

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 48  
Average Utilization: 81.3%  
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	33.5%	2,486	2,722	95.9%	80.4%	Optimized
Distribution Center B	Dallas, TX	65.1%	2,809	3,276	97.9%	70.4%	Improvement Needed
Distribution Center C	Atlanta, GA	39.3%	1,948	3,242	98.7%	72.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	46.8%	1,769	2,532	98.5%	91.5%	Optimized
Distribution Center E	Newark, NJ	72.1%	2,488	2,242	95.6%	92.0%	Optimized

### 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