

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 32  
Average Utilization: 84.4%  
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	50.2%	1,762	1,726	98.9%	71.7%	Improvement Needed
Distribution Center B	Dallas, TX	50.4%	1,627	2,410	96.7%	87.8%	Optimized
Distribution Center C	Atlanta, GA	47.7%	1,207	3,767	96.7%	84.3%	Optimized
Distribution Center D	Los Angeles, CA	38.5%	1,713	3,105	95.3%	91.0%	Optimized
Distribution Center E	Newark, NJ	56.4%	1,801	1,900	95.4%	87.3%	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