

# 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: 84.5%  
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	86.8%	2,489	2,492	95.7%	88.8%	Optimized
	Dallas, TX	57.0%	2,514	1,934	97.5%	88.8%	Optimized
Distribution Center B	Atlanta, GA	123.5%	2,931	2,444	96.9%	61.4%	Improvement Needed
Distribution Center C	Los Angeles, CA	61.9%	2,399	1,597	96.8%	89.2%	Optimized
Distribution Center D	Newark, NJ	66.0%	2,280	2,807	96.1%	94.1%	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