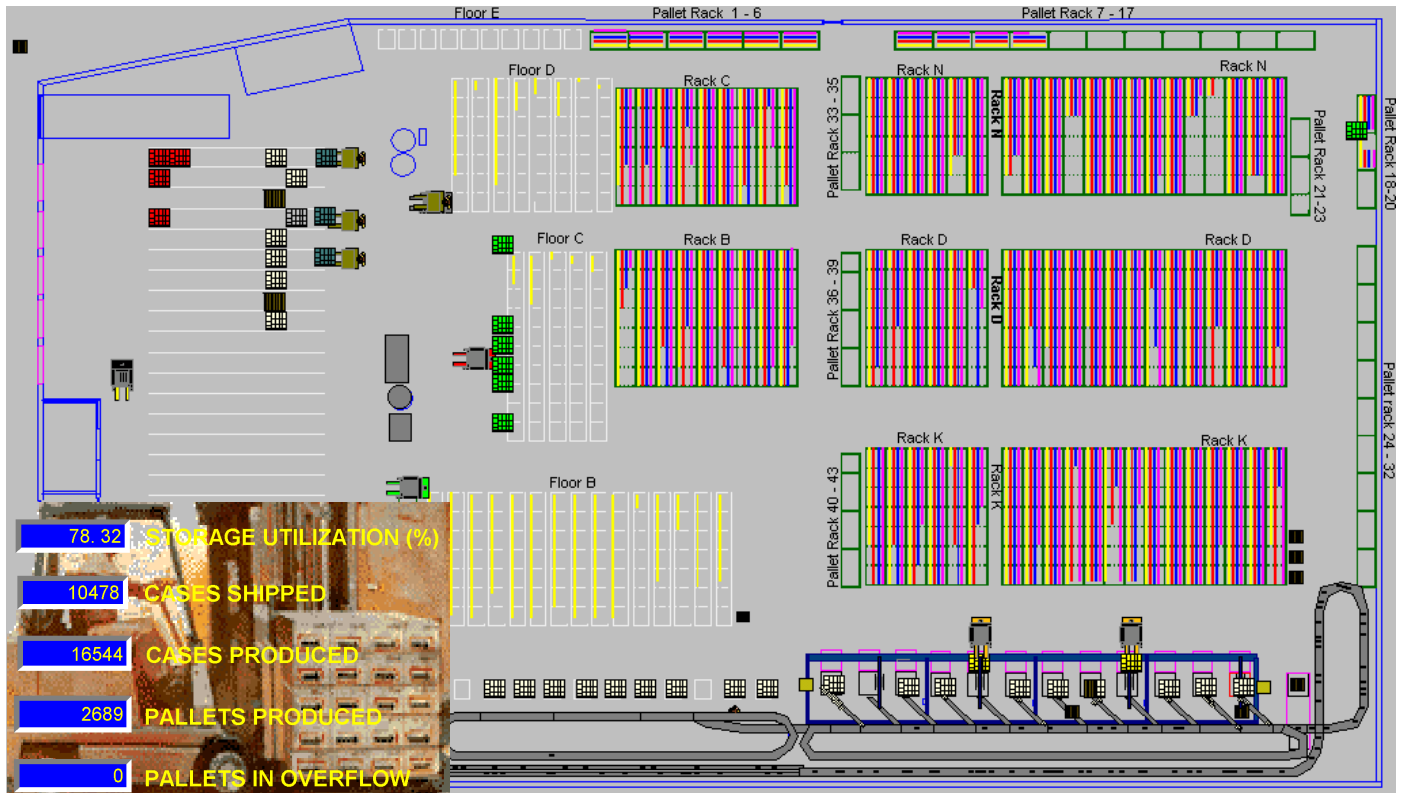


Finished Goods Warehouse

Chicago, IL

Facility Planning & Analysis Services

- Warehouse Layout Design
- Simulation Modeling



The simulation model was designed and developed to encompass the entire finished goods warehouse. This included 1. the palletization of cases, 2. put-away and retrieval of finished goods pallets and 3. the picking, spreading and shipping to customers. Real time output data could be observed during the execution of the model.

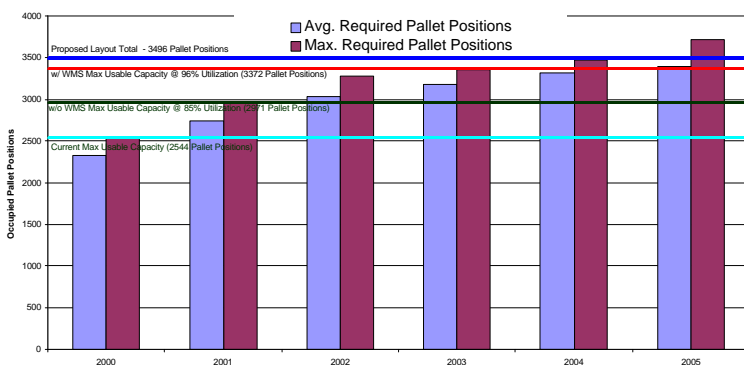
Our client requested the assistance to provide solutions for their warehouse capacity issues. This finished goods warehouse was already at full capacity with materials stored in an adjacent, unconnected building. To add to an already inefficient system, future growth would occur during the next five years. This client needed to understand the magnitude of their situation and to receive proper guidance for their future direction regarding the warehouse.

Simulation was the tool of choice to quantify the existing condition and future capacities and to analyze the effects of the proposed warehouse design modifications, including an introduction of a warehouse management system.

We not only modeled the entire warehousing operation, but also provided solutions during the development of the improved warehouse layout and design based on their years of industrial/manufacturing experience.

Within the simulation model, code was developed to produce a flexible, one-of-a-kind warehouse model that can be used in other warehousing applications.

WAREHOUSE STORAGE REQUIREMENTS



Output data was represented as clear, organized charts as illustrated above. This data interpretation demonstrated visibly that in the following year of the warehouse study current warehouse capacity (light blue horizontal limit) was exceeded.