

Continuous Improvement with Ultramax

No process is perfect. When your goal is process improvement - whether you define improvement as higher yield, reduced impurities, lower energy consumption, or "whiter" product - Ultramax gives you a fast and accessible way to achieve it.

What Is Ultramax?

Ultramax is software (for your PC, minicomputer, or mainframe) that improves your process output by adjusting input variables that you control. For any process--even one with a number of input parameters--Ultramax discovers the interrelationships among the variables and tells you how to achieve quick improvement - without a prior computer model..

As an active participant in Ultramax optimization, you set the goals and objectives that are important to your company. Ultramax takes data from production runs and creates a process model that gets better with each run. The software designs every run selectively, basing each new run on results from previous runs to produce better results every time. As the process gets closer to the optimum, the model becomes more accurate.

Traditional methods for process improvement ignore the realities of the production environment. They assume that you can run simultaneous experiments, that each experiment can be run exactly as designed, and that data gathering is more important than the economic results of each run.

Ultramax uses results from normal, sequential production runs. That makes it the best optimization tool for production environments.

- *Ultramax is fast.* Results converge to a practical optimum after only a few runs.
- *Ultramax is easy.* Personnel with no special background can use the software.
- *Ultramax is cost-effective.* There are no out-of-spec runs or high implementation costs for special experiments.
- *Ultramax is flexible.* You can change variables when you don't agree with Ultramax's advice.

What Does Ultramax Do For You?

1. Ultramax helps you achieve improvements that would not be practical with any other technology. Even processes that have been optimized using statistical process control (SPC) methods can be improved significantly. For example:
 - A Michigan company with its grinding process well under control used Ultramax to achieve a dramatic 17% productivity improvement.
 - In a multi-step chemical process plant, Ultramax increased yield more than \$750,000 by

focusing attention on important variables that were previously ignored.

- Ultramax increased centrifuge output and reduced impurities for an animal-oil refiner.
2. Ultramax encourages a disciplined "team approach" to problem-solving. Identifying and analyzing the input variables, output variables, and process goals produce a new awareness of what is important in your process. With Ultramax, you can challenge traditional procedures and focus on critical process elements.

Summary

Ultramax is the only quick way to find linear and nonlinear relationships among six or eight variables affecting process. Analyzing data from different combinations of settings, means that Ultramax can deliver better quality, reduced variation, higher production rates, and lower costs.

No process is perfect, but Ultramax can get your process very close.