

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 43  
Average Utilization: 83.9%  
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	73.6%	2,065	2,431	96.9%	89.7%	Optimized
	Dallas, TX	37.5%	1,096	2,875	97.0%	87.8%	Optimized
	Atlanta, GA	41.5%	1,534	3,899	96.4%	71.2%	Improvement Needed
Distribution Center B	Los Angeles, CA	57.5%	1,428	3,988	98.8%	83.1%	Optimized
	Newark, NJ	67.0%	1,844	2,360	96.2%	87.7%	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