The rise of Virtual Reality

Virtual reality (VR), in which computer-generated environments simulate real experiences, opens the way to exciting new applications in education.

Life-sized, digital twin representations, enhanced with process information that is generated in real-time, create innovative, immersive learning environments.

VR allows learners to visualize and understand complex and unfamiliar technologies and systems, easing the acquisition of concepts that often elude learners in classical teaching approaches.

Enabling VR in CIROS®

CIROS® is the universal, 3D virtual commissioning software program for factory automation and robotics.

Thanks to the VR simulator integrated into CIROS® software, a simple button-click sends learners to a 3D world, simulating complex factory automation equipment, mechanisms, and processes – without any risk to people or equipment – and allowing location-independent learning.

Highlights

- Real-time, interactive, 3D simulations
- Leverages VR for efficient and motivating learning
- Virtual commissioning enables quick familiarization training
- Pre-configured training equipment and scenarios
- Interfaces to all major CAD and 3D geometrical files
- MES4 and cyber-physical systems are optional
**CIROS® VR**

Virtual Reality simulation for immersive automation training

**Industry 4.0 and VR**

By its very nature of bridging digital and physical worlds, VR is particularly well-suited for Industry 4.0 training. Qualification for Industry 4.0 is made even easier and more stimulating when combining VR with cyber-physical systems from Festo Didactic.

Not only does it allow visualization of virtual images of the MPS systems, as well as CP Lab and CP Factory (CP product family is optional), but learners face virtual, yet full-scale equipment, real-life process and component behavior, and the ability to examine and virtually interact with equipment from different points of view to perform various tasks.

**Expand learning to MES**

The CIROS® VR interface provides an information exchange with the virtual environment.

Due to the consistent system approach, the VR simulator has a complete MES4 connection via an ERP, making learning more comprehensive.

**Flexible licensing**

CIROS® VR is available with all CIROS® 6 licenses as a free, pre-installed plugin available for both CIROS® Education and Studio editions.

CIROS® can be used as a complement to actual laboratory equipment, or as a stand-alone product for completely virtual training.

CIROS® 6 includes online interfaces to PLCs, EtherCAT, MATLAB, and many more.

Two options for license management are available:

- USB dongle license for physical use or concurrent license via network server
- Cloud-based software license through a Festo-hosted portal

**Hardware specs:**

Recommended specifications to run the CIROS® VR simulator at high fidelity (90 fps):

- Intel Core i5 7th Generation or equivalent
- 8 GB, 200 GB SSD or better
- NVIDIA GeForce GTX 1060 (for normal environments)
- NVIDIA GeForce GTX 1070 (for large environments)
- Windows 10 64-Bit
- HTC Vive VR-Headset (tested and recommended)
- CIROS® supports OpenVR through Steam

Contact your sales representative to get a quote for a CIROS® 6 license. Upgrade prices (from CIROS® 5.1 to 6) also available.