

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 43  
Average Utilization: 72.7%  
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 Level	Status
Distribution Center A	Chicago, IL	66.6%	2,971	2,552	99.0%	71.1%	Improvement Needed
Distribution Center B	Dallas, TX	87.3%	1,362	2,697	98.4%	80.5%	Optimized
Distribution Center C	Atlanta, GA	46.9%	1,953	3,903	97.9%	66.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	67.2%	2,700	2,231	96.0%	71.2%	Improvement Needed
Distribution Center E	Newark, NJ	74.0%	1,741	2,812	95.9%	74.1%	Improvement Needed

### 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