



AspenTech 2009 Worldwide User Conference

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Marriott Woodlands Waterway Hotel

<http://www.aspentech.com/uc2009/>

Energy Management Session

Tuesday, May 5, 1:30-3:00 PM

LyondellBasell

“Online Energy Management with Aspen Utilities Operations”

Many chemical companies with energy intensive processes have already upgraded their process control systems with advanced process controls (APC) and real-time optimizers (RTO) to optimize the processes that are appropriate for full automation. For processes that can not be easily automated there are additional tools that can be used. These tools typically give advice to the board operators on how best to configure processes like complex utility systems (steam, gas, electricity, etc.) that are difficult to automate. The effectiveness of this type of technology in reducing the total energy demanded by the process increases as the complexity of these utility systems increases. This presentation is about implementing on-line open-loop utility optimization and real-time energy key performance indicator for energy-intensive unit operations.

Huntsman Corporation

“Advanced Modeling for Energy Reduction and Other Process Improvements”

Huntsman Corporation was seeking to improve processes with a focus on energy usage reduction by bringing more science to their operations. Through the use of advanced Aspen Plus models and Pinch Analysis, a team of AspenTech and Huntsman associates identified and implemented immediate process changes resulting in annual savings in excess of \$3.0 MM. Further capital improvement ideas with potential annual benefits in excess of \$13.0 MM were also identified and added to the Huntsman project planning process.

KBR

“Improving Steam System Design through Dynamic Modeling”

Dynamic modeling is an effective tool for determining the effects of multiple parameters on the stability of steam systems. Periodic investigation of these parameters enables process engineers to define and design more robust systems. This presentation is based on several recent studies by the authors, and shows how dynamic simulation was applied at different phases of the project.