

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 44  
Average Utilization: 83.9%  
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	70.5%	1,142	3,146	98.7%	91.7%	Optimized
	Dallas, TX	69.0%	1,761	2,392	97.6%	82.8%	Optimized
Distribution Center B	Atlanta, GA	73.8%	2,332	2,050	99.0%	78.0%	Improvement Needed
Distribution Center C	Los Angeles, CA	41.9%	1,719	2,089	97.6%	85.5%	Optimized
Distribution Center D	Newark, NJ	48.7%	2,609	2,019	97.1%	81.8%	Optimized
Distribution 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