

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 58  
Average Utilization: 72.6%  
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	35.1%	1,514	1,810	98.5%	79.5%	Improvement Needed
Distribution Center B	Dallas, TX	92.4%	1,968	2,677	97.7%	93.1%	Optimized
Distribution Center C	Atlanta, GA	43.1%	2,733	3,362	95.7%	64.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	105.8%	1,296	3,103	99.5%	63.4%	Improvement Needed
Distribution Center E	Newark, NJ	79.8%	2,563	3,432	98.9%	62.0%	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