

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 49  
Average Utilization: 82.3%  
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	32.1%	2,949	2,203	95.9%	85.0%	Optimized
	Dallas, TX	55.6%	2,055	2,183	95.9%	85.2%	Optimized
Distribution Center B	Atlanta, GA	107.6%	2,267	3,410	99.4%	61.6%	Improvement Needed
Distribution Center C	Los Angeles, CA	31.7%	2,834	3,295	97.4%	94.8%	Optimized
Distribution Center D	Newark, NJ	62.3%	2,692	3,740	98.2%	84.8%	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