

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 51  
Average Utilization: 85.7%  
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	106.0%	2,399	3,302	97.2%	86.4%	Optimized
	Dallas, TX	56.5%	1,864	2,728	96.2%	73.5%	Improvement Needed
Distribution Center B	Atlanta, GA	65.9%	1,308	3,430	98.8%	91.6%	Optimized
Distribution Center C	Los Angeles, CA	66.9%	2,544	2,558	97.7%	86.1%	Optimized
Distribution Center D	Newark, NJ	70.1%	2,324	3,916	95.5%	90.7%	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