Virtual reality at AZO
Computer-generated, interactive virtual exploration of 3D models

Virtual environment

Design and planning

System visualisation

Discussion tool

Mobile and stationary

Visualisation

The task in hand

It goes without saying that we and our customers plan layouts in 3D, but these can only give a limited spatial understanding of the situations being depicted. We therefore offer you the opportunity to dive into the virtual world and discover and experience the system and its surroundings for yourselves.

VR technology presents a full-scale depiction which can be used as a basis for sharing detailed information.

The solution

AZO offers a number of variants for depiction using VR, from the stationary VR unit at AZO's site to mobile, wireless VR systems that we can use at your premises.

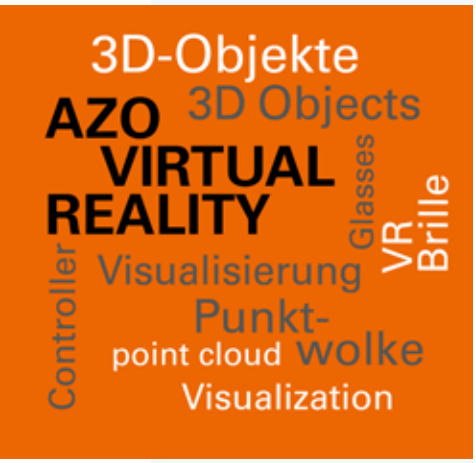
We have the perfect format for your VR presentation, whether its for larger numbers of participants or relatively small groups, at your company headquarters or on site at AZO.

It is advisable to inform your employees early about changes, especially changes to processes, new systems and handling concepts, and to involve them in the plans; this increases acceptance and helps counteract any preconceptions.

Full depiction incorporating:

- Architectural services
- Process facilities
- Systems for peripheral processes
- Components
- Point clouds made using 3D scans

SERVICES



Operating principle

The 3D data are converted into a suitable format in advance, if required, and then displayed in the VR goggles directly or via software. The projected environment then appears, and the observer can 'teleport' to the desired points (locations) using the controller. The system can also be considered in bird's-eye view using the Fly setting on the controller.
This gives an overview of the system, allowing movement through it to specific areas of interest.

It is possible to see through components and equipment to consider internal regions in more detail. Subassemblies can also be selected and moved.

The system has automatic boundary detection within the range of movement to protect the user. A virtual grid indicates the extent of their range of movement without coming into contact with interfering contours. This ensures passage through the virtual world without anything breaking the illusion.

Our team of experts is always working on new features for VR visualisation at AZO.

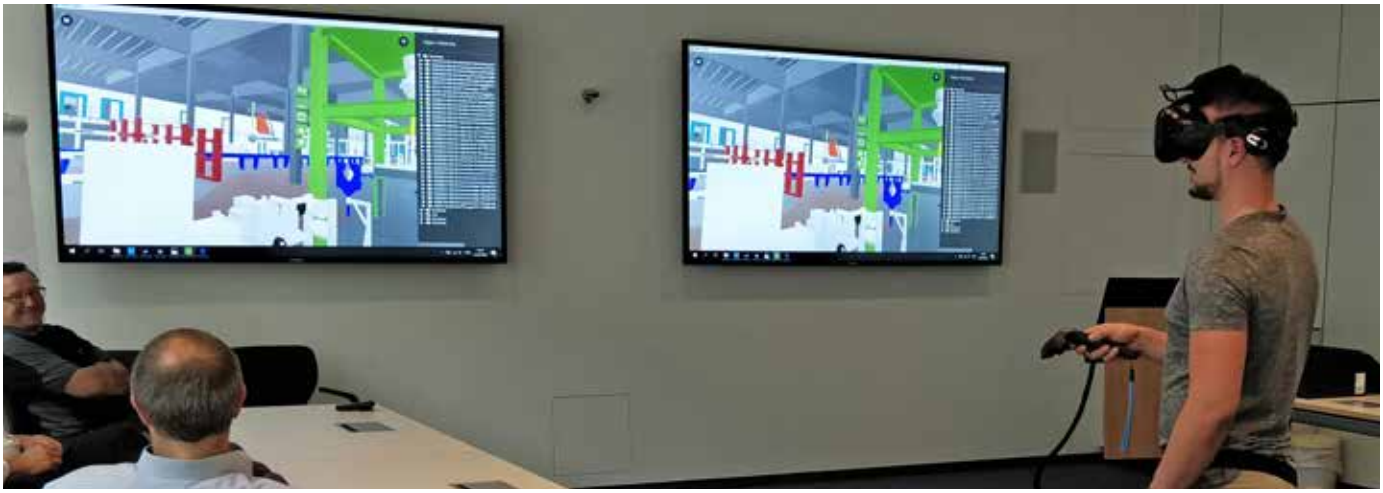
AZO®

1100 2060 GB

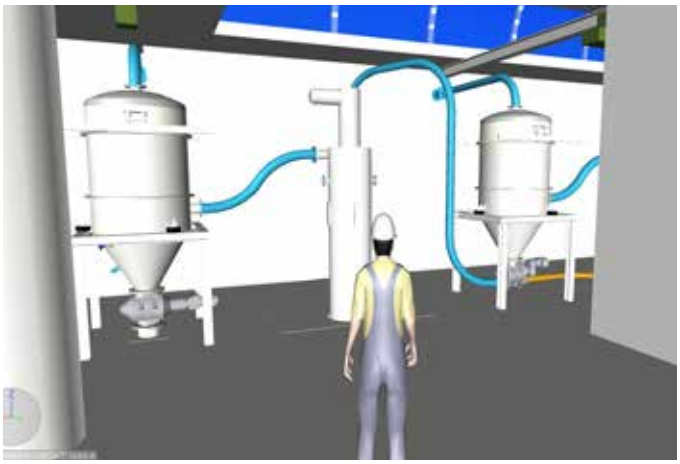
Technical data for VR goggles

	HP Windows Mixed Reality headset	HTC VIVE PRO SPEC	OCULUS Quest
Screen:	Dual LCD 2.89“ diagonal	Dual AMOLED 3.5“ diagonal	2x OLED with 72 Hz refresh rate
Resolution:	1440 x 1440 pixels per eye	1440 x 1600 pixels per eye	1600 x 1440 pixels per eye
Controller:	Two Bluetooth Windows Mixed Reality controllers	SteamVR Tracking 2.0	Two Bluetooth controllers
Cable length:	3.6 m reach	Wireless 5 m x 5 m range of movement	Wireless
Other:	Three face cushions, mobile version uses inside-out tracking, no sensors required	Face cushion / stationary version / eye relief with lens distance adjustment / 110° field of view	Mobile version uses inside-out tracking; all-in-one solution: no need to connect a computer

Application examples



The AZO media centre is equipped with the latest VR technology and has space for 25 attendees



The VR application offers customers the opportunity to access and examine systems before they are even installed. Employee training can be carried out prior to commissioning

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