

# M-Base News No. 34, September 2007

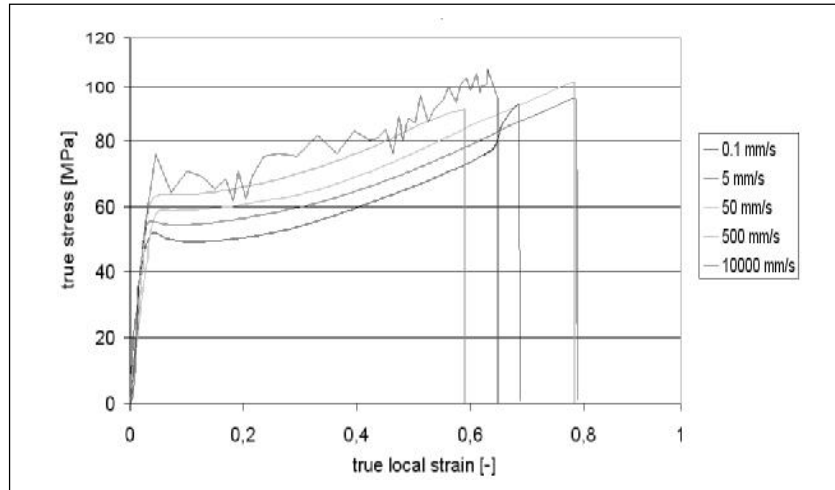
## Crash Data for Plastics

From September 2007 on, Material Data Center, the plastics information portal from M-Base, will offer material data for crash simulation with plastics.

The presented data is a result from the project „Mechanische Charakterisierung thermoplastischer Kunststoffe für die Crash-Simulation (Mechanical Characterization of Thermoplastics for Crash Simulation)“ which was conducted by FAT, a department of the German Association of the Automotive Industry (VDA), supported by Arbeitsgemeinschaft industrieller Forschungsvereinigungen „Otto von Guericke“ e. V. (AiF). The project was executed by Fraunhofer Institut für Kurzzeitdynamik, Ernst Mach Institut, Freiburg.

During the term of the project three Engineering Plastics from different producers have been characterized in dynamic tests and their crash behaviour has been evaluated. The results are now published in Material Data Center.

This specific database contains complete data sets for the three selected materials, including the raw data from different high speed tests, as well as the generated engineering properties and input files for PAM Crash and LS-DYNA. Up to three temperatures have been consi-



Typical Crash Data of a PC+ABS

dered. Relevant guidelines for testing and data evaluation are also available for download.

This valuable data is available for all registered users of Material Data Center. The crash data can be found in the category „ToolBox“.

The data offered in this system are results of a scientific project. It is allowed to use this data for calculations without restriction. However, the producers of the materials, nor the partners in the project, nor M-Base as provider, take any responsibility or warranty for this data. Any decision about the application of materials based on this data must be double

checked with the producer of the material. The material producers possess extensive experience and consulting facilities in this innovative and complex area of plastics engineering.

The presentation of this data in Material Data Center is supposed to demonstrate the state of the art concerning crash simulation with plastics and shall lead the way, how this important design data can be structured and disseminated in future.

We also offer consulting services to interested customers relating to the integration of crash data into internal material data maintenance systems.

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