

Whirlpool Corporation

Evansville, Indiana

Client

Whirlpool Corporation is a leading manufacturer of refrigerators for the domestic market.

Problem Statement

The Evansville facility has been running for over 40 years and although much growth and many manufacturing enhancements have taken place, the material handling system was essentially unchanged since the 1950s. Tompkins Associates was commissioned to assist Whirlpool in determining the best material handling and warehousing solutions to allow the company to move closer to achieving world-class manufacturing status.

Scope-Of-Work

Tompkins' scope-of-work consisted of developing a Strategic Facilities Master Plan which encompassed all areas of the facility from receipt of materials into the plant to the placement of packaged goods on the conveyor to the distribution center. Tompkins performed the following activities:

- Reviewed the part routings for each of the typical refrigerator models and tracked the material handling steps.
- Quantified the total expenditure on material handling and separated the cost into each component. The components included labor, equipment, and equipment maintenance.
- Reviewed the impacts of the five-year production forecast and the proposed change in assembly techniques from large batch runs to a more continuous flow, reduced lot size flow on material handling.

Tompkins performed an economic analysis and made the following recommendations:

- Install a radio frequency inventory tracking and control system
- Implement point-of-use docks adjacent to the final assembly area
- Install an automated receiving system for purchased parts
- Install a bar code inventory tracking system for linear tracking and institute programs to address the production issue which prevented dedicating thermoformers
- Install selective high bay rack with narrow aisle vehicles for purchased parts.
- Utilize the space formerly occupied by purchased parts to bring plastic parts on-site.