

# CASE STUDY



## Medical Device Manufacturing

ROi sought our expertise to tackle the unique challenge of establishing a distribution center and manufacturing facility for custom surgical kits.

## The Client

ROi is a medical device distributor supplying medical supplies and custom procedure trays under their 'regard' brand. They offer an end-to-end supply chain solution, including logistics management and 3PL storage services.

Facility Size: 108,000 sq. ft.

Product: 2500 Raw Materials, 1100 Custom Procedure Trays (CPTs)



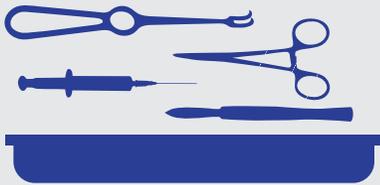
## Results Snapshot



**Increase in  
Productivity**



**Kit Assembly  
Accuracy**



**Unlimited  
Customization**

## THE CHALLENGE

To create an efficient plan, we carefully observed manual operations, studied processes, and collected comprehensive data. Our design involved an integrated system with a distribution center next to a manufacturing clean room. Precision was crucial to prevent surgery delays, so we ensured each kit had the correct items and quantities.



## RESULTS

The distribution center had features like a reserve rack, a multi-level pick module, and a sorting mechanism. In the clean room, associates assembled unique surgical kits on nine assembly lines. Totes with selected items were weighed for validation before sorting and carting. Kits underwent thorough verification before being sent to the sterilization chamber for distribution.

The LD Systems solution yielded a 65% increase in overall productivity with a 99.96% kit assembly accuracy, and allows for unlimited customization of finished surgical procedure trays.

# THE SOLUTION

01



## Consulting Services

LD Systems performed a thorough operational review of all processes and identified all bottlenecks and efficiency roadblocks.

02



## Facility Layout and Design

Provided a complete overview of layout and design of new facility including new equipment, AutoCAD drawings and process.

03



## Equipment Recommendations

Determined functional requirements and reviewed equipment from multiple vendors to identify the optimal solutions.

04



## Installation and Project Management

Oversaw the installation of all new equipment to verify operation and solve all interoperability issues.



## CONCLUSION

With LD Systems' integrated solution, ROi is now equipped to meet the growing demand for custom surgical kits.

### The Results

- 65% increase in productivity
- 99.96% accuracy in kit assembly
- Unlimited customization of finished surgical procedure trays