

Virtual reality from Virtalis lets Vestas shorten development times

September 18, 2014 [Nic Sharpley](#) : [0 Comments](#)



Vestas Mediterranean in Madrid is the latest Vestas office to install a Virtalis ActiveWorks system, taking the number within the group into double figures.

"The fact that will surprise most people is that we, in some cases, find VR better than reality for the verification of designs. We've been able to do away with physical geometry and, in so doing, rectify errors at an earlier stage than ever before and communicate with more people in a more understandable way. Since we installed our first Virtalis ActiveWall five years ago, we've significantly broadened the key stakeholders involved in a new product design," says Allan Molbech, VR administrator at Vestas.

Vestas believes that the company wide adoption of VR technology shortened the product lifecycle of its V112-3MW Turbine significantly.

The inclusion of Health and Safety specialists, transportation experts, blue collar workers from the assembly line, service engineers and sales people, as well as the more directly connected design and production engineers in the design of the V112-3MW led to a more coherent design sooner than would have been possible by any other method.

The Vestas team, which comprises 40 or so "advanced users," calls its biweekly design collaborations "Serious Gaming", with each individual being represented by their own avatar who is able to collaborate with the other avatars in a virtual space that transcends national boundaries through the corporate network. In addition, Vestas' VR systems are also used several times daily for local design reviews and customer reviews.

Vestas Mediterranean's Virtalis installation comprises both an ActiveSpace and an ActiveWall located within a mock up of a turbine nacelle. The ActiveSpace, which fosters detailed technical investigations, boasts an nVisor ST50 HMD capable of delivering a 50o field of view at 1280x1024 resolution. The ActiveWall was designed with larger groups in mind and centres round a 3mx2.25m screen. The images are rear projected by a Christie Mirage with a short throw lens projecting onto the Stewart Screen via a mirror. Movements with the systems are tracked by an InterSense IS-900 Micro Trax. The fully integrated systems are run via Virtalis StereoWorks software and Virtalis Exchange on a HP workstation powered by an NVIDIA Quadro 6000 graphics card.



According to Allan Molbech, VR administrator at Vestas, the ActiveWorks system has allowed efficient, technical communication unaffected by distance.