

Vitamin Manufacturer

Valencia, California

Facility Planning & Analysis Services

- Facility Layout Design and Optimization
- Simulation Modeling

A consumer vitamin producer, desired to increase their production capabilities by 10% annually through 2008. Their current facilities could not accommodate this type of growth and were looking for a consulting firm to optimize a new manufacturing facility for them. To assist them with their goal, they partnered with several engineers and architects. The design team developed an approach that incorporated both qualitative and quantitative analysis techniques. The team used sophisticated analytical techniques, including development of a simulation model, to determine the optimal equipment layout and utilizations. The simulation model developed was used to validate the clients initial assumptions of throughput, and equipment requirement. This approach successfully answered the capacity questions that production, sales, and upper management had. While at the same time, with the assistance of the model, the design team developed an optimized facility that saved the manufacturer **12%** of their proposed **\$100 million** construction budget.

