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Original: German

RID/ADR/ADN

Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods (Geneva, 19 - 23 September 2016)

Item 2 of the agenda: Tanks

Interpretation of diameter in paragraphs 6.8.2.1.18 and 6.8.2.1.19 of RID/ADR

Proposal transmitted by Germany

1. In Germany, there are different interpretations regarding the diameter to be used for the third root formula in paragraphs 6.8.2.1.18 and 6.8.2.1.19 of RID/ADR. Some manufacturers use the internal diameter while others use the external diameter (including the shell) for the calculation. Normally, this does not present a problem; but where the internal diameter of the tank is exactly 1800 mm, the choice of the internal or the external diameter leads to different results for the minimum shell thickness.
2. Since the minimum shell thickness is used in the calculation of equivalent thicknesses, this leads to significant differences also in this respect.
3. The following example, in which mild steel with a chosen shell thickness of 6.0 mm is taken as a basis, illustrates the issue:

	6.8.2.1.18	6.8.2.1.19
$D_i = 1800 \text{ mm}$	$e_0 = e_1 = 5.0 \text{ mm}$	$e_0 = e_1 = 3.0 \text{ mm}$
$D_a = 1812 \text{ mm}$	$e_0 = e_1 = 6.0 \text{ mm}$	$e_0 = e_1 = 4.0 \text{ mm}$

4. Since the internal diameter in mm is mentioned explicitly only in paragraph 6.8.2.1.17 of RID/ADR, it could be assumed that, in all others, reference is made to the external diameter.
5. Germany requests clarification and would like to ask the members of the Joint Meeting to communicate their interpretation.