VR Smart Factory - Allen-Bradley



VR870-AB



Amatrol's VR Smart Factory - Allen-Bradley (VR870-AB) creates a digital twin of Amatrol's three-cart Mechatronics training system that can be explored virtually via a Meta Quest VR headset. Users can observe the operation of the system that assembles a working industrial directional control valve, including pneumatic pick and place feeding, go/no-go gauging/quality inspection (height and orientation verification), and automated inventory/parts storage.

In addition to observing the system in action, users can also interact with the virtual system, performing a variety of skills, such as: adjusting air pressure regulators for cylinders and vacuum generators; adjusting the ultrasonic sensor that regulates height measurement; viewing system information on the HMI screen; and adding parts to the gravity feeder. Several of these actions can also be performed via shortcuts using the left hand gaze controller on the VR headset.



Shortcut the Smart Factory Learning Curve with VR

Whether you already own an Amatrol Mechatronics training system or are investing in one soon, Amatrol's VR Smart Factory shortcuts the learning curve for users. Every user with a licensed VR headset can become familiar with the system's operation and practice basic adjustments to see how they affect the system's operation BEFORE working on the physical system. VR Smart Factory allows users to experiment and make mistakes in a virtual environment. Instructors can also expand the number of users learning at any particular time by allowing some users to work on the physical system while others use VR, which replicates the experience of using the real system.





Flexibility

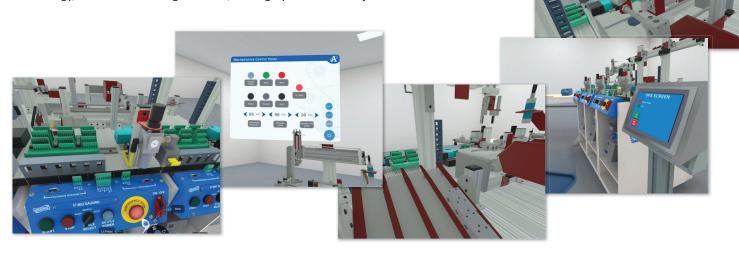
Instructors can allow multiple users to share one headset, or multiple headsets can be used to allow several users to interact with the virtual system simultaneously. Each VR headset requires its own license. This gives instructors the flexibility to craft a unique learning experience for users.

Accessibility

Amatrol's full Mechatronics line requires a generous amount of lab space that not all facilities can accommodate. VR Smart Factory, on the other hand, requires very little space. In fact, users with accessibility issues will find that they can observe and interact with the system virtually even when seated or in a very small space.

Expand Users' Learning Experience

VR Smart Factory replicates the real three-cart Mechatronics system in such detail that it presents a unique opportunity for instructors to combine VR Smart Factory with the real physical training system and Amatrol's eLearning curriculum to create an immersive learning experience that will better prepare users with real hands-on skills relevant to modern industry needs. Industry 4.0 skills are in high demand today, and workers with experience with advanced technology, such as VR and digital twins, are highly valued in the job market.





Required Hardware

Each VR Smart Factory license will require a Meta Quest 3 VR headset (purchased separately).

