Stochastic Simulations for Crash Worthiness and Occupant Protection

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Reduction of mass of vehicle is a high priority of design targets in automotive industries. To achieve the design targets, several quality control methods are employed in crashworthiness and occupant simulations by LS-DYNA at Toyota Motor Corporation. Some topics using quality control methods in the simulations including LS-TASC are introduced, and its effectiveness and limitations are discussed.