

EnVision
On-Demand



Operator Training Solutions for Oil & Gas Production, NGL (Gas Plant) & LNG Facilities, Refineries & Petrochemical Facilities, Power Plants & Technical Colleges.

GSE SYSTEMS[®]
Your performance improvement partner



Cloud-based SaaS solution provides anytime, anywhere access to rich learning content to broaden the learning environment, and allow users to conduct training where they learn best



On-Demand
Learn anytime, anywhere



No IT requirement
No software to load, tracking versions, etc.



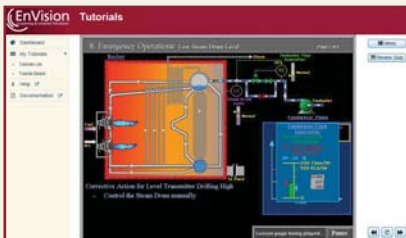
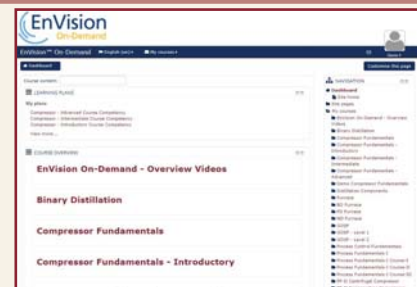
Structured Learning
From basic to advanced learning



Proven Content
Validated by world's largest oil and gas companies for over 20 years



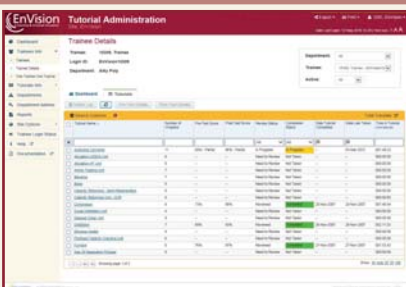
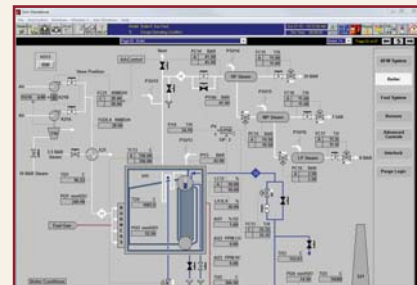
Learning Management System
Included LMS can work as your platform or provide input into your specific LMS



Tutorials
Content rich and self paced -- Gain the basic knowledge needed to progress to more process-specific instruction



Simulations
High-fidelity simulation models -- safe learning environment features predefined training exercises and the ability to create your own

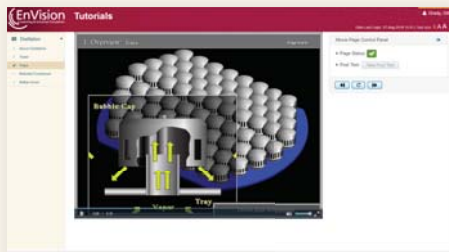


Administration
The metrics you need for continuous improvement -- track student, department and site performance, analyze challenging subjects, and more

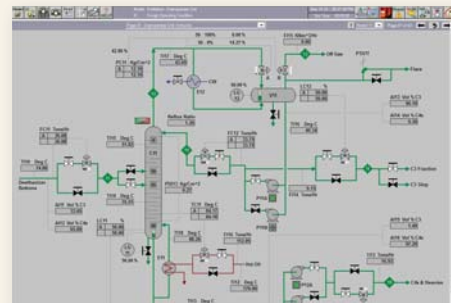


Benefits of GSE's EnVision Products

- State of the art training system
- Efficient training: shortens training time
- Better process knowledge retention
- Increased user motivation
- Teaches fundamental principles
- Improves troubleshooting skills
- Provides virtual operating experience
- Training can be conducted 24 hours/7 days
- Trains operators and engineers at all levels
- Reduces instructor load
- Reduces instruction cost
- Low ownership cost
- Available in English, Danish, Dutch, French, German, Spanish, and Swedish



Distillation Tutorial - Tray Type



Distillation Depropanizer Simulator

The **e-Learning Tutorials** are multimedia based self-paced tutorials that teach the fundamentals of various unit operations and process control.

The tutorials have built-in quizzes, and come with learning management software that allows an instructor to register trainees and monitor their performance and quiz scores.

Delivered using voice, video, animation and graphics

- Provides focused and structured learning
- Develops mental models for Unit Operations
- Teaches:
 - “Why”, developing reasoning skills
 - Principles of Operations
 - Cause and effect relationships
- Pre/Post tests
- Review questions

The **Simulator** is a real-time dynamic simulator for practicing various operations, such as startup, shutdown, normal operations and troubleshooting on a process specific simulated unit.

- Simulation control with Pause, Resume & Accelerated mode
- Multiple initial conditions
- Snapshots
- Equipment and instrument malfunctions
- Scenarios
- User changeable battery limits
- On-line help
- User log
- Composition analysis
- Extensive printing and logging functions
- DCS-like, with generic instrument and graphic displays

Combines comprehensive standardized dynamic simulations and e-Learning tutorials for training operators, engineers, and maintenance staff

Visit www.GSES.com/EnVision for more information

Unit Operations

- Amine Treating for Refineries (Sim + CBT)
- Boiler (Sim + CBT)
- Compressor (Sim + CBT)
- Distillation: Depropanizer (Sim + CBT)
- Furnace (Sim + CBT)
- Pump (CBT)

Upstream/Midstream

- Amine Treating for Upstream (Sim + CBT)
- Glycol Dehydration (Sim)
- GOSP: Gas Oil Separation Process (Sim + CBT)
- Propane Refrigeration Unit (Sim + CBT)
- Feed Gas Conditioning (Sim + CBT)
- NGL Fractionation (Sim)
- NGL Gas Plant with Demethanizer (Sim + CBT)
- LNG-SMR, using Single Mixed Refrigerant (Sim + CBT)

Power

- Furnace (Sim + CBT)
- Steam & Power Generation Boiler (Sim)
- Steam Boiler (Sim + CBT)

Refineries

- Alkylation-HF (Sim + CBT)
- Alkylation-HFSO₄ (Sim + CBT)
- Blending: Gasoline and Fuel Oil (Sim + CBT)
- CDU Atm. & Vacuum (Sim + CBT)
- Delayed Coker (Sim + CBT)
- FCC: Fluidized Catalytic Cracker (Sim + CBT)
- HCU: Hydrocracker Unit (Sim + CBT)
- HDS: Diesel Hydrotreater (Sim + CBT)
- Hydrogen Unit (SMR) with PSA (Sim + CBT)
- Reformer-CCR (Sim + CBT)
- Reformer-Fixed Bed (Sim + CBT)
- SRU: Claus Process (Sim + CBT)
- SRU: SCOT Tail Gas Treating Unit (Sim + CBT)
- Visbreaker (Sim + CBT)

Ethylene

- Acetylene Converter Reactor (Sim + CBT)
- Ethylene Cracking Heater (CBT)
- Ethylene Refrigeration Unit (Sim)

Process Fundamentals and Controls

- Process Fundamentals-I (Sim)
 - Gas & Liquid Flow
 - Pipe Flow Network
 - Single Phase Heat Exchanger
 - Single Phase Exchanger with Bypass Control
 - Air Cooler
 - Tank & Pump
 - Tank, Pump & Heat Exchanger
- Process Fundamentals-II (Sim)
 - Centrifugal Compressor
 - Condensing Heat Exchanger
 - Flash Drum
 - Kettle Type Reboiler Heat Exchanger
 - Mixer with Heating Jacket
 - Reciprocating Compressor
 - Steam Turbine with Condenser
 - Reflux Drum with Overhead Condenser
 - Three Phase Separator
- Process Fundamentals-III (Sim)
 - CSTR Reactor
 - Cooling Tower
 - Distillation: Ethanol + Water
 - Distillation: Methanol + Water
 - Liquid-Liquid Extraction
 - Tank Terminal
- Process Control Fundamentals (Sim)
 - Cascade and Ratio Control
 - Feed Forward Control
 - Override Control
 - Split Range Control
- Process Control Experiments
- Basic Process Control (CBT)
- Advanced Process Control (CBT)
- Instrumentation (CBT)



GSE Systems, Inc.

1332 Londontown Boulevard, Suite 200
Sykesville, Maryland 21784 USA

T: +1 410.970.7800

F: +1 410.970.7997

E: envisioninfo@gses.com

www.GSES.com

Connect with us on:

