

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 19  
Average Utilization: 75.5%  
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 Status		
Distribution Center A	Chicago, IL	51.4%	2,228	2,399	96.3%	82.4%	Optimized	
	Dallas, TX	51.4%	2,107	2,184	95.0%	61.2%	Improvement Needed	
Distribution Center B		Atlanta, GA	55.5%	2,724	3,946	95.9%	62.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	43.6%	1,902	3,945	97.7%	88.2%	Optimized	
Distribution Center E	Newark, NJ	55.0%	1,343	2,321	97.9%	83.3%	Optimized	

### 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