

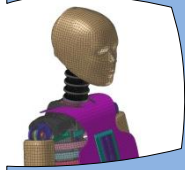


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Denton ATD

"CREATING THE STANDARD IN SAFETY MEASUREMENT"

Denton ATD Completes New Design and Manufacturing Facility for Crash Test Dummies.

Helping you achieve your technical goals

Denton has completed its new crash test dummy design and manufacturing facility in Huron, Ohio. Denton's commitment to the occupant safety industry along with customer demand for its ATDs and certification equipment has prompted investment in this 45,000 square foot facility. As the world's first facility to be built specifically for manufacturing of dummies, it incorporates a state-of-the-art machining center and advanced environmental controls to ensure the optimal conditions for vinyl and rubber

molding as well as dummy certification testing. The plant was formally opened by the Ohio Governor Ted Strickland on November 14, 2009.



MARKET WATCH

SID-IIIsD 2009 Final Rule Changes.

As of August 24, 2009, the U.S. Code of Federal Regulations, Part 572, Subpart V has been updated in response to petitions for change to the 2006 regulations governing the SID-IIIs Build Level 'D' (SID-IIIsD) anthropomorphic test device (ATD).



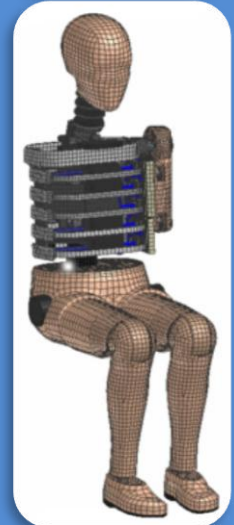
Getting the most from our research analysis

SID-IIsD, H3-5th, H3-50th and MIL-LX Finite Element models are now available

The Denton FE models have been developed using accurate geometric, mass and material data. Geometry has been compiled from a combination of CAD data and scans of actual parts. Mass properties have been implemented and verified using measured masses of actual components. Material data has been collected using a wide range of material tests including volumetric compression, quasi-static tension and compression, strain rate tension and compression, stress relaxation and biaxial testing. The hyper-elastic and visco-elastic material properties have been collected and represented using the latest numerical techniques including optimization of the material constitutive model constants.

To validate the models, Denton is using an extensive array of material, component, subsystem, and full dummy certification tests. Denton is working closely with key customers to extend the model validation into customer specific conditions. In all cases, the highly dynamic nature of the real world application of the actual dummies is being considered in the model verification.

The Denton Finite Element Models are available in LS-DYNA and PAM-CRASH FE formats and represent the physical ATDs manufactured and sold by Denton



Distribution agreement

Denton ATD and Engineering Technology Associates, Inc. (ETA)

A distribution agreement between Denton ATD and Engineering Technology Associates, Inc. (ETA), allowing ETA to sell Denton Virtual Dummy products and support them through its VPG finite element modeling product, was signed July 10th. The agreement linking Denton ATD, a global leader in the development and manufacture of advanced crash dummies and safety measurement devices, and ETA, a leader in the field of virtual product development and engineering software is effective immediately"

This agreement promises to greatly enhance ETA's future product offerings for crash simulation and occupant safety modeling. ETA President, Abe Keisoglou commented, "This agreement will not only bring our customers new opportunities to use state-of-the-art dummy models in their simulations, but will also deliver enhanced support, training and an opportunity to access Denton's vast hardware and application knowledge."

"We are delighted to be working with ETA who has given great support to Denton since its inception into this business segment. Having ETA act as a distributor dramatically increases Denton's ability to meet the customer distribution and support demands which is a major priority associated with all Denton product." comments Dave Stein, Denton ATD President and CEO.

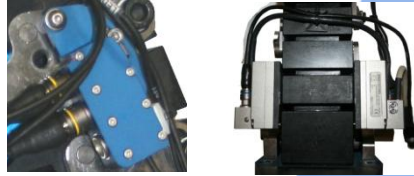


More Information on <http://www.dentonatd.com/>



Denton COE completes DTI integration into BioRID II ATD

As with other dummies, the goal was to have the A/D conversion either inside or close to the transducer, with the focus on the conversion of existing instrumentation to the DTI technology.



Over the past few years Denton COE has successfully developed integration solutions for in-dummy data acquisition systems using Hentschel DTI technology. The most recent project was the integration solution for the BioRID II ATD.



Another aspect for the integration solution was the possible future use of skull cap load cells and angular rate sensors. This has been taken into account in the design of the in-dummy bus concept. Additionally, having the in-dummy data acquisition installed in the BioRID allows for capturing all data channels during the certification of the dummy, which is usually not possible in certification laboratories. This way all data can be recorded and the entire system checked at once.



BioRID II SN100 delivered to Europe

Jubilee for BioRID II - BAST receives SN100 dummy

At BAST (Bundesanstalt für Straßenwesen, Germany), the research work of the section "Passive Vehicle Safety, Biomechanics" provides nationally and internationally relevant contributions to the improvement of the safety standards of motor vehicles. BAST also participates in the EuroNCAP Consortium as a recognized laboratory.

Since 2009, the whiplash score is included in the Adult Protection score where the results of a seat are based on geometrical aspects of the seat design as well as the dynamic performance of the seat.

Back in 2006 BAST received their first BioRID II equipped with the standard instrumentation, the new SN 2000 0100 BioRID II has additional instrumentation such as spring load cells and a lumbar spine load cell, this allows for collection more useful data in order to understand the mechanisms of the dummy behavior in a rear impact test.

With this second dummy and the strong involvement of Bernd Lorenz, Head of Passive Safety & Biomechanics at BAST, who leads the TEG group as part of the GTR7 activities, BAST strongly supports the activities in the field of whiplash testing and the continuous improvement to the BioRID II Rear Impact Dummy.





Upcoming Events

Main events where you would be able to meet with us in the next months

- March 30 & 31 - CAE Grand Challenge - Hanau, Germany
- April 13 to 15 - SAE meeting - Detroit, US
- May 19 & 20 - ESI global Forum - Munich, Germany (speaker & exhibitor)
- May 26 & 27 - DENTON CRASH MEETING - Heidelberg, Germany
- June 22 to 24 - Testing Expo - Stuttgart, Germany

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