

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 48  
Average Utilization: 81.7%  
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	77.2%	1,729	1,930	95.9%	85.8%	Optimized
	Dallas, TX	92.0%	2,208	2,856	95.3%	84.3%	Optimized
	Atlanta, GA	68.6%	2,243	1,541	96.1%	91.5%	Optimized
	Los Angeles, CA	72.5%	1,876	3,415	99.2%	82.3%	Optimized
	Newark, NJ	85.3%	1,068	3,351	96.4%	64.6%	Improvement Needed

### 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