

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 38  
Average Utilization: 80.2%  
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	45.2%	1,773	2,076	96.0%	82.8%	Optimized
	Dallas, TX	81.0%	1,040	1,786	95.5%	68.3%	Improvement Needed
Distribution Center B	Atlanta, GA	54.4%	2,307	1,930	96.7%	72.8%	Improvement Needed
Distribution Center D	Los Angeles, CA	43.5%	2,998	1,863	98.4%	87.0%	Optimized
Distribution Center E	Newark, NJ	61.7%	2,458	2,004	98.1%	89.9%	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