

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 59  
Average Utilization: 85.6%  
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	75.5%	2,951	3,730	98.8%	90.0%	Optimized
	Dallas, TX	89.2%	1,803	2,201	96.9%	85.6%	Optimized
	Atlanta, GA	53.1%	1,499	2,046	97.5%	93.9%	Optimized
	Los Angeles, CA	50.0%	1,517	2,173	98.2%	93.9%	Optimized
	Newark, NJ	59.6%	1,316	1,725	98.3%	64.4%	Improvement Needed

### 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