SULFURIC ACID PLANT PROCESS OPERATOR TRAINING SIMULATOR

PROVIDING YOU CONTINUOUS IMPROVEMENT AND A COMPETITIVE EDGE



Today's markets are more competitive than ever—and as companies continue to expand and overhaul their facilities, DuPont has increased the range of products, services and training we offer for sulfuric acid plants and sulfuric acid storage/handling/ transfer systems.

World-class process safety performance is a differentiating element for companies aiming to be competitive in today's markets. This level of performance requires an operator training program that drives continuous improvement and protects a company's employees, facilities, profits, its surrounding community and the environment. In recognition of this critical need, DuPont Sustainable Solutions now offers an expanded portfolio of Sulfuric Acid Process training products and services. This portfolio includes:

Traditional classroom operator training

Emergency response training

Startup / shutdown training

Sulfuric acid handling and safety training

Customized training programs

Our featured training solution, Operator Training Simulator for Sulfuric Acid Plant Process technologies

PROVEN, WORLD-CLASS EXPERIENCE IN DYNAMIC SIMULATION TRAINING

We believe that well-trained people are a key driver of excellence in all areas of business. Proper training builds confidence, fosters teamwork and promotes continuous improvement in safety, quality, productivity and efficiency. Better trained operators make better decisions, save money and reduce safety and environmental incidents.

That's why DuPont created TMODSTM, a proprietary dynamic simulation software engine based on chemical engineering principles, providing a platform for operators and engineers to 'operate' chemical processes virtually. Today, TMODSTM continues to be widely used at DuPont more than 20 years after its invention. It serves as the underlying engine in numerous chemical process simulator within DuPont and is used internally to facilitate operator training for safe and reliable startup and sustainable unit operation for many of our manufacturing processes, including the production of sulfuric acid.





PARTNERING WITH YOU TO IMPROVE OPERATOR TRAINING AND SAFETY

Today, dynamic Operator Training Simulators are the industry standard for training operations personnel in manufacturing facilities around the world, enabling:

- Improved operator response
- Improved profitability
- Improved uptime
- Reduced startup time

With high-fidelity Operator Training Simulators from DuPont Sustainable Solutions, operators and engineers become familiar with:

- Proper start-up and shut down procedures
- Graphic layouts
- Correct responses to abnormal conditions
- Operator console functions
- Process dynamics
- Unit performance optimization

SULFURIC ACID PLANT PROCESS OPERATOR TRAINING SIMULATOR – STATE OF THE ART FEATURES

The Operator Training Simulator available through DuPont Sustainable Solutions models the entire acid plant and includes unique processing capabilities including simulation of:

Dual absorption configuration
Gas cleaning and drying area
Oxidation and heat exchange areas
Strong acid absorption areas
Environmental performance and stack emissions
Sub-optimal conditions
Emergency scenarios

Configuration Highlights

- Available as a stand-alone PC work station or integrated into the DCS system, where DCS-integration provides an excellent tool for debugging control system logic prior to unit startup
- Can be configured to allow for separate student and trainer work stations in which the trainer can initiate scenarios or make process changes to test student responses.







DuPont Operator Training Simulators can be fully customized, allowing you to create a training environment that is as close to your real unit as possible; customization may include tag names, DCS screens, process configuration, control logic and equipment sizes.

Additional Features

- Built-in analytical tools that allow the instructor to measure and report student performance relative to key training goals, such as competency, change in knowledge, and retention over time.
- Simulation speeds up to 10x real-time.
- Interactive interface designed to resemble board operator DCS screens.
- Easy-to-navigate graphical user interface allows operators to view and adjust controllers, switches, set points and alarms just as they would on a conventional DCS.
- Trend lines that allow operators to track moving process variables quickly and easily over time.
- Large library of scenarios that teach operators how to identify situations and respond quickly, efficiently and safely.

SULFURIC ACID PLANT PROCESS OPERATOR TRAINING SIMULATOR

REAL BENEFITS FOR REAL RESULTS

The Sulfuric Acid Plant Process Operator Training Simulator offers you proven state of the art, realistic training that can improve operator and unit performance when it counts most.



By working with our simulator, your organization can:

Improve Safety & Reliability

- Practice upset or failure scenarios BEFORE they occur in an operating plant increasing the probability of a correct response.
- Learn to recognize sub-optimal operating conditions.
- Test emergency response procedures for pump failures, compressor trip, power failure, etc.

Optimize Unit Performance

- Practice and master essential unit principles and skills.
- Adopt industry best practices.

Increase Training Effectiveness

- Learn critical operations concepts from world-class subject matter experts with practical, hands on experience.
- Deliver a content-rich, hands-on training experience that results in greater student engagement and knowledge retention.
- Train using real-life scenarios in a safe environment, and provide immediate feedback on performance for proper skill development.

Contact us today to find out how DuPont's real-world experience, science-based innovation, problemsolving success and our Clean Technologies experts can help your organization transform itself to become safer, more efficient and more environmentally sustainable.

For more information on our Sulfuric Acid Plant Process Operator Training Simulator, contact Dave Dericotte at +1-913-327- 3550 or David.Dericotte@dupont.com, or visit us at

www.sustainablesolutions.dupont.com

DuPont Sustainable Solutions CLEAN TECHNOLOGIES