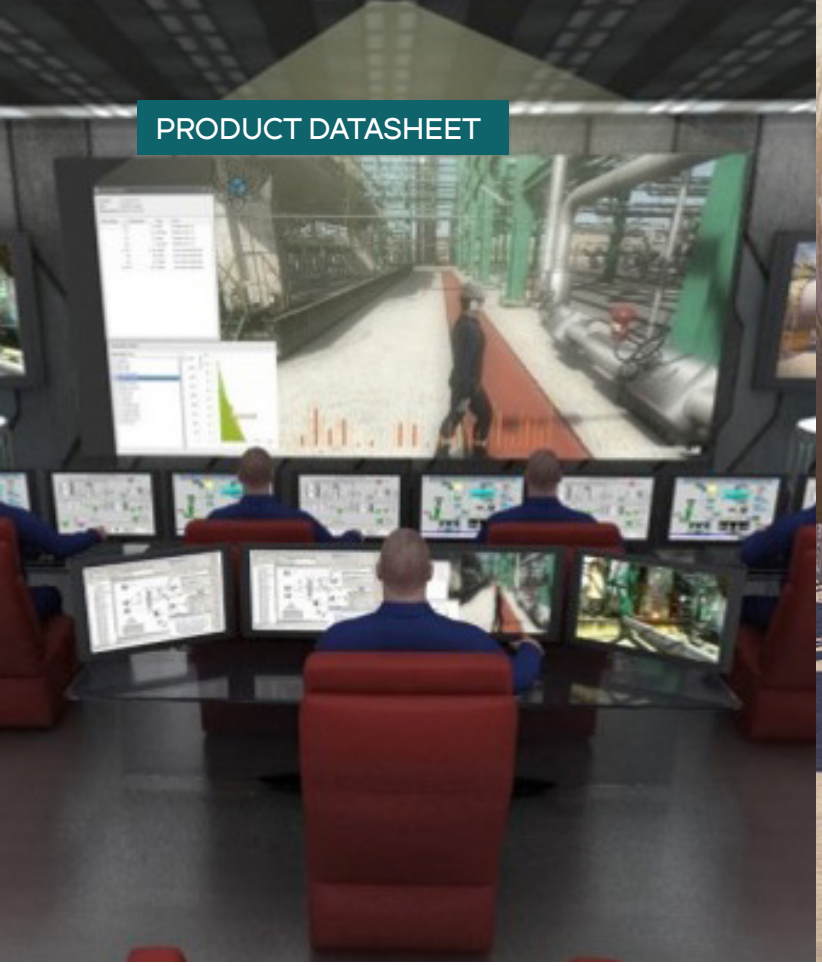
PRODUCT DATASHEET



IMMERSIVE VIRTUAL REALITY TRAINING

The Immersive Training System (ITS), connects all operators and plant personnel with a high-fidelity 3-Dimensional process simulation and virtual walkthrough plant environment. Operator Training Simulators (OTS) allow operators to train on a computer in an identical environment to the control room. This provides a realistic virtual learning environment, which prepares personnel to act appropriately in any given situation. The Immersive Training System supports the capture and knowledge-transfer of best practices, increasing efficiency and reducing costly errors or maintenance.

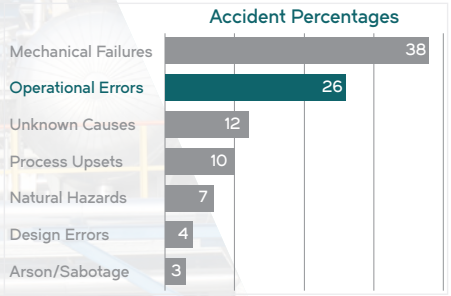
Summary

The Immersive Training System uses the next generation of gaming technology to create an Immersive, Interactive Virtual Reality Training environment to empower the process industries to train and certify their operators.

Use the Immersive Training System for procedural training, operator familiarization, safety scenario practice, knowledge capture, maintenance planning, gaining operator engagement and team training to improve operations and safety corporate-wide.

Business Value

The Immersive Training System captures the inherent value in the knowledge base of your workforce, integrating it into a comprehensive training program that grows with your needs.

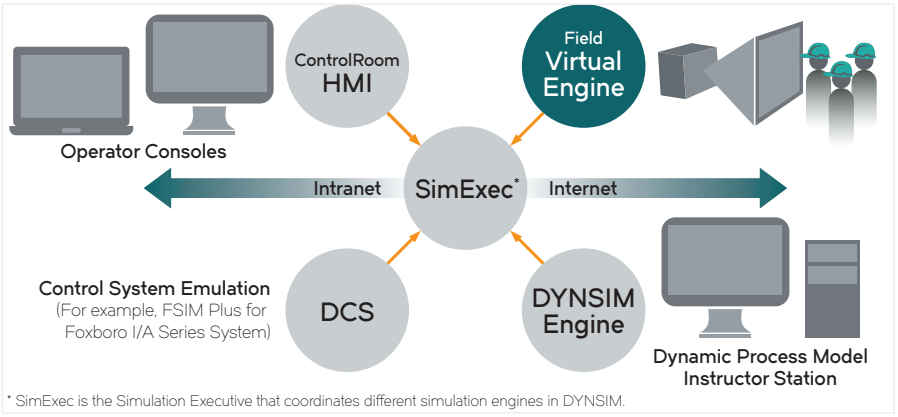


A Comprehensive Plant Crew Training Solution

The Immersive Virtual Reality Training System is a comprehensive solution linking Control Room Operators to Field Operators, Maintenance Operators, and other critical team members in your process, by means of a High-Fidelity Process Simulation coupled with a Virtual Walkthrough Plant Environment. The Immersive Training System provides a complete Plant Crew Training System, capturing best practices, rarely-used procedures and other operations and makes them systems of record for continuous use and refinement.

The Immersive Training System Modular Architecture

The Immersive Training System's modular architecture allows you to link to major DCS systems, as well as "traditional" Operator Training Simulators. Leveraging the SIM4ME® architecture data is easily transferred between the Virtual Environment, the SimSci Dynamic Simulation Suite and any 3rd-party software or data source required for the overall solution. This environment allows for a multifunctional scalable technology.



Traditional Training Simulators Don't Cover Field Operators

As the chart shows, the second-highest source of accidents in plant operations are operational errors.

Your challenge? How to ensure that the practices you create are enforced, standardized, and proliferated, from employee to employee, and maintain consistency by shift, by plant, or by site. It is commonly accepted amongst the educational institutions that retention of knowledge is significantly increased through a "learning by doing" approach compared to reading or classroom teaching. As a result, the use of simulation, (OTS), is considered best practice for training control room operators to allow them to experience real-life operating scenarios and learn by practicing in a safe training environment.

Now, Virtual Reality Comes to the Plant

What if your process could be simulated, with full operator interaction? Emulating not only the existing hardware and software systems, but the physical plant design and layout, and operator consoles? And creating an interactive, 3D environment for training, testing, and process simulation? That is what the The Immersive Training System brings. Modeling your plant the way it is, and the way it will be.

Import existing CAD/CAM designs, Laser Scan or Photographic surveys into the Immersive Training System to create a 3D stereoscopic photorealistic interactive Virtual Reality environment. Create any number of safety and training scenarios to put your operators through their paces.

The Immersive Training System Benefits: Optimize Training Throughout the Plant

- Reduce the time to operator proficiency
- Improve operators ability to respond quickly and correctly to emergency situations
- Provide a realistic environment to practice operating procedures
- Improve skills for rarely performed but safety-critical tasks
- Maximize team training and communications between the control room and the field
- Reduce unnecessary shutdowns and reduce plant performance due to operator error
- Capture operator knowledge and best practice

The Immersive Training System Brings Real Value to Operations

The Immersive Training System has shown to reduce the time-to-value, and costs of on the job training, by 30 to 40%. It reduces the time of startup when recovering from a planned or unplanned shutdown, or from warm/cold conditions, by 15 to 20%. And, it contributes to a maintenance budget savings of 1 to 3%. These costs can rapidly reduce the total cost of ownership for the Immersive Training System within the first year deployment.

The Immersive Training System's Solution Components

The Immersive Training System represents the "best in breed" of training components from SimSci, representing generations of design and operator training simulation:

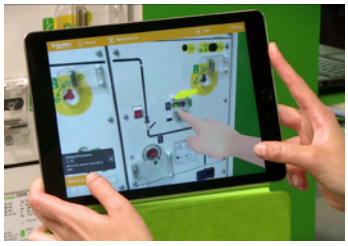
- High Fidelity dynamic simulation in DYNSIM
- Integration of multiple software components using SIM4ME
- Immersive Interactive Virtual Reality in the Immersive Training System
- Stereoscopic 3D Visualisation using any modern VR hardware
- Interaction using any modern input device (gamepads, gloves, gesture recognition)
- Connection and interaction with mobile devices

Services Offerings

To complement the software, offerings include:

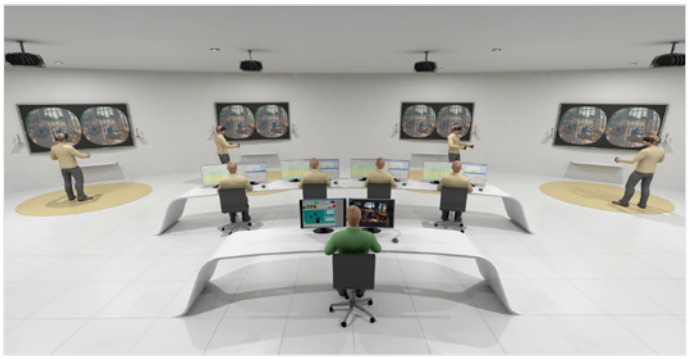
- A managed service model for total system maintenance and upkeep
- 3D Photo Scanning and 3D Modeling
- Virtual Reality configuration
- Systems integration
- Training programs






Infrastructure

Whether you need a virtual reality facility to test your designs, hardware and equipment for deployment, or mobile solutions for remote data entry and operator feedback, these components are available to complete your Virtual Reality system.



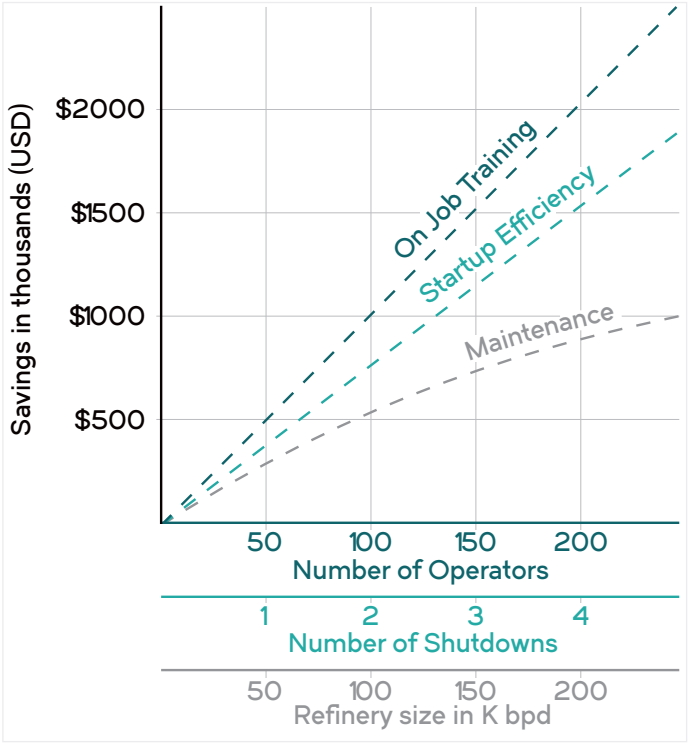
Basic Architecture

The Immersive Training System's Virtual Reality experience starts with the control room - a Virtual Reality engine provides operators with a rich, 3D experience using special visors, 3D projection, or 3D HDTVs for field training. DYNSIM Dynamic Simulation Software from SimSci contributes High-Fidelity Simulation for operator training and process engineering design studies. All contribute to increasing the operator's basic understanding of the processes, equipment, and procedures necessary for safe and reliable operations.

The Immersive Training System Savings

Use the Immersive Training System to accelerate cost savings that can show a lower total cost of ownership after just a few months use. Typical savings include:

- Save 30 to 40% on time and costs for on the job training
- Reduce time of startups, from planned/ unplanned shutdowns, or from warm/ cold conditions, by 15 to 20%
- Save 1 to 3% on maintenance budgets



For more information, visit www.aveva.com or contact your local salesperson about the Immersive Training System.