VR-SUPPORTED ENGINEERING PROCESSES AT DAIMLER

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ABSTRACT

The improved hardware performance and availability of low-cost, powerful head-mounted displays (HMDs) renewed the focus on Virtual Reality as an everyday tool in the engineering area two years ago. After some development time, it was possible for the use of HMDs to be firmly integrated into the daily work routine and existing processes at Daimler.

Apart from just the visualization of data, the focus of development was on interaction with the models and collaboration in 3D. For example, it was possible for functions known from post-processing to be integrated almost entirely into the VR environment. Evaluations are thus conducted collaboratively in various disciplines. Especially with partners spread around the world, this form of collaboration has contributed on the technical and interpersonal levels to improvements in the development process.

Building on this work, new topics, such as brushing, in-VR sculpting with the hands, voice control and haptic feedback, are being integrated.

Along with the software, standardized hardware is being developed. The aim is for the compact hardware to be made available close to each person's workplace and within a very short time in order to allow collaborative meetings to be called on the spur of the moment.