

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 65  
Average Utilization: 81.6%  
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	79.0%	1,424	2,702	95.5%	94.3%	Optimized
	Dallas, TX	51.4%	2,717	2,101	98.5%	71.4%	Improvement Needed
Distribution Center B	Atlanta, GA	58.1%	1,421	1,596	96.3%	81.9%	Optimized
Distribution Center C	Los Angeles, CA	105.0%	2,455	2,259	98.0%	66.3%	Improvement Needed
Distribution Center D	Newark, NJ	55.0%	1,993	2,546	99.3%	93.9%	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