Position paper on K values of in-service vehicles

Transmitted by Transfrigoroute International (TI)

1. In annex 1, paragraph 2 (and similar wording in paragraphs 3 and 4) of ATP can be found the phrase “The K coefficient of refrigerated equipment of classes B and C shall in every case be equal to or less than 0.40 W/m².K”.

2. Some Contracting Parties to ATP have implemented K value testing for the renewal of ATP certificates after 6 years. TI does not support the practice of K value testing after 6 or 9 years, except for tanks. The IIR has already raised objections to this practice and TI fully endorses this position.

3. It has long been established from test data from ATP test stations that the average ageing of insulation is 5% per annum. This is also generally accepted by the manufacturers of insulated bodies.

4. Type approval testing of new bodies yields K values in the region of 0.37 - 0.39 for IR or FRC class equipment, approaching the maximum value of 0.4 W/m².K. The situation is similar for class A equipment.

5. With the possibility to use a prototype test report to request an ATP certificate for an insulated body with a ± 20% variation of the inside surface area, anecdotal evidence suggests that K values could be closer to or perhaps higher than the type approval limits.

6. When the ageing coefficient of 5% per annum is added, it is clear that the requirement in ATP, that K values “shall in every case be equal to or less than” the limits set for type approval testing, cannot be met. K value testing after 6 or 9 years would result in a K value higher than 0.4 W/m².K. The practical and commercial impact of this interpretation is that the vehicle would have to be declassified with a potential consequential devaluation of the asset value of the vehicle and a restriction on its operational ability to carry frozen products. This lack of flexibility also impacts on the earning capability of the vehicle for its owner.
7. Therefore, TI fully supports the use of the temperature pull-down tests originally drafted by France and to be introduced in 2013. It is important that the tests are conducted in strict accordance with the minimum and maximum ambient temperature requirements. This would avoid the need for K value testing and provide practical, easily reproducible proof that a vehicle can safely transport perishable products in accordance with the requirements of ATP.

8. Given the current political climate, it is also important that due consideration is given to the need to retain the type approval class categorization of the vehicle and its overall energy consumption.

9. TI strongly recommends the acceptance of this important principle by WP.11.

10. In the proposed review of annex 1 of ATP in which TI has been asked to participate, TI will seek the removal of the wording “shall in every case” in paragraphs 2, 3 and 4 of annex 1. One proposed wording for paragraph 2 could be: “The K coefficient of new refrigerated equipment of classes B and C shall refer to IR type approved insulated equipment”.

____________________