

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 36  
Average Utilization: 87.0%  
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	64.6%	1,095	3,876	95.7%	84.4%	Optimized
	Dallas, TX	45.8%	2,142	1,766	96.0%	93.9%	Optimized
	Atlanta, GA	87.4%	1,700	2,839	96.2%	81.6%	Optimized
	Los Angeles, CA	65.4%	1,233	3,747	96.5%	86.3%	Optimized
	Newark, NJ	89.7%	2,057	2,211	98.0%	88.6%	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