Guidelines for the application of EN 13094:2015 for compliance with ADR

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 ADR.

In order to comply with the requirements of ADR, 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 "P_v*" with "*P_{ta}*",*

where P_{ta} *= 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 × (P_{ta} + P_{ts})" *with* "max (0,2; 1,3 × $P_{ta\ water}$; 1,3 × P_{ta})".

4. Amendment of Annex A, A.5 Calculation method - Worksheet

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

Replace N° 2 "Maximum working pressure [b], P_{ms}" *with* "Opening pressure of the breather device, P_{ts}".

Delete "[b] P_{ms} is the maximum of P_{vd}, P_{ts}, P_d and P_r".

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 A.5.6.2.1.2, Tensile stress due to pressure during transport

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