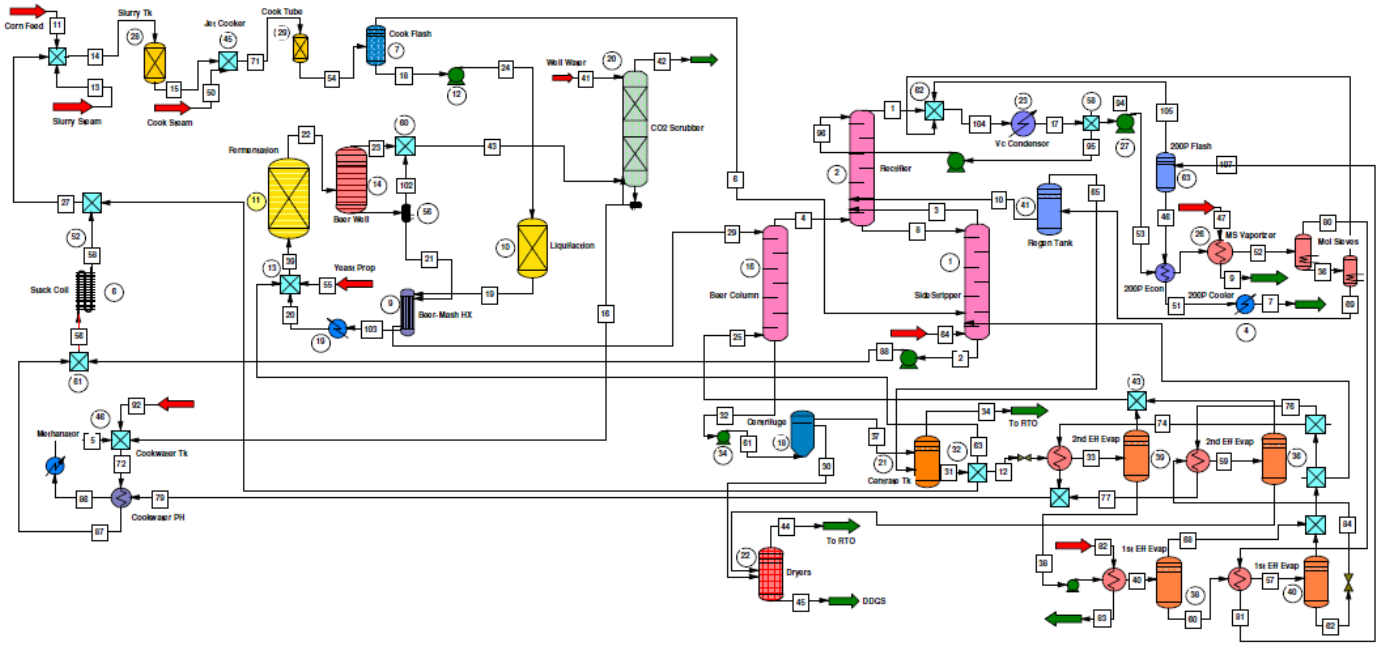
ADF Engineering
PROBLEM SOLVED

Benefits of Process Simulation Modeling

Creating a process simulation model can provide several benefits for new and existing processes. The ability to simulate process behavior without the costs of pilot trials or test runs can save man-hours and lost production, in addition to avoiding safety concerns that might arise when changing operational specifications.



Visualizes effects of process changes:

- ***Simulate changes to see mass/energy balance effects within a plant***
  - ***Especially beneficial for plants with heat integration and recycled process streams***
- ***Locate bottlenecks and determine new process limitations if bottlenecks are removed***
- ***Simulate effects of equipment modifications for heat exchangers, distillation columns, scrubbers, reactors and more***

Track and minimize utility consumption

- ***See where heating a cooling streams' energy is going, and how to minimize it***
- ***Compare simulation utility consumption to process data to find energy leaks and inefficiencies.***

Gives insight to process controls and operations

- ***Helps understand relationships between controlled and manipulated process variables***
- ***Establish control set points for various production scenarios by optimizing process centerlines***

ADF Engineering, Inc. • 228 Byers Road, Suite 202 • Miamisburg, OH 45342 • Phone: 937-847-2700