2018/12 (France) – Application of EN 13094:2015 to gravity-discharge tanks and INF.9 (France)

13. For RID/ADR 2017 it was accepted that the maximum working pressure does not apply to gravity discharge tanks according to 6.8.1.14 (a), in order to prevent the incorrect determination of the test pressure for the shell and its compartments. However, due to circumstances, no revision of standard EN 13094 has been published in time for RID/ADR 2019 to take this amendment into account.

14. As this leads to incompatibility between the standard and the regulations, it is proposed to introduce guidelines on how to apply EN 13094:2015 in relation to RID/ADR 2017 and 2019. The proposal for the guidelines received general approval from the experts. It was felt that to link the two, a note in column 2 of the table of 6.8.2.6.1 was needed.

3. When the report of the working group on tanks was dealt with in the Joint Meeting plenary, the chairman of the working group on tanks pointed out that the working group had only been of the view that a reference in ADR was necessary, as railway tank manufacturers would not apply standard EN 13094. This led the Joint Meeting to adopt the reference to these guidelines for ADR only.
4. As standard EN 13094 has also been referred to in RID for many years, and it cannot be ruled out that individual manufacturers also use this standard for the construction of railway tanks, it is proposed that a reference to the guidelines on how to apply standard EN 13094 also be included in RID.

Proposal

6.8.2.6.1 Amend the Table, under "For design and construction of tanks", as follows:

"– For standard "EN 13094:2015", in column (2), add the following Note:

"NOTE: See also the guidelines on the OTIF website (www.otif.org)."

Include the following guidelines on OTIF’s website:

“Guidelines on how to apply standard EN 13094:2015 in order to comply with RID 2017 and 2019

The European standard EN 13094 specifies requirements for the design and construction of metallic gravity-discharge tanks intended for the carriage of substances having a vapour pressure not exceeding 110 kPa (absolute pressure) for which a tank code with letter “G” is given in Chapter 3.2 of RID.

In order to comply with the requirements of RID, the following amendments to EN 13094:2015 shall be made.

1. Amendment of 3.1, Terms and definitions

Delete the definition of maximum working pressure in 3.1.4.

2. Amendment of 6.4, Dynamic conditions

In the first paragraph of 6.4.2, replace “Pv” with “PtA”, where PtA = static pressure (gauge pressure) in Megapascals (MPa).

3. Amendment of 6.5, Pressure conditions

3.1 Amendment of 6.5.1

Delete "c) 1.3 times the maximum working pressure".

3.2 Amendment of 6.5.2

Replace “1.3 × (PtA + PtS)” with “max (0.2; 1.3 × PtA water; 1.3 × PtA)”.


4.1 Amendment of A.5.2.2.1, Table A.2, Pressures

Replace N° 2 “Maximum working pressure b, Pms” with “Opening pressure of the breather device, PtS”.

Delete “bPms is the maximum of Pvd, PtS, Pd and Pr”.
4.2 Amendment of A.5.2.2.2, Table A.3, Calculation pressure in service conditions

*In 4, 5, 6 and 7, replace “P_{ms}” with “P_{ts}”.*

4.3 Amendment of 5.6.2.1.2, Tensile stress due to pressure during transport

*In a) Force, replace “P_{ms}” with “P_{ts}”.*