

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 52  
Average Utilization: 87.7%  
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	73.8%	1,668	2,170	96.2%	91.0%	Optimized
	Dallas, TX	120.2%	1,862	1,784	97.3%	78.3%	Improvement Needed
Distribution Center B	Atlanta, GA	37.3%	1,185	1,993	97.1%	86.5%	Optimized
Distribution Center C	Los Angeles, CA	45.0%	1,866	2,608	98.9%	89.0%	Optimized
Distribution Center D	Newark, NJ	40.4%	2,020	2,811	99.0%	93.6%	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