

# Case Study

## INTERNATIONAL TOY MANUFACTURER

### CLIENT:

Growth and the demand for more manufacturing space for a toy company lead them to decide to construct a new distribution center on their site. The company needed to determine the level of technology, the layout, and the information systems support requirements.

### DESCRIPTION OF OPERATION:

The company manufactures and distributes a famous brand of toys from a single site in the U.S. The company places a very high priority on quality and control in all its operations.

### OBJECTIVES:

Gross & Associates was retained to determine the facility configuration, the appropriate levels of automation and mechanization for each system component, the layout details, and the information system support requirements.

### RECOMMENDATIONS:

Gross & Associates recommended the following:

1. Construct a 225,000 square foot distribution facility with 50 feet of clear height.
2. Utilize very narrow aisle (VNA) technology with man up turret trucks.
3. Transport product from the manufacturing building using an automated system of pallet conveyors and trailers with belt conveyor beds.
4. Sort the pallets to input stations directly opposite the VNA aisle where the product is stored.
5. Pick the cases for customer orders from a four level pick mezzanine with automatic sortation diversion on the conveyor system.
6. Direct all activities by computer via radio frequency (RF) communications to create a paperless environment.
7. Verify all material handling transactions with bar code scans to insure compliance with the computer's directions.

### RESULTS:

With our help, the client implemented the recommended operating methods, computer direction, and layout. We wrote detailed performance specifications for all the material handling equipment and for the information systems. We assisted the client with vendor qualification and bid evaluation. We worked with the client staff, trainers, architects, engineers, vendors, and system integrators from start to finish. We developed detail implementation plans and followed up on the details in all areas. The facility is now fully operational and is shipping customer orders. All system components are meeting or exceeding their projected productivity and reliability expectations.

**Compliments of:**  
**Gross & Associates**  
*Corporate Headquarters*  
*167 Main St.*  
*Woodbridge, NJ 07095*  
*Phone: (732) 636-2666*  
*FAX: (732) 636-2799*  
*info@grossassociates.com*