

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 42  
Average Utilization: 78.6%  
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	57.1%	2,664	2,383	96.3%	87.3%	Optimized
	Dallas, TX	38.2%	2,146	2,943	96.6%	75.5%	Improvement Needed
Distribution Center B	Atlanta, GA	110.6%	1,589	2,962	97.2%	66.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	58.0%	2,718	2,331	98.7%	82.9%	Optimized
Distribution Center E	Newark, NJ	97.1%	1,513	3,215	98.2%	80.6%	Optimized

### 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