

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 39  
Average Utilization: 85.8%  
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	65.9%	1,250	2,057	96.2%	74.7%	Improvement Needed
Distribution Center B	Dallas, TX	32.2%	1,492	3,119	96.8%	76.4%	Improvement Needed
Distribution Center C	Atlanta, GA	51.4%	1,562	2,669	95.9%	93.5%	Optimized
Distribution Center D	Los Angeles, CA	92.4%	2,641	2,044	95.8%	94.4%	Optimized
Distribution Center E	Newark, NJ	50.8%	2,927	3,753	96.8%	90.1%	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