

**ENGINEER,
EXPLORE,
EXPERIMENT...**

VR FOR MANUFACTURING...

Virtual Reality Breaks through Barriers

Virtual Reality (VR) and advanced visualisation are not just used for design reviews. Virtalis has an equal number of customers for whom manufacturing prove-outs and rehearsals and digital factory planning were their key drivers to invest in the technology.

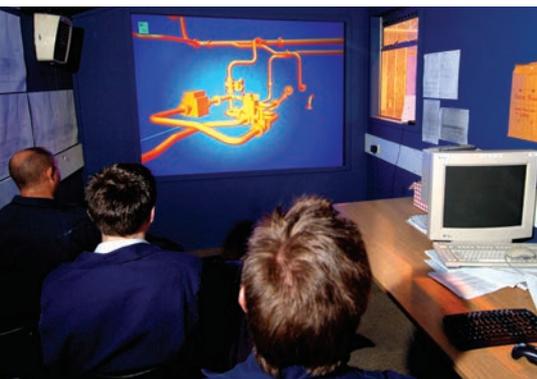
Operations teams can deploy VR hardware and software to review virtual prototypes, highlight manufacturing issues earlier, better understand the human factors implications and be able to train production line staff to get it right first time. This improves product build quality, leads to more efficient manufacturing and reduces errors and levels of rework. Our customers often describe their Virtalis VR system as a communication hub, where barriers are broken down and everyone is able to interact and speak the same language. This includes management and production line workers, designers and accountants.

“ People just drop in and look at the compartment they are working on. Sometimes they stay ten minutes, sometimes they stay an hour. If there is a particular problem they are wrestling with, they might pre-book a cabin. ”

Chris Foote, Pipe Fitter and Virtalis VR Cabin Systems Operator BAE SYSTEMS Submarine Solutions.

VR Enhances Factory Planning

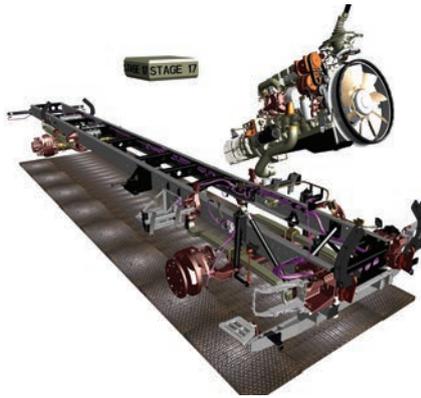
Stepping back from product design, VR helps businesses plan, model and simulate the whole Digital Factory. Starting with CAD models or scanned point cloud data of the factory and the plant, it is possible to visualise product and people flow through the proposed layout and to optimise that, before committing to capex and tooling costs.



KEY BENEFITS OF VR

- Improves communication
- Linked to key CAM companies, including Lanner, Dassault, Siemens and PTC
- Interaction between departments and other sites
- Re-use of CAD design data
- Able to visualise point cloud data
- Virtual factory planning allows exhaustive testing before capital investment

SOLUTIONS FOR... THE DIGITAL FACTORY



“ With Virtualis’ help we were able to build up the entire manufacturing process stage by stage. They installed a VR system, which allowed us to carry out design reviews with our manufacturing colleagues weekly. As we were able to work on how the design was to be built at the same time as the design itself, the manufacturing engineers quickly realised the advantages to them and their team on the production line.”

Doug Holmes, lead engineer of Leyland Truck’s Configuration Group.

Virtalis and its Partners Cover Manufacturing Software

Virtalis is an established business partner of all the main PLM companies, such as PTC, Dassault Systèmes and Siemens, and with CAD software suppliers to industry niches, like Sener for Shipbuilding.

We are also working in partnership with Lanner, the company behind the industry-leading WITNESS business process simulation software, to add VR capability and give users the ability to better understand and analyse their digital factories.



“ We approached Virtualis because we wanted to partner with a company that has both the technology and skills to equip WITNESS with powerful and flexible 3D and VR capabilities. Our customers will be better able to articulate their thinking visually, allowing people from very diverse professional backgrounds to communicate complex ideas across shared, intuitive and collaborative virtual environments.”

Ian Dabney, Lanner’s Head of Products.

The ActiveWorks Portfolio and Visionary Render

Virtalis’ ActiveWorks visualisation and immersive display systems are flexible and scalable and can be configured to meet your needs, based on what you want to visualise, the space available and the numbers of users involved.

Our reputation is based on our numerous reference sites worldwide. From desktop solutions, through transportable ActiveMove systems up to fully immersive, PC-clustered, multi-channel stereoscopic 3D ActiveWall or ActiveCube display systems, Virtualis has successfully designed, installed and supported them all.

Virtalis’ Visionary Render software renders the VR model in real-time, in 3D stereo, and with high update rates and negligible latency.



ACTIVEWORKS 3D
VIRTALIS

“ We’d been looking at VR technology for some time. We wanted a system that would take our CATIA and DELMIA PLM data and turn it into a 3D VR model automatically, without any need for translation. We also wanted a system that would link into a high end haptics system, allowing VR to become an integral, day to day tool for our manufacturing engineers.”

Geoff Tantum, Airbus UK’s Engineering Group Leader for Simulation.