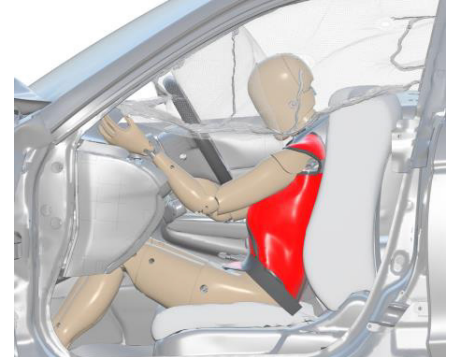


JANUARY 2024

HUMANETICS CAE UPDATES

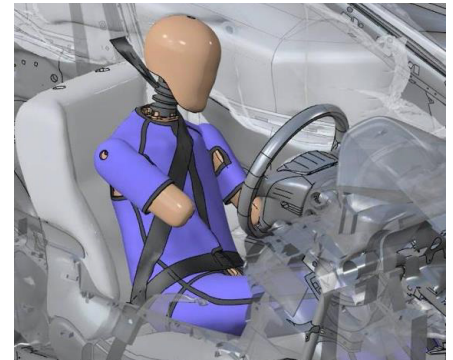
THOR-5F

- THOR-5F is a brand new ATD representing the small female anthropometry with superior biofidelity and injury measurement capabilities when compared to the HIII 5th
- [THOR-5F v1.5 FE model](#) represents the latest available hardware design
- Mesh update to represent latest hardware geometry
- Validation on full dummy certification tests with updated hardware
- Lumbar and thoracic spines are validated on new component test



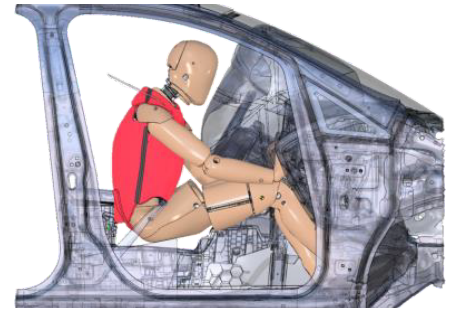
WSID-5F

- NHTSA accepted a new preliminary SBL-E design based on CAE biofidelity evaluations represented in the WSID-5F v3.0 FE release model
- [WSID-5F v3.0 FE model](#) represents preliminary SBL-E design
- Rib-Eye instrumentation for chest intrusion measurement instead of IR-TRACCS
- Different design for the whole thorax to increase biofidelity
- Lumbar Spine is validated on new mini sled component tests under different loading conditions



THOR-50M C-NCAP

- C-NCAP introduced a new virtual testing scenario combining Pre-Crash and Crash (MPDB load case)
- Monitoring will start July 2024 and official rating will be in 2025
- [THOR-50M C-NCAP v1.9](#) need to be used for the pre-crash phase and fulfills required pre-crash biofidelity criteria set by C-NCAP



HIII 5th IIHS (Pressure Vest)

- IIHS introduced in 2023 a new criteria for the HIII 5th dummy in the second row based on the maximum slippage of the shoulder belt among the thorax relative to the chest deflection (chest index)
- To measure the belt slippage a new pressure vest must be fitted onto the standard jacket instead of a cotton shirt
- This vest can measure the applied pressure from the belt and can calculate the corresponding belt slippage based on pressure distribution over time
- The corresponding [HIII 5th v2.1 FE](#) model enables the user to repeat the same measurement as in hardware for predicting the new criteria.

