

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 62  
Average Utilization: 82.0%  
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	39.8%	1,318	3,996	98.3%	90.7%	Optimized
	Dallas, TX	64.2%	1,238	3,513	97.6%	72.6%	Improvement Needed
Distribution Center B	Atlanta, GA	44.9%	1,432	3,147	96.0%	68.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	54.3%	2,966	2,987	95.8%	92.1%	Optimized
Distribution Center E	Newark, NJ	82.0%	1,060	2,935	97.9%	86.2%	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