

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 57  
Average Utilization: 81.6%  
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	52.3%	1,827	2,371	96.6%	86.1%	Optimized
	Dallas, TX	87.5%	2,969	3,693	97.4%	82.4%	Optimized
Distribution Center B	Atlanta, GA	116.7%	1,327	1,957	98.0%	88.2%	Optimized
Distribution Center C	Los Angeles, CA	42.5%	1,113	1,883	98.5%	71.0%	Improvement Needed
Distribution Center D	Newark, NJ	50.1%	2,568	1,583	99.5%	80.5%	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