

Discussion Issues on DPPS Testing

4th DPPS TF Meeting, 2017.11.21~23

**Ministry of Land, Infrastructure and Transport
Korea Transportation Safety Authority,
Korea Automobile Testing & Research Institute**

Issues on test area with a deployed hood

■ ISSUE 1

- Headform Test Area is laterally likely to be reduced with a deployable hood, compared to the area with non-deployable hood
- If a deployable hood is optional, there would be two different test areas existing in the same car model
 - Test area is the area which is supposed to be tested
 - Pedestrian head can be crashed into the area
 - How do the public understand the different test area?

Issues on test area with a deployed hood

■ ISSUE 2

- If the compliance test is conducted in a test laboratory of the authority, manufacturers must provide technical support to make the hood deployed before the authority marks the test area

→ Marking the test area and figuring out the impact points takes some time (1~2 days)

Issues on test area with a deployed hood

■ ISSUE 3

- Where the deployable hood is lifted up high, marking the bonnet rear reference line following the definition might be impossible
 - The reference line must be physically definable by the authority like other reference lines according to the definition and not just rely on manufacturer's data

Issues on test area with a deployed hood

■ ISSUE 4

- How can the authority select impacts points, considering the worst case in the engine room?
 - Choose impact points with a completely open hood?
 - How to consider the contour of the vehicle surface?

Issues on test area with a deployed hood

■ ISSUE 5

- How can the test area be defined for the deployable hood with a pedestrian airbag system?
 - Is it appropriate to mark the test area only with deployed hood ?
 - How to mark the bonnet rear reference line with the semi-circular template ?
 - What if there is a car with only pedestrian airbag system ?

Issues on test area with a deployed hood

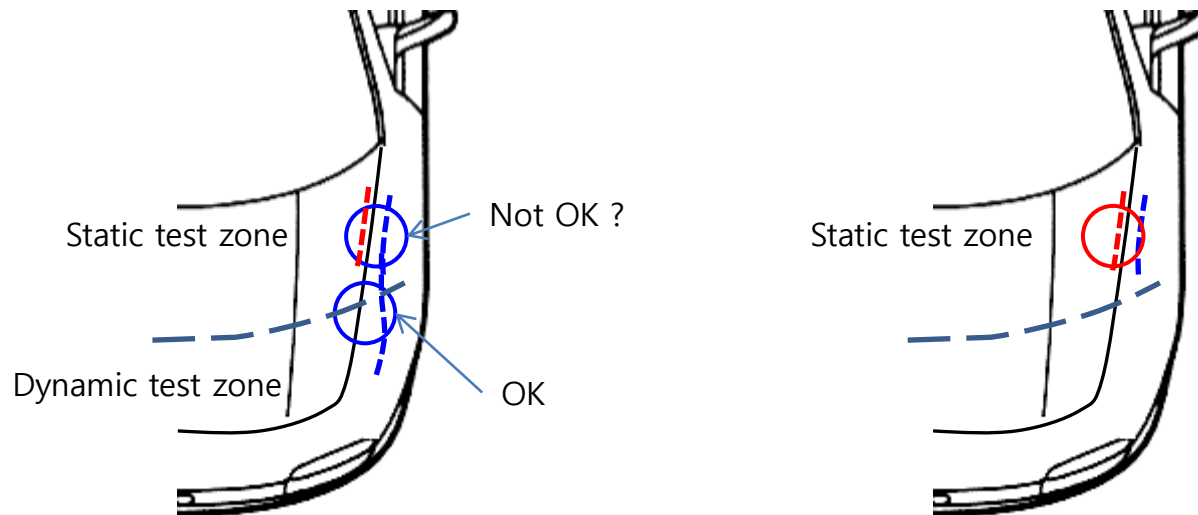
■ ISSUE 6

- What if the test area would be extended rearward in the future?
 - How to define the test area with a deployed hood?
 - Various considerations (WAD, Impact points, etc.)

Issues on Test Area Proposal of Japan

■ ISSUE 7

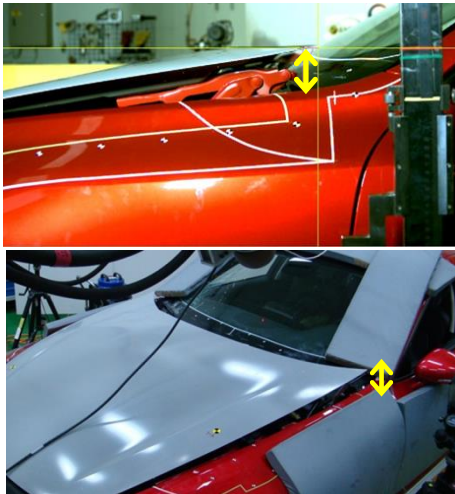
- How to define the test area when the dynamic headform test should be conducted partially?
→ Various considerations(WAD, Hood part'g, 82.5, etc.)



Issues on deployable hood height

■ ISSUE 8

- Difference between the valid height for measuring TRT and the actual height of deployed hood in headform testing



| tested in Korea | A car | B car |
|--|-------|--------|
| Height for TRT test (manufacturer provided) | 60 mm | 90 mm |
| Height in static headform test in deployed position (measured) | 71 mm | 149 mm |