

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 62  
Average Utilization: 86.8%  
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	104.6%	1,431	3,222	97.9%	92.3%	Optimized
	Dallas, TX	58.2%	1,169	1,758	96.9%	94.6%	Optimized
	Atlanta, GA	58.1%	1,182	2,813	97.9%	88.1%	Optimized
	Los Angeles, CA	98.1%	1,537	3,910	98.9%	82.4%	Optimized
	Newark, NJ	44.7%	1,404	2,010	98.6%	76.8%	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