

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 54  
Average Utilization: 83.5%  
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	40.9%	2,584	2,010	95.6%	81.0%	Optimized
	Dallas, TX	54.2%	2,140	2,001	95.1%	94.2%	Optimized
Distribution Center B	Atlanta, GA	64.4%	1,938	3,568	96.9%	68.5%	Improvement Needed
Distribution Center C	Los Angeles, CA	72.5%	1,220	1,838	98.3%	85.9%	Optimized
Distribution Center D	Newark, NJ	39.4%	1,634	2,379	99.4%	87.7%	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