

SOLUTIONS FOR CRASH AND SAFETY

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ABSTRACT –

It is common knowledge that simulations of virtual models hold a key role during the design process of a vehicle. Considering the continuously growing number of Crash regulations, but also the different variants that a vehicle can have, one concludes to a plethora of similar or completely different simulations. The model build up and the evaluation of the analysis results are the key points for a successful pre and post processing. The tools that a CAE analyst should have at one's disposal must be characterized by robustness and automation to deal with the numerous and really complex numerical simulations.

The most important case during the model build up is a comprehensive model organization. BETA CAE Systems has come up with new data types that facilitate the set-up for the solver simulation run. These new data types come to fully support data management in both, ANSA and solver, files. Also, advanced capabilities of version control and the storage of all attributes that a file needs to be followed during a simulation build up, ensure a productive process starting from file input, moving to the assembly, passing to the load-case set up and finalizing with a bulk solver file output.

Moreover capabilities of META, the post processor, complete a successful numerical simulation. A complete suite of Crash tools in combination with the automatic report generation in META guarantee a clear overview and easy validation of the results of a Crash analysis.