



Consultants in Material Handling Logistics

Operations Design for Warehousing, Manufacturing and Distribution

NETWORK MODELING AND OPERATIONS DESIGN – AUTOMOTIVE REPAIR AND MAINTENANCE PARTS DISTRIBUTION

CLIENT:

A major European based automobile manufacturer with about 350 U.S. dealerships needed to improve service response times to its dealerships and reduce costs.

DESCRIPTION OF OPERATION:

The company was operating two parts distribution centers (DCs), one in New Jersey and one in California. Both of the existing DCs operations were conventional with no mechanization and minimal information systems support for the DC operations.

OBJECTIVES:

The company's network of dealerships was expanding and they needed to know: where their future parts DCs should be located, what service areas each DC should cover, whether the future DCs should be full or partial line, and how large each of the future DCs should be. The client also needed to know what level of operations technology to incorporate into this and future DCs.

CONSULTING SCOPE OF WORK:

1. Extensive network modeling effort to determine the locations, service areas, product lines and phasing in requirements for the future DCs
2. Detailed DC operations process and associated layout design development
3. Information system upgrades recommendations
4. 3PL bid package
5. Building construction performance criteria
6. Material handling vendor bid package
7. Evaluation of 3PL vs. private warehouse operations
8. Location advisory services and site evaluation
9. Collaboration with and coordination with building contractors, material handling equipment vendors, and software developers

RESULTS:

The client successfully implemented the third DC which they operate themselves with upgraded technology including picking mechanization, carousels and a real time, RF based WMS. Based on the master plan, the client has opened two additional DCs operated by 3PLs. The results are significantly reduced logistics costs and improved service to the dealerships.