

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 47  
Average Utilization: 85.6%  
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	41.5%	1,712	3,322	97.2%	88.8%	Optimized
	Dallas, TX	50.2%	2,994	2,377	99.1%	76.5%	Improvement Needed
Distribution Center B	Atlanta, GA	104.8%	1,187	2,004	95.3%	87.3%	Optimized
Distribution Center C	Los Angeles, CA	89.7%	1,006	1,551	96.2%	88.1%	Optimized
Distribution Center D	Newark, NJ	61.5%	2,699	2,651	96.3%	87.2%	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