

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 45  
Average Utilization: 83.7%  
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	90.9%	1,809	1,542	98.8%	94.7%	Optimized
	Dallas, TX	42.4%	2,936	3,408	96.3%	81.3%	Optimized
Distribution Center B	Atlanta, GA	61.7%	2,558	2,827	97.9%	76.5%	Improvement Needed
Distribution Center C	Los Angeles, CA	80.4%	1,923	2,907	99.2%	85.3%	Optimized
Distribution Center D	Newark, NJ	60.7%	1,701	3,769	98.0%	80.9%	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