

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 54  
Average Utilization: 83.0%  
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	96.3%	1,791	2,903	97.8%	89.0%	Optimized
	Dallas, TX	67.3%	2,754	3,851	95.9%	64.9%	Improvement Needed
Distribution Center B	Atlanta, GA	65.1%	2,220	2,445	95.7%	88.0%	Optimized
Distribution Center C	Los Angeles, CA	68.7%	1,559	2,086	96.6%	82.9%	Optimized
Distribution Center D	Newark, NJ	59.5%	1,508	2,050	98.8%	90.3%	Optimized
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