

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 72  
Average Utilization: 84.6%  
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	51.2%	1,820	2,566	97.1%	88.9%	Optimized
	Dallas, TX	41.6%	2,531	3,127	95.2%	77.1%	Improvement Needed
Distribution Center B	Atlanta, GA	90.1%	2,816	2,244	98.7%	89.4%	Optimized
Distribution Center C	Los Angeles, CA	76.2%	2,944	1,940	95.3%	85.2%	Optimized
Distribution Center D	Newark, NJ	34.5%	2,724	3,376	98.1%	82.4%	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