

How It Works

Batch Process Simulation

Planning for an increase in production using existing equipment and facilities can be complex. Yet, if armed with knowledge from a customized batch process simulation — an electronic model of an entire facility’s manufacturing process — you can:

- Optimize throughput for given capital investment
- Identify critical utility capacity
- Determine appropriate equipment size
- Define a realistic operating schedule
- Establish raw material usage
- Evaluate environmental impact
- Assess staffing levels

“With a technical process description detailing major unit operations and a targeted throughput, we can create a flexible electronic model that can give you a more accurate understanding of what the demands of the process are and how many

batches you can produce,” says Kris Chatrathi, Burns & McDonnell senior chemical process engineer. “So if you need to produce more than you can with existing equipment or you are seeking capital for a new process facility, a batch process simulation can determine what exactly you need and how much you have to spend to increase production.”

Batch process simulation can be especially beneficial to the manufacturers in the pharmaceutical, specialty chemical, food and consumer products markets. With the ability to model multiple products and processes

that share unit operations, batch process simulation can determine where your process is bottlenecking and allows process engineers to design an optimal, cost-effective solution.

The batch process simulation model can be used to evaluate alternative unit operations, processes or process improvements.

“The model provides critical data necessary to make an informed decision about the alternatives being evaluated,” says Chatrathi, “which saves you both time and money.”

For more information, contact Kris Chatrathi, (816) 349-6731.

