



MoveInspect HR

Free Motion Head tests with MoveInspect Technology

A new interface enables the use of the MoveInspect HR system for tests under FMVSS201u. This unique interface between the measurement technology of AICON and the software FMH-Wizard from Concept Tech GmbH is particularly relevant for head impact determination.



—→ MoveInspect HR

FMH tests under FMVSS201u with AICON's MoveInspect HR

To comply with the provision under FMVSS201u, the vehicle developers have to measure and verify a variety of configurations and combinations. AICON's optical measuring system and the FMH-Wizard streamline the test process and provide more accurate measurement results. The Wizard identifies all relevant measuring points on the vehicle (as specified by FMVSS201u) and guides the operator through the complex measurement procedure. All these points can be tagged and measured with the MoveInspect HR system of AICON. The operators benefit from the efficiency of the measurement system. The results are generated more quickly and user-independent. Due to the self-referencing of the system accurate measuring results can be realized, even at the smallest movements of the test vehicle.

Launcher-positioning with Move 6D for tests under FMVSS226

Additionally, the newly developed software module Move 6D for the AICON 3D Studio supports the implementation of the FMH testing. Move 6D simplifies the positioning of two or more rigid bodies to each other, the controlling of their position and the orientation in space. During FMH tests it can be used for positioning the launch facility of the aluminum heads relative to the vehicle. As a part of AICON's MoveInspect Technology, the Move 6D software is also applicable and expandable for many other measurement tasks.



—→ Free Motion Head tests are supported by AICON's measuring system MoveInspect HR and the software module Move 6D

Free Motion Headform

In the Free Motion Head (FMH) experiments so-called Free Motion Head Forms are shot at the various surfaces of the vehicle interior. On the basis of the measured acceleration, the severity of the expected head injuries can be calculated. The aim of these tests is to determine and reduce the risk of acceleration-induced injuries to the head of the car occupants early in the vehicle development phase. The guidelines are very strict for vehicles that should be licensed in North America. They are defined in the head impact determination FMVSS201u.