

INTEGRATION OF VIRTUAL REALITY TOOLS INTO THE CAE DEVELOPMENT PROCESS

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ABSTRACT-

With improved hardware performance, the integration of VR interfaces into standard postprocessing tools and the availability of cost-effective, high-performance head-mounted displays, the topic of virtual reality as a tool to be used by the computation engineer on a daily basis is becoming a more and more realistic scenario. When it comes to the SFB, NVH and crash areas, the standard process can be leveraged — without preparing the correlating data beforehand — to visualize the results in the VR environment at the touch of a button. The use of prototype solutions makes it possible to "experience" simulation results, devise more effective working models for collaboration and simplify interaction with the respective models. Working in the design space intuitively, using both hands for interaction, accelerates the work process. In collaborative projects, employees can make changes directly to the model and generate 3D sketches. An export option that saves data can then be used to access these changes in all subsequent process steps. From the perspective of a young engineer, using modern media such as VR makes working more enjoyable, which in itself is one more motivating reason to engage in further development activities.