

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 50  
Average Utilization: 84.1%  
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	100.7%	1,956	2,154	97.3%	72.6%	Improvement Needed
Distribution Center B	Dallas, TX	82.8%	2,912	2,281	99.5%	73.3%	Improvement Needed
Distribution Center C	Atlanta, GA	70.6%	2,883	3,357	97.7%	89.1%	Optimized
Distribution Center D	Los Angeles, CA	60.8%	2,700	2,854	98.2%	93.6%	Optimized
Distribution Center E	Newark, NJ	74.7%	1,940	2,641	99.4%	92.2%	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