

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 43  
Average Utilization: 84.5%  
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	41.0%	1,830	2,416	99.3%	92.4%	Optimized
	Dallas, TX	114.1%	2,415	2,864	97.1%	80.7%	Optimized
Distribution Center B	Atlanta, GA	68.7%	1,104	2,483	96.4%	72.1%	Improvement Needed
Distribution Center C	Los Angeles, CA	60.1%	2,945	2,696	99.2%	84.9%	Optimized
Distribution Center D	Newark, NJ	42.7%	1,575	1,752	95.8%	92.5%	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