

JASIC reply to OICA comments

TF TA

14th November, 2022



JAPAN AUTOMOBILE STANDARDS INTERNATIONALIZATION CENTER

OICA comments	Answer
<p>Test protocol not clear yet (Japanese proposal is not published in detail yet)</p>	<p>Distance traveled is 250km x 20 times per set for a total of 5000km. Within one set there is WLTC mode and Curve & Slope mode. All other information necessary for the drum test is disclosed. (TA-04-05) The details of the test procedure can be discussed in the TFTA small group.</p>
<p>Test rigs / benches availability (probably huge investments are required)</p>	<p>We understand that wear drum tester is not special but commonly available. While the initial investment is large, the running costs are low. So it is better to consider not only the initial investment but the total investment.</p>
<p>Artificial effects are likely a concern and robust results are awaited</p>	<p>The indoor method allows testing under stable conditions, unaffected by traffic conditions, weather, or drivers etc. In addition to it, by setting driving conditions that are representative of the world, we aim to create a testing method that is fair and convincing. Please let us know the concrete concerns if any.</p>

OICA comments	Answer
<p>Technical aspects not clear e.g., how is steering angle considered, different layouts for driven and trailed tyres needed, different driving dynamics (ICE vs. BEV) simulation.</p>	<p>Steering angle and different layouts of driven and trailed are considering actual vehicle driving. Factors other than tyres should be controlled since evaluation of tyre performance is the purpose of the test. In addition, since the tire wear test method evaluates the wear performance of tires and not the effect of the vehicle on abrasion, it is not appropriate to add vehicle characteristics, which vary from vehicle to vehicle, as a factor in the evaluation.</p>
<p>Potential issue for 3PMSF tyres as all tyres are tested at 25°C</p>	<p>The temperature condition for the rolling resistance measurement method, carried out indoors, is also 25 °C, which is therefore considered to be a suitable temperature for all categories. (It is mentioned in Q&A list(TA-05-02) line 121)</p>

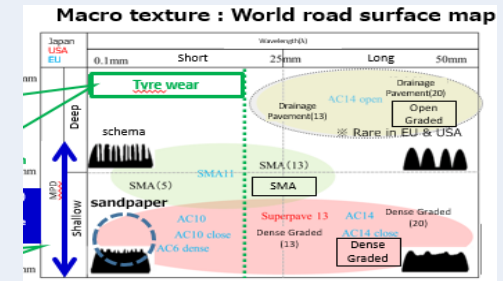
OICA comments

Unclear if drum surface characterization is representative of real life road surface / pavement*

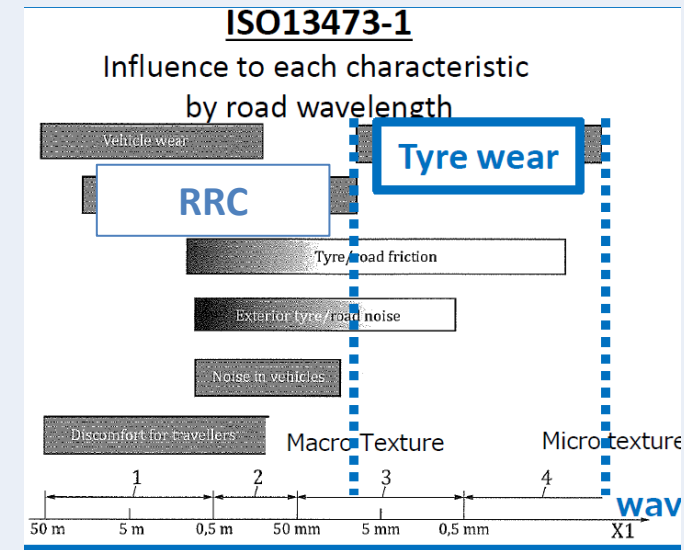
*Rolling resistance evaluation of winter tyres on in-service road surfaces

Answer

The chart shown below is the result of our investigation on asphalt surface specifications of the world. It expresses characteristics of asphalt surface by MPD. (It is mentioned in Q&A list(TA-05-02) line 85)



From ISO13473-1, the wavelength of the affected road surface is different for RRC and Tyre wear, and a suitable road surface shape is adopted for Tyre wear.



OICA comments	Answer
Possible misalignment between Foot print/ Diameter of tyre and drum tester.	Since the reference tyre and the candidate tyre are tested on the same drum, we believe it would be no problem.
Certain degree of negative influence for testing tyre in closed environment and possible mismatch with the real road test environment, temperature, humidity, etc.. Detailed investigation needed to account these influences.	Real road test environment can not be controlled so we believe that to carry out the test with stable condition is one of the merit for indoor test method. The test conditions are set to be representative of the world.