

Ejection Mitigation Headform

Headform for use to reduce the risk of occupant being thrown from vehicles during rollover and side impact crashes.

Background

The National Highway Traffic Safety Administration (NHTSA) published a final regulation in 2011 for ejection mitigation establishing the Federal Motor Vehicle Safety Standard 226 (FMVSS 226) Ejection Mitigation in an effort to reduce the risk of occupants being thrown from vehicles during rollover and side impact car crashes.

The Ejection Mitigation Headform is designed to assess if the vehicle has adequate safety measures in the side windows to prevent occupants ejecting from the vehicle during an impact, as well as measuring the reaction time of any side curtain airbags if fitted.

Test Procedure

The Ejection Mitigation Headform is fired at up to four points of the front and rear side windows of a stationary vehicle. The glass is pre-broken to simulate the fact that after an initial impact most glass in a car would have been weakened.

The second test then takes place with no glass present as, by the second head impact in real crash situations, most side windows would no longer be intact. The test checks that in the event of an accident the occupant would not travel further than 4 inches/100mm out of the window.





Quality

Cellbond is certified to ISO 9001:2015 and strives to continually improve its quality systems. Cellbond aims to provide its customers with the best quality products.



Aluminium ist wiederverwertbar
Aluminium is recyclable



For more information on Cellbond's related products or for specific development enquiries, please contact the Sales Team at sales@cellbond.com

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Technical Specification

The headform complies with FMVSS 226, Annex A. It weighs approximately 4.6kg including skin, skull, mounting block and accelerometers measuring three axes. The total weight of the impactor is specified as 18kg, which includes the mass of the headform and the moving mass of the impactor.

The face has no features to simplify the contact surface and lessen interactions that may affect the test outcome. The head is a vinyl skin with an aluminium skull and is manufactured in line with official NHTSA drawings.

The accelerometers are mounted inside the skull. On request, Cellbond can also supply various accelerometer types.



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