

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 20  
Average Utilization: 81.7%  
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	78.4%	2,357	3,892	96.5%	80.7%	Optimized
	Dallas, TX	53.7%	2,436	2,118	95.3%	81.6%	Optimized
Distribution Center B	Atlanta, GA	92.7%	1,297	3,994	97.7%	66.8%	Improvement Needed
Distribution Center C	Los Angeles, CA	38.2%	1,787	2,218	96.9%	90.9%	Optimized
Distribution Center D	Newark, NJ	76.2%	2,441	2,099	95.9%	88.5%	Optimized
Distribution 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