

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 68  
Average Utilization: 83.1%  
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	72.6%	2,154	3,711	98.0%	82.5%	Optimized
	Dallas, TX	62.7%	2,888	1,989	98.9%	61.7%	Improvement Needed
Distribution Center B	Atlanta, GA	105.2%	2,814	1,755	98.5%	88.9%	Optimized
Distribution Center C	Los Angeles, CA	88.3%	1,387	3,683	98.9%	88.1%	Optimized
Distribution Center D	Newark, NJ	61.4%	1,025	1,562	96.6%	94.5%	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