

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 37  
Average Utilization: 70.8%  
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	67.6%	1,540	3,689	96.4%	64.7%	Improvement Needed
Distribution Center B	Dallas, TX	89.5%	2,727	2,594	97.4%	78.3%	Improvement Needed
Distribution Center C	Atlanta, GA	51.5%	1,172	2,779	96.5%	82.3%	Optimized
Distribution Center D	Los Angeles, CA	50.2%	1,100	2,726	97.9%	68.0%	Improvement Needed
Distribution Center E	Newark, NJ	57.7%	2,159	3,391	97.3%	60.5%	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