

EVALUATION OF OCCUPANT INJURY RESULTS USING META FOCUS ON THOR

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ABSTRACT

First part of the presentation explains the use of META's Occupant Injury Criteria (OIC) Tool to plot CAE and hardware test results of the relatively complex THOR dummy.

Challenges related to the large number of channels and THOR specific injury metrics will be discussed. Detailed presentation of the user friendly OIC Tool to compare several CAE runs with hardware test results. The OIC tool can be used as well to compare several hardware tests or several CAE simulations, which allows as well an export to a PowerPoint presentation.

(Second part is optional, depending upon availability of successful application).

Second part of the presentation is focusing on the coupling of DOE results with META within LS-OPT. META is used in this particular case as Post-Process Tool for a complex DOE including a great number of CAE runs, which includes changes of restraint parameters and friction parameters. The LS-DYNA THOR Dummy has been used as an example to illustrate possibility to plot a great number of results. META provides LS-OPT a large set of data to visualize the sensitivities of each design parameter with respect to the injury response of the THOR.