Concept of proposed additional test campaign and estimate of necessary quantity of Molded SRTT worn

IWG WGWT
29 November 2021
1) Assess day to day variation of Molded SRTT worn and equations of calculations

- Candidate tyres: All Normal and 3PMSF tyres provided to test centers in the first test campaign.

![Diagram showing Normal, M+S, 3PMSF/ICE categories]

- Participants: All Test centers

- Test sequence:

  Basic sequence:
  
  Molded SRTT \(\rightarrow\) Buffed SRTT \(\rightarrow\) Candidate 1 \(\rightarrow\) Candidate 2 \(\rightarrow\) Molded SRTT \(\rightarrow\) SRTTn \(\rightarrow\) Candidate 3 \(\rightarrow\) Candidate 4 \(\rightarrow\) Molded SRTT

To assess day to day variation, the Normal tyre and the 3PMSF tyre with the lowest \(\mu_{peak}\) value among each category in the first test campaign are tested for 4 consecutive days.

- Day 1: Molded SRTT \(\rightarrow\) Candidate Normal (lowest \(\mu_{peak}\)) \(\rightarrow\) Candidate 3PMSF (lowest \(\mu_{peak}\)) \(\rightarrow\) Molded SRTT
- Day 2: Molded SRTT \(\rightarrow\) Candidate Normal (lowest \(\mu_{peak}\)) \(\rightarrow\) Candidate 3PMSF (lowest \(\mu_{peak}\)) \(\rightarrow\) Molded SRTT
- Day 3: Molded SRTT \(\rightarrow\) Candidate Normal (lowest \(\mu_{peak}\)) \(\rightarrow\) Candidate 3PMSF (lowest \(\mu_{peak}\)) \(\rightarrow\) Molded SRTT
- Day 4: Molded SRTT \(\rightarrow\) Candidate Normal (lowest \(\mu_{peak}\)) \(\rightarrow\) Candidate 3PMSF (lowest \(\mu_{peak}\)) \(\rightarrow\) Molded SRTT

M+S tyres are excluded from 2\(^{nd}\) test campaign.
2) Water depth / road surface roughness

- Participants: Test center which performed water depth evaluation of analytical plan

- Test sequence:
  Day 1  Water depth 0.5mm
    Molded SRTTw – Buffed SRTTw – Candidate A – Candidate B – Molded SRTTw – SRTTn - Candidate C – Molded SRTTw
  Day 2  Water depth 1.0mm
    Molded SRTTw – Buffed SRTTw – Candidate A – Candidate B – Molded SRTTw – SRTTn - Candidate C – Molded SRTTw
  Day 3  Water depth 1.5mm
    Molded SRTTw – Buffed SRTTw – Candidate A – Candidate B – Molded SRTTw – SRTTn - Candidate C – Molded SRTTw
  Day 4  Water depth 2.0mm
    Molded SRTTw – Buffed SRTTw – Candidate A – Candidate B – Molded SRTTw – SRTTn - Candidate C – Molded SRTTw
JASIC recommend to produce Molded SRTT worn: **146 tyres**

1.5 time number of 1\textsuperscript{st} test campaign*
+ additional spare (1 set/lab) for emergency purpose

* In the first test campaign, 50% of the sequences were performed on Buffed SRTT worn reference and 50% on SRTT new reference. Since the additional test campaign JASIC proposes is only for the Molded SRTT worn reference, the number of Molded SRTT worn runs is 1.5 times the number of Buffed SRTT worn runs in the first test campaign. Therefore, the number of Molded SRTT worn needs to be 1.5 times the number of Buffed SRTT worn used in the first test campaign.

<table>
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<tr>
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<th>Trailer method</th>
<th>Vehicle method</th>
<th>Sub total</th>
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<tbody>
<tr>
<td>Number of participated test center</td>
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<td>5</td>
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<tr>
<td>Number of 1\textsuperscript{st} test campaign</td>
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<tr>
<td>Necessary quantity for additional test campaign</td>
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<tr>
<td>Spare (1 set per lab)</td>
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<td>29</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>146</strong></td>
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