Isofix Loads Measurements

Task 5.1
CLEPA Contribution
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Test description

• R44 bench equipped with:
  – Lower isofix anchorages loads sensors
    • Load given in this document are calculated in the centre of the 6 mm diameter anchorage
  – Support Leg load sensor

• Tests performed
  – Seat A : Gr0+ with Support leg R44 / P1,5
  – Seat B : Gr1 with Support leg R44 / P3
  – Seat A : Gr0+ with Support leg Euroncap / Q1,5
  – Seat B : Gr1 with Support leg Euroncap / Q3
R44 Pulse

Test number: LSP-08-1102

Décélération chariot (Sled Deceleration) = 23.8 g à (at) 57 ms
Niveau à (Level at) 5 ms = 3.1 g
Niveau à (Level at) 10 ms = 3.9 g
EuroNCAP Type Pulse

Max : 36.7 g
Installation

- **Seat A** weight 12.2 kg – Gr 0+ Support Leg
Installation

- **Seat B** weight 14.6 kg. Gr 1 Support Leg
Installation

- Previous test Seat C:
  weight 11 kg
  - Gr 1 Top Tether
Results - Synthesis

R44 EURONCAP

Force measured in N in SL for seat A
Results- Synthesis

R44 EURONCAP

Force measured in N in SL for seat B
Results - Synthesis

R44
EURONCAP

Force measured in N in lower anchorage for seat B
## Results- Synthesis

<table>
<thead>
<tr>
<th>Pulse</th>
<th>Seat</th>
<th>Anti-rotation</th>
<th>Dummy</th>
<th>Lower Isofix anchorage</th>
<th>SL/TT</th>
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<td>TT</td>
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<td>SL</td>
<td>Q3</td>
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</table>

Force measured in N
Result Synthesis

• Higher forces in anchorages with 2 points only and with support leg
• For Gr0+ lower force in Euroncap. But more important impulse for support leg in Euroncap.
Next Steps

• Tests with other labs to check results

• Input from car manufactures to evaluate anchorages deformation.

• Tests with Gr1 rwd facing

• Test with Gr1 and P6 for max loads