IG on Child Restraints Systems

Dynamic test - Side Impact

Test bench

- Sled test
  - Fixed door in rearward or forward facing position
  - Sliding ECE-R 44 test bench
  - Sliding CRS fixation

Test procedure

- Pulse according to ISO
  - Delta-v 25 km/h
  - Delta-v corridor (acceleration 10 to 14 g)
IG on Child Restraints Systems

Dynamic test - Side Impact

Test set-up

➢ Door position
  - Distance “X” between centre of head and door still to evaluate
  - Angle “$\alpha$” between door and centre line of CRS still to evaluate

➢ Door dimension and surface
  - Height 500 mm above CR-point
  - Upper edge horizontal
  - Lower and rearward edge in such a way that test bench keeps sliding
  - Rigid door padded according ISO
IG on Child Restraints Systems

Dynamic test - Side Impact

Test set-up

- ECE-R 44 test bench
  - sliding in sled direction (250 mm or to be defined)
  - parallel with sled direction
  - sled mass defined (today existing sleds +x kg)

- CRS fixation for belt and ISOFIX anchorage as well
  - sliding in sled direction (200 mm or to be defined)
IG on Child Restraints Systems

Dynamic test - Side Impact

Source: Recaro GmbH & Co. KG
IG on Child Restraints Systems
Dynamic test - Side Impact

a < b < c
IG on Child Restraints Systems

fixed door

500 mm
IG on Child Restraints Systems

rearward facing

ECE-R 44 test bench

forward facing

fixed door