

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:00:34 AM  
Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 48  
Average Utilization: 83.8%  
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	86.5%	2,357	2,175	97.6%	89.4%	Optimized
	Dallas, TX	99.5%	2,548	3,914	96.4%	91.9%	Optimized
Distribution Center B	Atlanta, GA	81.1%	2,998	3,937	97.9%	72.7%	Improvement Needed
Distribution Center C	Los Angeles, CA	52.0%	1,073	2,030	95.6%	92.0%	Optimized
Distribution Center D	Newark, NJ	67.2%	2,193	1,702	96.4%	73.1%	Improvement Needed
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