EnVision
e-Learning & Universal Simulation

Process Control Advanced Concepts Tutorial

A self-paced MultiMedia based Tutorial/CBT on Process Control Advanced Concepts.

Tutorial/CBT:

This interactive course explains the Advanced Concepts of Process Control and Dynamics using Voice, Video, Animation and Graphics.

Introduction
- Overview of Conventional Control
- Overview of Advanced Control
- Block Diagrams
- Definitions

Process Dynamics
- Introduction
- Process Characteristics
- Linear Systems

PID Controller
- Introduction
- PID Gap Controller
- Variations of PID Controller
- Advanced Options in PID Controller
- Computer Control

Adaptive Control
- Introduction
- Gain Scheduling
- Auto Tuning
- Self Tuning Regulator
- Model Reference Adaptive Control

Dead Time Compensation
- Introduction
- Smith Predictor Algorithm
- Implementation

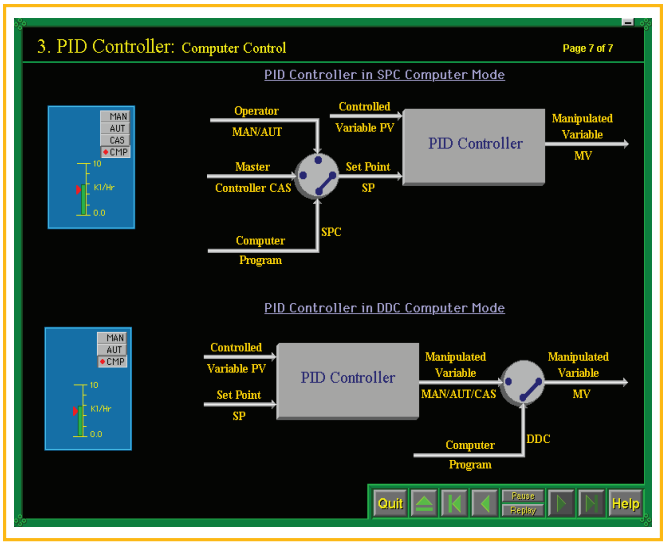
Feedforward Control
- Introduction
- Steady State Feedforward Control
- Dynamic Feedforward Control
- Feedforward Algorithm
- Combined Feedforward and Feedback Control

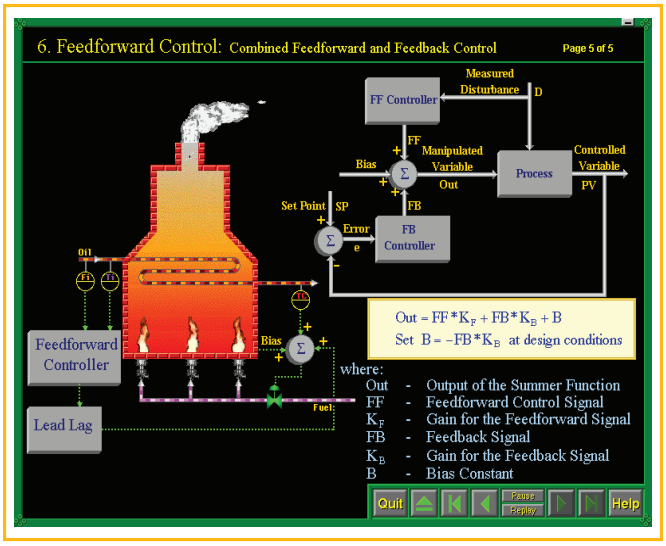
Non-Interacting Control
- Introduction
- Interaction Analysis
- Decoupler Design

Computed Variable Control
- Introduction
- Internal Reflux Control

Model Predictive Control
- Introduction
- Process Model
- Model Predictive Control
- Key Parameters
- Example

Intelligent Control
- Introduction
- Neural Network Based Control
- Fuzzy Logic Control





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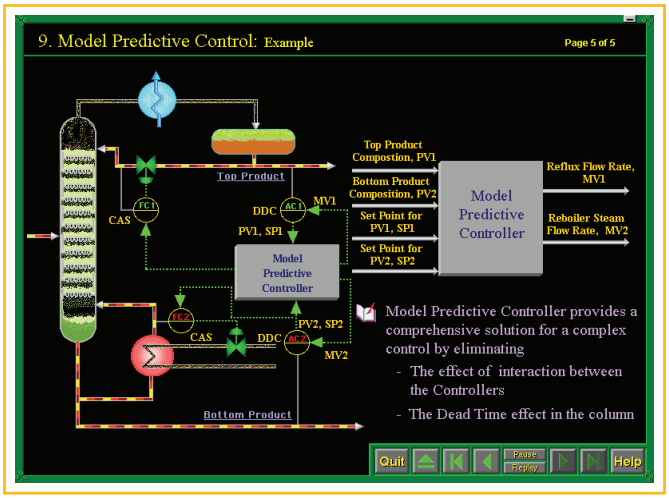

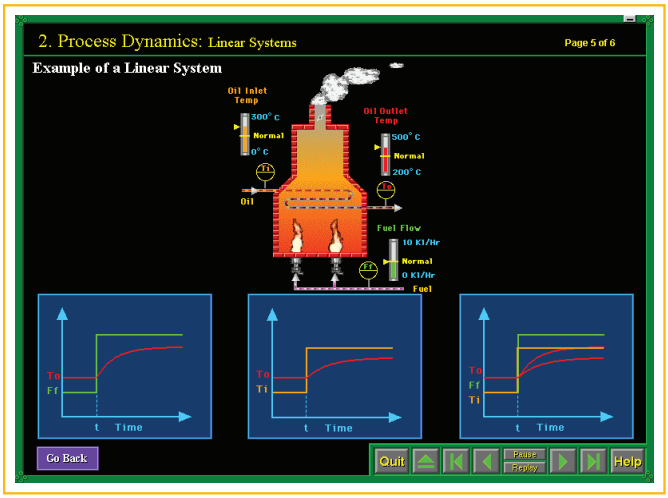

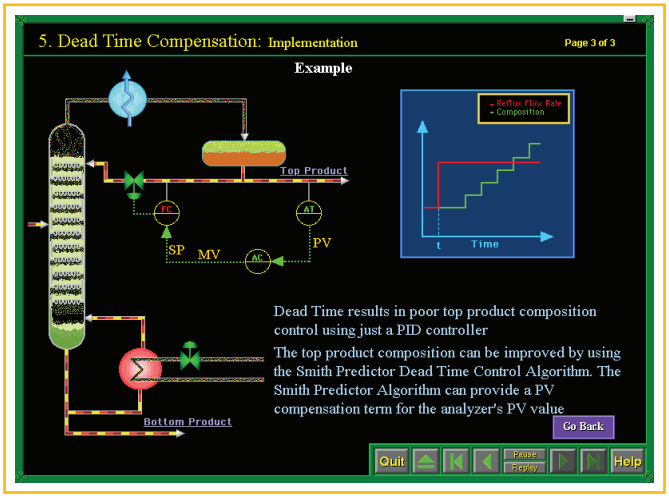

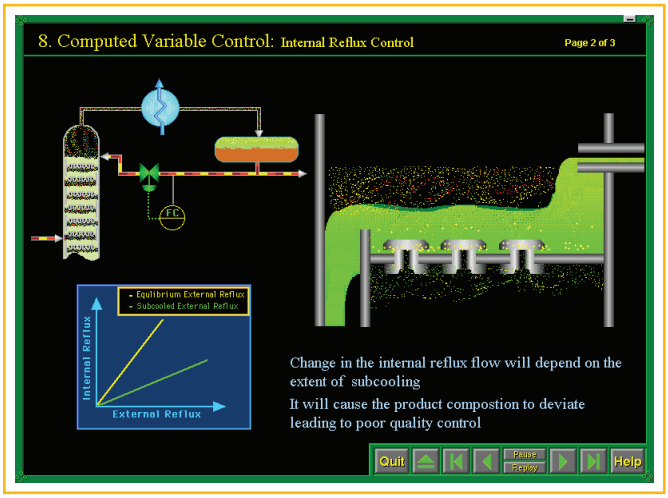

- Tutorial has a built-in Quiz and comes with a Learning Management System (LMS) called TutAdmin. The LMS allows an instructor to register trainees and monitor their performance and Quiz scores
- Tutorial is available as a Standalone or Web based application
- Available in English, Chinese, Danish, Dutch, French, German, Spanish and Swedish

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