

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 19  
Average Utilization: 85.4%  
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	78.6%	2,667	2,594	95.4%	83.0%	Optimized
	Dallas, TX	77.2%	1,563	2,211	97.9%	90.8%	Optimized
	Atlanta, GA	83.6%	1,842	3,801	97.6%	89.6%	Optimized
	Los Angeles, CA	56.1%	1,573	2,905	95.9%	90.5%	Optimized
	Newark, NJ	63.1%	1,438	3,705	97.6%	73.2%	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