

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 53  
Average Utilization: 77.3%  
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%	1,959	3,605	98.4%	81.2%	Optimized
	Dallas, TX	82.7%	1,365	3,315	95.2%	66.7%	Improvement Needed
Distribution Center B	Atlanta, GA	75.2%	1,188	1,788	97.6%	86.3%	Optimized
Distribution Center C	Los Angeles, CA	50.1%	2,498	2,216	97.2%	88.0%	Optimized
Distribution Center D	Newark, NJ	74.4%	2,430	3,751	97.8%	64.1%	Improvement Needed
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