

# 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: 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	34.3%	2,927	3,200	97.5%	91.1%	Optimized
	Dallas, TX	38.3%	2,246	1,929	98.1%	92.6%	Optimized
Distribution Center B	Atlanta, GA	63.2%	1,458	1,917	99.0%	73.1%	Improvement Needed
	Los Angeles, CA	136.0%	2,485	3,268	99.1%	89.4%	Optimized
Distribution Center D	Newark, NJ	60.8%	2,244	2,186	96.5%	76.1%	Improvement Needed
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