THOR-AV-5F

REPRESENTING A RECLINING FEMALE OCCUPANT IN AN AUTONOMOUS VEHICLE

Autonomous vehicles represent the future of mobility, and future focus of vehicle safety. As automated driving systems take the driver's seat in controlling vehicles in motion, occupants can relax more - focusing less on driving, and more on relaxing, working, or interacting with fellow passengers.

All these new modes present unlimited new challenges for safety testing. New seating positions and new seating directions will require new ways to keep occupants safe from impact, and safe from each other during and impact.

Our Autonomous Vehicle Dummies - using the latest THOR technology, with 150 data channels - can adapt to reclined seating positions with a more flexible pelvic structure.

The THOR-AV-5F from Humanetics is an enhanced version of the THOR 5th Female dummy. This cutting-edge new ATD is featuring a refined design that better represents the small female stature in a crash scenario – either in a traditional vehicle seat or in an autonomous vehicle seating environment.

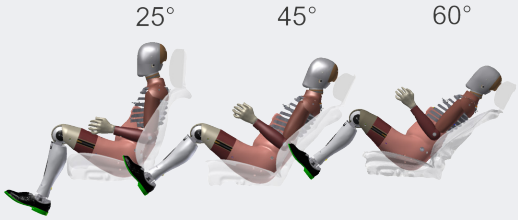
The design is based on the latest anthropometry data from the University of Michigan Transportation Research Institute's (UMTRI) Anthropometry of Motor Vehicle Occupants (AMVO) UMTRI AMVO 5F and UMTRI 5F pelvic bone.

Since the start of its development in 2019, the dummy has undergone hardware prototyping, as well as extensive biofidelity testing, performance evaluation in the customer AV environment, dummy evaluation and development of injury criteria. In addition, THOR-AV-5F offers upgraded instrumentation to allow improved data collection.

Evaluations by NHTSA and NCAP organizations have already taken place and will continue to take place. The THOR-AV-5F is available for sale, lease and rent.

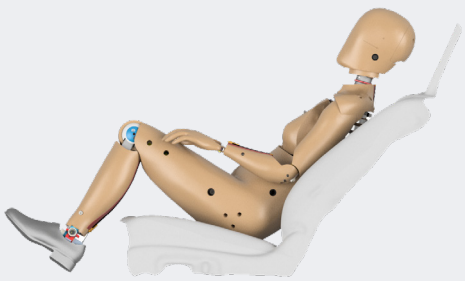
Advanced AV Features

- Head accelerometer and slice mounting modifications
- Updated joint range of motion
- Neck with enhanced biofidelity
- Updates to spine and abdomen
- Offers enhanced biofidelic response
- For use in all current THOR-5th Female applications
- Design is unique to Humanetics



Simulation Models

Humanetics offers highly detailed and fully validated Finite Element models of our dummies, along with FE modeling consultancy services.



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