Process Operator Training Simulators

For over 40 years, GSE Systems has been developing operator training simulators that provide real solutions to challenging industry problems. As more organizations realize the potential benefits of dynamic simulation, the use of cost effective, high-fidelity process simulators has steadily increased.

How Do You Manage Change?

When an organization is challenged with a new task or a change to an existing operation, simulation is an effective supporting technology. Whether impending changes require operator training or engineering evaluation, simulation can help shorten schedules, lower costs, and mitigate project risks. If your answer is “yes” to some of the below questions, then a realtime, dynamic process simulator can help your plant.

Would plant OPERATIONS benefit from...

- A better understanding of process fundamentals?
- Refined operational techniques?
- Faster identification and diagnosis of fault conditions?
- Improved handling of emergencies or abnormal plant conditions?

Would plant ENGINEERING benefit from...

- Real-time, dynamic design verification?
- DCS pre-installation checkout?
- Process control strategy evaluation?
- Pre-tuning of control loops?
- Process re-engineering?

Would plant MANAGEMENT benefit from...

- Reduced costs during design and construction?
- Assurance of on time startup for a faster revenue stream?
- Operator training for OSHA 1910 compliance?
- Higher operating margins from increased plant efficiency, reliability, and availability?
- JPro™ simulation systems even include SimScore™ — an instructor monitoring and trainee assessment package.
- This comprehensive scoring package provides:
  - Tracking of any variables used within the simulation system
  - Weighting of variables to develop scoring criteria
  - Multiple evaluation techniques (average, integral, etc.)
  - Collated scores for a single numeric evaluation of a system or individual

Instructor facilities to select and initiate a Malfunction, and monitor trainee performance
More Than a Trainer

The development of a high-fidelity, dynamic training simulator can also be useful to engineering. JPro process simulation allows you to have one or more models, created and maintained using state-of-the-art graphical tools. This supports a wide range of engineering evaluation applications.

- Engineers will appreciate the added insight of a dynamic model.
- With cost effective personal computers and flexible JPro licensing...there is portability of the process model to the engineer’s desk or notebook.
- Whether a control system is simulated, partially stimulated, or fully stimulated...JPro tools allow the engineer to selectively emulate control loops for added case study flexibility.
- When used with SmartTutor™ software from GSE Systems...the engineer can control the simulator from familiar Microsoft® Word, and use dynamic presentation capabilities with PowerPoint.
- As the JPro simulation model is based on design and real plant data...there is long term support for a continuous plant improvement program.

Manage Change Effectively

When your plant faces a change or something entirely new, would you like to know what the effects are before you implement it on the actual plant? Would it be better to test alternate courses of action first, and then make a more informed decision? Would you like to check out potentially good ideas that you would not risk trying directly on the actual plant? How will you gain the confidence of control room operators to accept change and properly handle it in the plant?

If you see the need for improved training, or whenever change comes to your

- Plant
- Operations
- Control Systems

SimScore display for trainee assessment

GSE SYSTEMS
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