

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 37  
Average Utilization: 83.6%  
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	53.9%	1,152	2,116	97.8%	88.1%	Optimized
	Dallas, TX	66.2%	1,843	1,528	98.2%	70.9%	Improvement Needed
Distribution Center B	Atlanta, GA	104.4%	2,115	3,700	95.9%	86.8%	Optimized
Distribution Center C	Los Angeles, CA	44.2%	2,042	2,129	95.1%	86.5%	Optimized
Distribution Center D	Newark, NJ	35.2%	2,880	2,724	97.6%	85.4%	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