

IIHS Small Overlap Crash

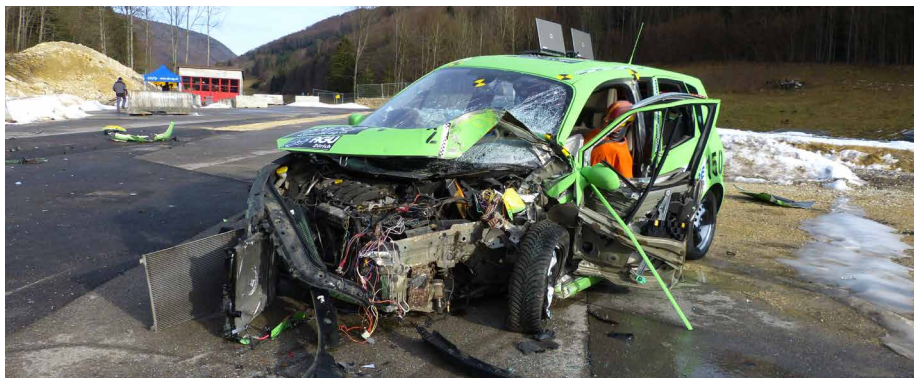
Frontal crash with 25% overlap

The Small Overlap Crash according to the Insurance Institute for Highway Safety (IIHS) specifications shows what happens when only a small part of the front of the vehicle collides with another vehicle or a solid object such as a pillar or tree.

- ✓ **64 KM/H IMPACT VELOCITY**
- ✓ **25% OVERLAP**
- ✓ **IMPACT AGAINST RIGID BARRIER**
- ✓ **IMPACT AGAINST SECOND VEHICLE**

RELEVANCE

Important deformation elements such as longitudinal beams are not effective due to the test arrangement with 25% overlap. This results in a slight velocity reduction in the first phase. The passenger compartment collapses and the risk of injury to passengers is very high.



Vehicle after small overlap crash

YOUR BENEFITS

Realistic

Vehicle damages of actual accidents show similarities to those of the IIHS Small Overlap Crash.

Flexible

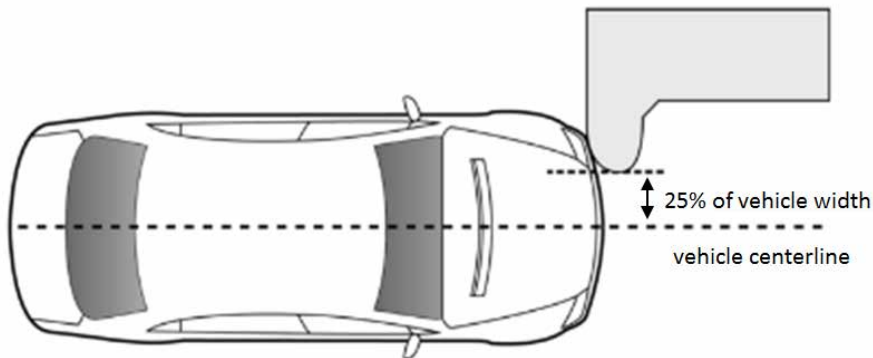
The frontal collision occurs either against a rigid barrier or a vehicle.

Impressive

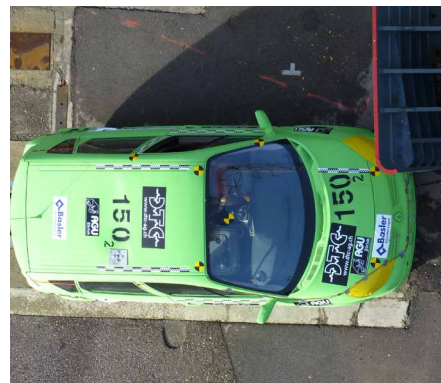
Design weaknesses of the vehicles and possible improvements in passenger protection are immediately visible.

TEST SETUP

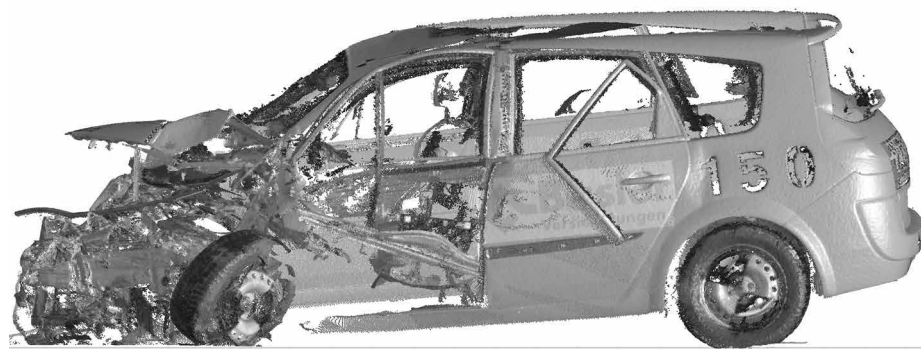
The vehicle hits a rigid barrier with 25% overlap. On the driver's seat is a HIII 50% dummy of approx. 78 kg and the required impact velocity is 64 km/h. As an alternative to the rigid barrier, the collision can also take place against a second vehicle to represent an oncoming traffic collision.



Overview of test setup



Vehicle against rigid barrier



3D-Modell, created with laser measurement

DATA ACQUISITION

Top measuring equipment is available for the best possible analysis of the impact.

- High speed cameras with variable resolution and recording rate
- Measuring equipment with a frequency of 20 kHz
- 3D laser scans for accurate measurement of the geometry before and after the impact

Please do not hesitate to contact us, we will gladly send you an individual quotation.



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