

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 34  
Average Utilization: 80.6%  
Throughput Increase: 34.2%  
Labor Cost Reduction: 28.5%  
ROI Period: 2.3 years

## Warehouse Performance

Warehouse Location		Capacity Used	Inbound/Day	Outbound/Day	Picking Accuracy	Automation Level	Status
Distribution Center A	Chicago, IL	82.5%	2,624	3,183	96.5%	93.3%	Optimized
	Dallas, TX	113.4%	1,271	1,759	96.1%	62.3%	Improvement Needed
Distribution Center B	Atlanta, GA	39.3%	1,420	3,943	97.0%	94.8%	Optimized
Distribution Center C	Los Angeles, CA	70.3%	1,890	3,802	99.3%	90.7%	Optimized
Distribution Center D	Newark, NJ	104.9%	1,603	1,855	97.4%	61.9%	Improvement Needed
Distribution Center E							

## Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement voice-

picking  
system to  
improve  
accuracy to  
99.8%

- Upgrade WMS integration for real-time inventory visibility

- Add automated sortation system for small package handling

- Implement predictive analytics for demand-based staffing

- Consider AS/RS system for high-velocity SKUs