

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 68  
Average Utilization: 74.8%  
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	90.1%	1,572	3,579	97.9%	75.7%	Improvement Needed
Distribution Center B	Dallas, TX	103.0%	2,923	3,957	96.8%	74.7%	Improvement Needed
Distribution Center C	Atlanta, GA	48.6%	1,640	2,848	96.5%	68.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	58.5%	1,275	3,436	97.1%	88.3%	Optimized
Distribution Center E	Newark, NJ	78.5%	1,068	3,710	97.2%	67.4%	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