

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 33  
Average Utilization: 82.4%  
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	86.8%	2,265	2,990	99.3%	84.4%	Optimized
	Dallas, TX	66.7%	2,365	3,303	95.5%	80.2%	Optimized
Distribution Center B	Atlanta, GA	45.3%	2,776	1,563	95.1%	62.6%	Improvement Needed
Distribution Center C	Los Angeles, CA	41.0%	2,907	1,999	95.4%	92.4%	Optimized
Distribution Center D	Newark, NJ	101.9%	2,906	2,643	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