EnVision
e-Learning & Universal Simulation

Ethylene Heater Tutorial

A self-paced MultiMedia based Tutorial/CBT for an Ethylene Heater.

Tutorial/CBT:

This interactive course explains the Fundamentals of an Ethylene Heater using Voice, Video, Animation and Graphics.

Overview
- Introduction
- Importance of Cracking Heaters
- Process Overview

Components
- Feed Preparation
- Dilution Steam System
- Convection Section
- Radiant Section
- Waste Heat Recovery
- Boiler Feed Water and Steam Drum
- Burner and Draft System
- Decoking System

Principles
- Cracking Chemistry
- Extent of Reactions
- Effects of Feedstock Composition
- Effects of Dilution Steam
- Coke Formation

Key Variables
- Coil Outlet Temperature
- Residence Time, Dilution Steam and Coil Outlet Pressure
- Draft Control and Crossover Temperature
- Operating Mode

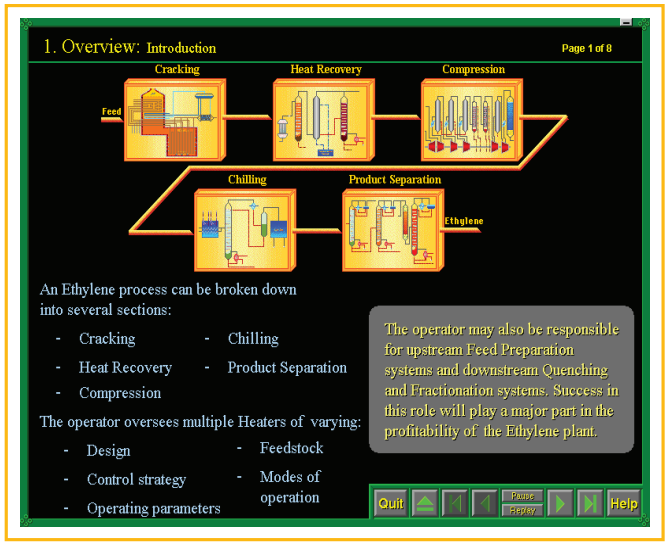
Startup
- Introduction
- Refractory Dry Out
- Warm-Up
- Feed Introduction

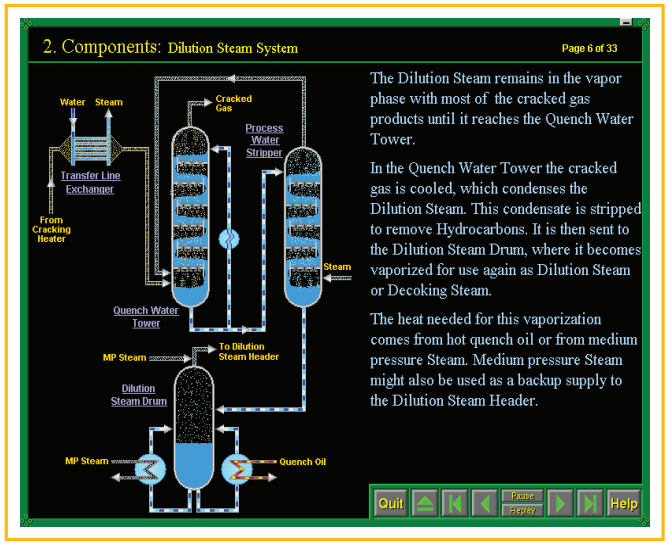
Shutdown
- Introduction
- Feed Removal
- Decoking and Cool Down

Safety Systems
- Safety Systems

Troubleshooting
- Operational Checks
- Typical Operating Problems
- Common Causes of Operator Error

Decoking Operation
- Introduction
- Decoking Procedure





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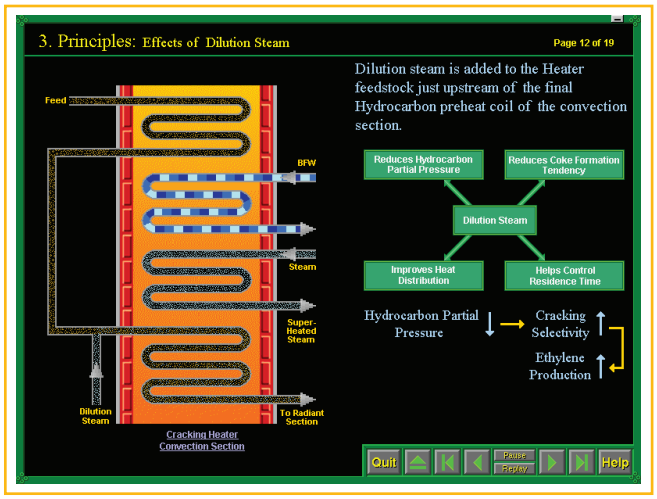

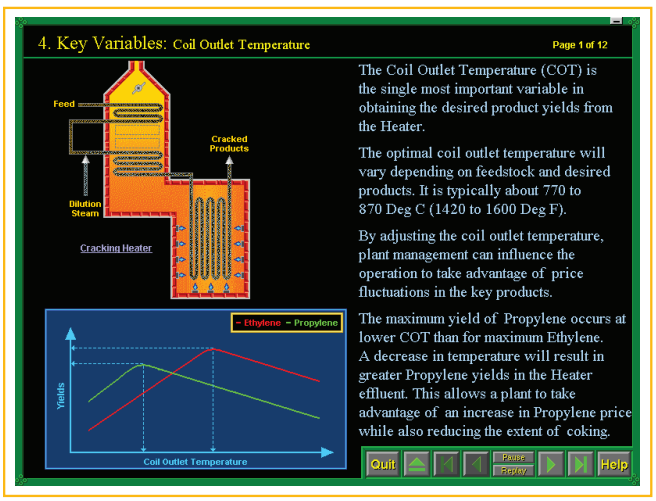

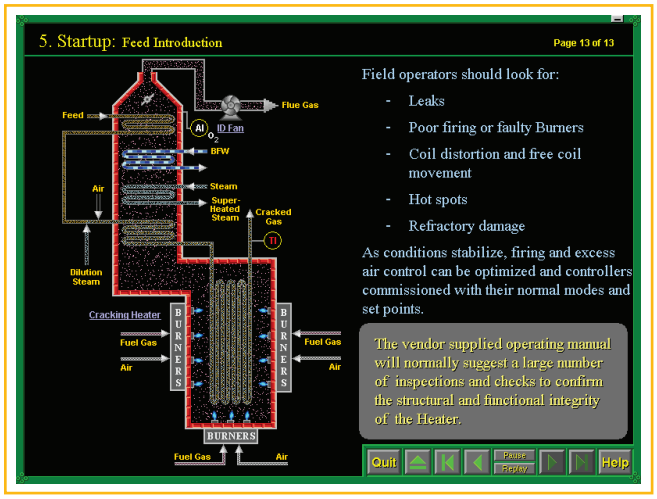

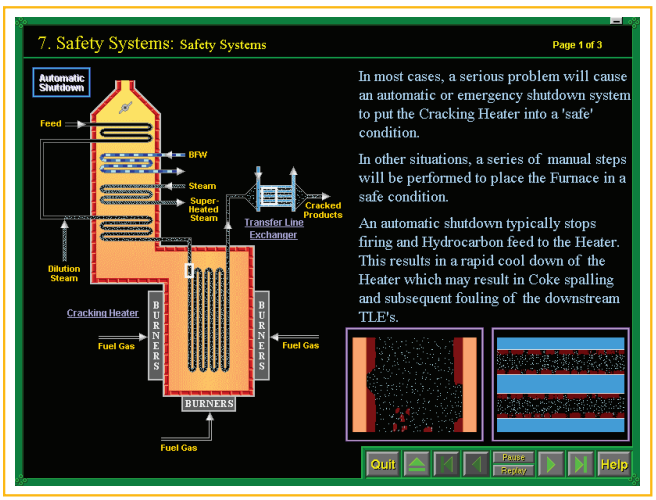

- Tutorial has a built-in Quiz and comes with a Learning Management System (LMS) called TutAdmin. The LMS allows an instructor to register trainees and monitor their performance and Quiz scores
- Tutorial is available as a Standalone or Web based application
- Available in English, Chinese, Danish, Dutch,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

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