

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 27  
Average Utilization: 85.7%  
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	46.0%	2,783	2,948	96.5%	88.9%	Optimized
	Dallas, TX	38.1%	2,628	1,913	96.6%	91.7%	Optimized
Distribution Center B	Atlanta, GA	53.4%	1,042	2,717	96.2%	90.8%	Optimized
Distribution Center C	Los Angeles, CA	63.2%	1,681	3,926	98.4%	94.1%	Optimized
Distribution Center D	Newark, NJ	40.3%	1,931	3,901	96.1%	63.3%	Improvement Needed
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