

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:02:17 AM  
Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 69  
Average Utilization: 83.5%  
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	35.8%	1,859	2,351	97.0%	90.9%	Optimized
	Dallas, TX	74.4%	2,578	3,229	98.3%	75.8%	Improvement Needed
Distribution Center B	Atlanta, GA	60.0%	2,687	1,602	98.9%	85.8%	Optimized
Distribution Center C	Los Angeles, CA	82.6%	2,091	1,697	95.0%	72.1%	Improvement Needed
	Newark, NJ	84.5%	1,960	2,972	97.3%	93.1%	Optimized
Distribution Center D							
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