

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 35  
Average Utilization: 87.7%  
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	82.4%	1,678	2,016	98.9%	83.0%	Optimized
	Dallas, TX	53.4%	1,201	3,790	98.3%	90.6%	Optimized
	Atlanta, GA	40.1%	2,733	3,406	97.7%	82.7%	Optimized
	Los Angeles, CA	94.8%	1,852	1,608	95.6%	89.1%	Optimized
	Newark, NJ	58.6%	1,898	3,933	95.6%	93.2%	Optimized
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