

# 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: 82.5%  
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	63.5%	2,769	3,239	97.2%	84.3%	Optimized
	Dallas, TX	46.5%	2,541	3,319	99.0%	85.4%	Optimized
Distribution Center B	Atlanta, GA	62.1%	1,095	2,345	97.1%	83.9%	Optimized
Distribution Center C	Los Angeles, CA	69.0%	2,490	1,901	96.7%	72.9%	Improvement Needed
Distribution Center D	Newark, NJ	104.0%	2,945	2,130	95.4%	86.1%	Optimized
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