

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 38  
Average Utilization: 86.9%  
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	50.1%	1,713	2,229	98.2%	77.2%	Improvement Needed
	Dallas, TX	53.1%	1,119	2,293	98.9%	93.2%	Optimized
	Atlanta, GA	82.4%	2,408	2,025	97.1%	81.1%	Optimized
	Los Angeles, CA	100.6%	2,329	3,934	95.8%	93.2%	Optimized
	Newark, NJ	91.6%	2,887	3,223	97.6%	89.6%	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