

Operator Training Systems (OTS)

For efficient process operation

What Operator Training Systems (OTS) can offer

Each pilot has passed numerous hours of training in a flight simulator before he is allowed to fly a new type of aircraft. The benefits of this training are obvious.

An Operator Training System (OTS) is nothing less than a flight simulator for industrial processes. With an OTS it is possible to train plant operators and plant engineers as well as product developers. According to the demands on site different tasks and situations can be trained at any time. Various questions concerning complex process situations can be answered.

Training scenarios are set up by a trainer and repeated as often as necessary without any impact on the actual process. Training typically includes start-up and shut-down, change of load or product and critical process situations. Control strategies can be verified without any restrictions from the ongoing production.

Example: HOTS (Hostalen^{®1} Operator Training Simulator)

By means of the HOTS the influence of various process parameters from the polymer production in a reactor cascade can be trained. The influence of temperature and catalyst activity on quality levels such as density or melt flow index are important training scenarios.

Core piece of the HOTS is a process model which is capable of a simulation of the reaction process with very high accuracy. Any operator interventions in this virtual process are made through a generic interface that provides a simulation and emulation of the original DCS.

Due to the OTS the process knowledge can be increased and the real process can easier be operated within quality levels. The OTS is used for the training of personnel prior to an initial process operation as well as for the training of complete crews to enhance process knowledge.

¹ HDPE-Process of LyondellBasell

Project examples

- Hostalen[®] Operator Training Simulator (HOTS, LyondellBasell)
- Bio-Ethanol OTS - Demonstrator

Interested? Contact us!

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Your benefit

- Increased qualification & confidence of all plant operators
- Higher process understanding
- Optimized operator interventions:
 - safe handling of malfunctions
 - training experience on different process strategies
- Time saving on start-up & product change
- Increased plant availability
- Better control of quality requirements

Our range of services

Setup of training systems (complete or in parts). This includes:

- Process simulation
- Emulation of the control and communication system
- Individual training concepts
- Supply of all required hard and software
- Installation and initial operation

