

Business use of Virtual Reality

Fast development and highest quality are today's conditions on the market of capital and consumer goods. The use of innovative methods leads to a time and cost advantage and therefore to market success. 3D CAD construction and the employment of simulation tools, as well as networked communication have already raised the efficiency and speed of product development.

The application of Virtual Reality is a further step towards a faster and better product design. By their usage in early product development phases, virtual prototypes and processes carry the potential for minimising design defects, which assists in reducing investment risks and fulfilling critical demands of the market and the consumer.

Application of Virtual Reality allows engineers to work on interactively tangible models of future products at their real scale. This enables early localisation of planning errors and design defects, validation of draft options and the consideration of ergonomic questions, and thus a truly interdisciplinary collaboration within the company.

Beginning with the first idea of product and process development to the point of initial operation as far as marketing and service, the application of VR technology facilitates the opening of efficiency reserves and the increase of competitiveness.

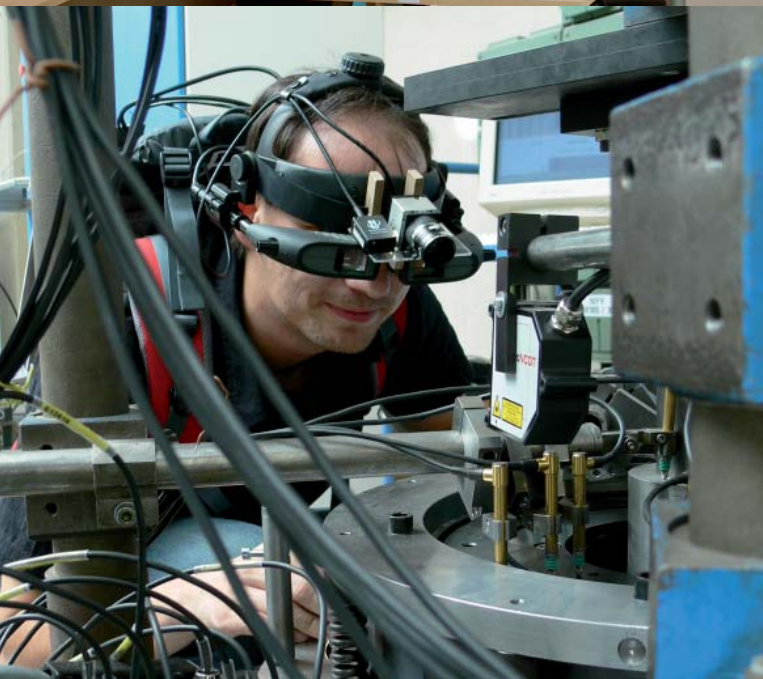


The **VRCP - Virtual Reality Center Production Engineering** at the Institute of Machine Tools and Production Processes at Chemnitz University of Technology offers an interdisciplinary platform for research, development, and application of VR technologies, focusing on mechanical engineering and production technology. One of our goals is the permanent further development of innovative technologies for practical usage within companies.

Take advantage from our experience and make use of our multifaceted range of services offered.

Range of Services Offered

- Visualisation and simulation of products, processes and factories
- Virtual comparison of options in case of new development
- Advanced post processing of components
- Virtual initial operation of machine tools
- Plant and factory planning
- Installation and assembly simulation of complex components
- Analysis and validation of ergonomic aspects on virtual machines and factories
- Movement analysis using Motion Capture
- 3D laser scanning for inventories
- Data preparation, modelling and simulation for VR demonstrations
- Customised VR presentations, animation creation, and rendering for product marketing
- Advisory service for installation and configuration of steady state or mobile VR presentation systems
- Planning, conception, and execution of VR presentations at exhibitions and events as well as offering workshops and training



The requirements on products and product development are increasing - data, models and systems become more comprehensive and elaborate. VR technologies offer companies new perspectives for a successful realisation of their goals and visions.

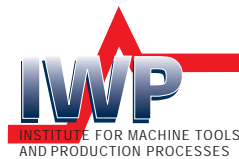
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From idea to virtual product Advance through Virtual Reality

