

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:03:26 AM  
Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 31  
Average Utilization: 78.6%  
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	110.8%	1,863	2,646	95.8%	82.5%	Optimized
	Dallas, TX	84.1%	2,216	2,214	99.3%	80.7%	Optimized
Distribution Center B	Atlanta, GA	42.2%	2,799	2,134	96.4%	60.5%	Improvement Needed
Distribution Center C	Los Angeles, CA	73.5%	2,386	3,672	97.1%	84.2%	Optimized
Distribution Center D	Newark, NJ	118.2%	2,624	2,597	97.0%	85.3%	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