

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 66  
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	98.4%	1,972	3,691	96.9%	91.1%	Optimized
	Dallas, TX	95.5%	1,749	1,917	97.2%	91.1%	Optimized
	Atlanta, GA	59.6%	2,291	2,416	97.1%	91.5%	Optimized
	Los Angeles, CA	44.4%	1,964	1,757	96.8%	92.3%	Optimized
	Newark, NJ	53.0%	1,407	1,741	96.1%	68.5%	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