

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

Japan

GTR Headform Impactor Specifications

- Moment of inertia* (kgm²) -

	Child 3.5 kg		Adult 4.5kg	
	Min.	Max.	Min.	Max.
before 8th INF GR PS	0.0075	0.0200	0.0075	0.0200
8th INF GR PS	0.008	0.012	no data	no data
for discussion (Method 1)	0.008	0.012	0.0103	0.0154
for discussion (Method 2)	0.008	0.012	0.0101	0.0151
New Requirements (proposal) ->			0.010	0.015

<- IHRA/PS231 based

<- EU based

<- simply child requirements times Adult and Child headform weight ratio (4.5kg/3.5kg = 1.286)

<- child requirement values times avg. of actual Adult and Child headform impactor moment of inertia ratio (1.258)

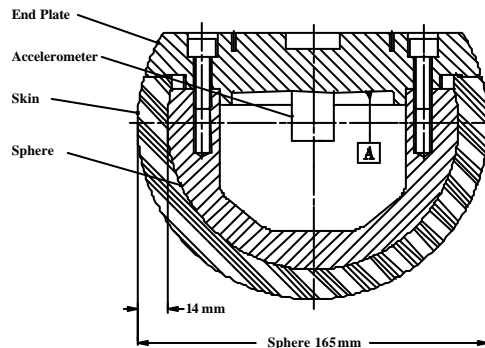
Actual Measurement values for JAMA-JARI headform ->	0.0086-0.0098 (avg. 0.0093)	0.0110-0.0120 (avg. 0.0117)
EU ->	-	0.011

<- above new requirement is possible to achieve

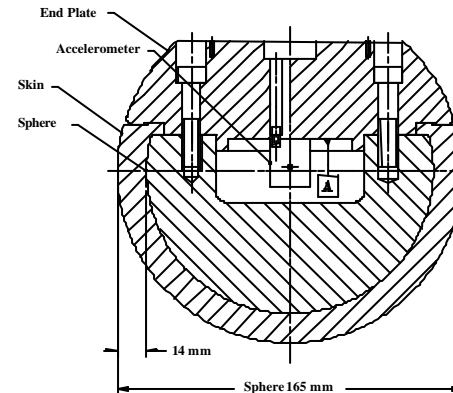
<- above new requirement is possible to achieve

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

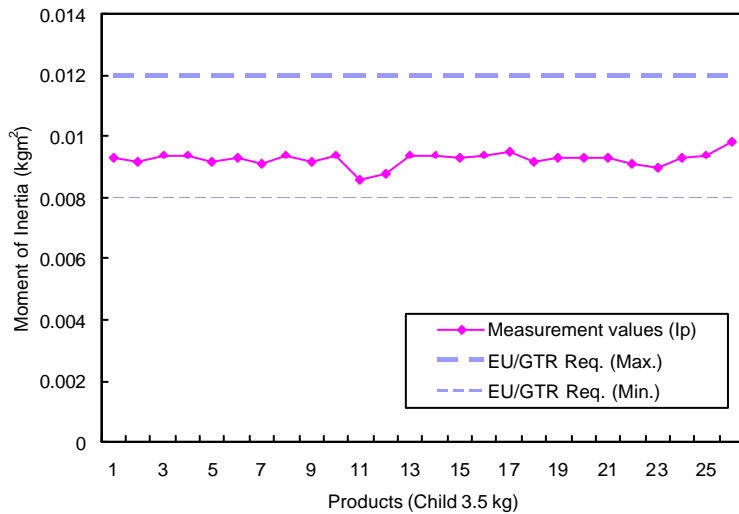
Child headform



Adult headform

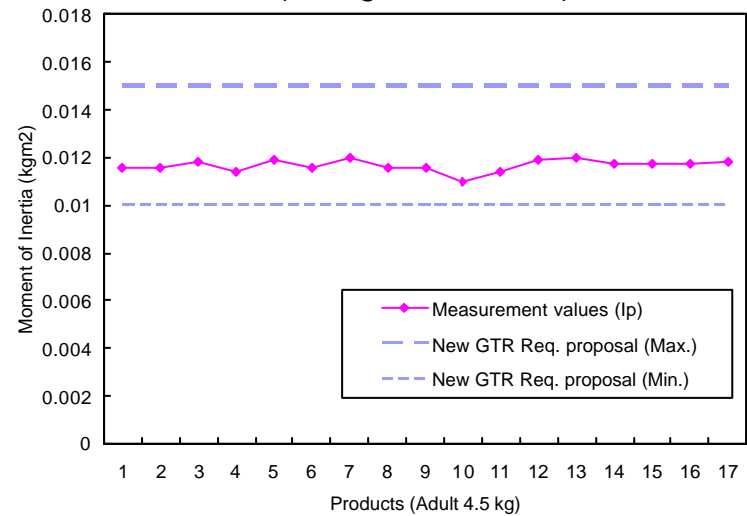


Child headform (3.5 kg JAMA-JARI)



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

Adult headform (4.5 kg JAMA-JARI)



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