New Requirement Proposal for the GTR
Adult Headform Impactor Specification
- Moment of Inertia -

Japan
GTR Headform Impactor Specifications

- Moment of inertia* (kgm$^2$) -

<table>
<thead>
<tr>
<th></th>
<th>Child 3.5 kg</th>
<th>Adult 4.5 kg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min.</td>
<td>Max.</td>
</tr>
<tr>
<td>before 8th INF GR PS</td>
<td>0.0075</td>
<td>0.0200</td>
</tr>
<tr>
<td>8th INF GR PS</td>
<td>0.008</td>
<td>0.012</td>
</tr>
<tr>
<td>for discussion (Method 1)</td>
<td>0.008</td>
<td>0.012</td>
</tr>
<tr>
<td>for discussion (Method 2)</td>
<td>0.008</td>
<td>0.012</td>
</tr>
<tr>
<td>New Requirements (proposal) -&gt;</td>
<td>0.010</td>
<td>0.015</td>
</tr>
</tbody>
</table>

Actual Measurement values for JAMA-JARI headform -> 0.0086-0.0098 (avg. 0.0093) 0.0110-0.0120 (avg. 0.0117) <- above new requirement is possible to achieve

EU -> - 0.011 <- above new requirement is possible to achieve

* The moment of inertia about an axis through the centre of gravity and perpendicular to the direction of impact

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Child headform

![Child headform Diagram]

Adult headform

![Adult headform Diagram]

Drawings: INF GR PS143
**Child headform**
*(3.5 kg JAMA-JARI)*

**Adult headform**
*(4.5 kg JAMA-JARI)*

**Moment of Inertia (kgm²)**

**Measurement values (Ip)**

**EU/GTR Req. (Max.)**

**EU/GTR Req. (Min.)**

**Ip:** The moment of inertia about an axis through the centre of gravity and perpendicular to the direction of impact.