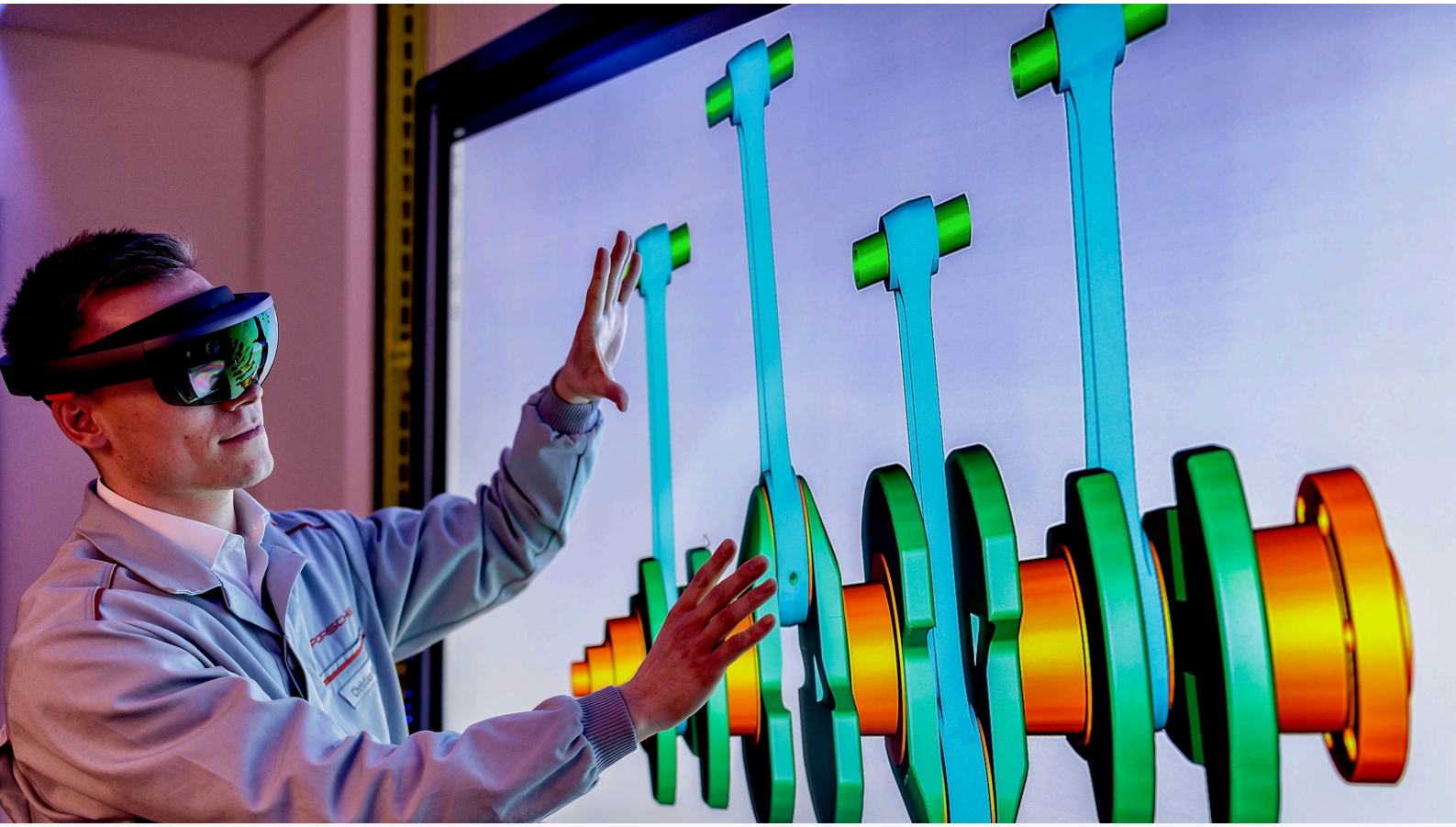


Porsche sets new quality benchmarks with its Inno-Space

08/02/2018 Using the Inno-Space innovation area that has just been opened at the Leipzig plant, Porsche is working on the quality management approach of the future.

For the past 70 years, Porsche has been synonymous with sports car construction at the very highest level and with an excellent quality standard. Around two thirds of all Porsche vehicles ever produced are still approved and roadworthy. This February, the first innovation will be put to the test in the Inno-Space: the look and feel test using augmented reality. By the end of the year, this concept is then set to be integrated into the production process. The test offers a fast and reliable means of highlighting deviations from the specified perfection level, enabling time savings and a significant increase in the analysis quality.

An interface between the present and the future of quality management

The Inno-Space forms an interface between the present and the future of quality management, allowing innovations to be developed and established so that they can be transferred into the series production processes at the plant. At this area a dedicated factory IT environment can be simulated, which can later be connected to the plant in a controlled way with a view to integrating new developments into the production process. An in-house IT team that works closely with the quality management team is the driving force behind these brand new technologies, apps and processes. “In the Inno-Space, we can design and test pioneering concepts for the future without disrupting the plant’s normal processes”, says Albrecht Reimold, Member of the Executive Board for Production and Logistics at Porsche AG.

The secured environment is used to test innovations for the quality management work of tomorrow. The team collaborates with various universities and start-ups. In partnership with GTV, a start-up based in Dresden, Porsche has been using augmented reality (AR) as a technical platform for quality control.

Originated in the Inno-Space: The AR look and feel test

The AR look and feel test is a typical example of how new innovations that originated in the Inno-Space are developed and implemented. GTV worked together with the Fraunhofer Society to develop a tablet app that takes the flaws found during the look and feel test and superimposes them over an image of the vehicle at each stage of the production process. First, the individual CAD data for the vehicle is read into the app and the camera in the tablet is held over a component; the CAD image is superimposed on the live image, making flaws or deviations immediately visible. The database also includes details of other parameters, such as joints. In this case too, comparing the live image with the CAD image directly highlights any joint areas that do not meet the required standard.

Another advantage is that the test process can be streamed in real time to any partner or site. At the same time, the flaws detected are stored in the plant’s central database and made available worldwide. “This feature means that we benefit from numerous advantages that reach well beyond merely the testing process”, says Andreas Schmidt, Head of Quality at the Porsche plant in Leipzig, responsible for implementing the augmented reality project with the research institutions. “The fact that the tablet is networked allows us to do things like quality audits with our suppliers via video conference at short notice.”

Porsche is continuously developing its approach to quality management

With innovations of this nature, Porsche is continuously developing its approach to quality management – and in many cases is setting the benchmark for others. “Top quality is an essential part of our brand identity at Porsche and is expected by our customers”, says Frank Moser, Head of Corporate Quality at Porsche. “The quality that Porsche delivers is the result of hard work driven by scrupulous precision and the passion to create the perfect sports car during all project phases and in all areas. When it comes to quality, we get to the very heart of every little detail – this is the approach that characterises the Porsche brand.”

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