

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 46  
Average Utilization: 80.7%  
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	64.1%	2,885	3,833	97.7%	87.7%	Optimized
	Dallas, TX	64.1%	2,084	3,751	98.6%	67.6%	Improvement Needed
Distribution Center B	Atlanta, GA	51.7%	2,412	1,512	97.1%	65.6%	Improvement Needed
Distribution Center C	Los Angeles, CA	49.3%	1,170	1,744	96.2%	90.1%	Optimized
Distribution Center D	Newark, NJ	84.2%	2,595	2,726	96.2%	92.4%	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