

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 61  
Average Utilization: 78.2%  
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	46.4%	1,807	1,757	95.1%	81.9%	Optimized
	Dallas, TX	58.1%	1,755	1,656	97.3%	81.9%	Optimized
	Atlanta, GA	86.0%	1,602	1,770	98.3%	69.9%	Improvement Needed
Distribution Center B	Los Angeles, CA	33.4%	1,963	2,970	97.0%	66.7%	Improvement Needed
Distribution Center C	Newark, NJ	81.2%	2,260	2,869	96.8%	90.7%	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