

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:41 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 51
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	109.6%	1,155	1,663	97.2%	90.0%	Optimized
	Dallas, TX	74.7%	2,149	1,612	98.5%	88.0%	Optimized
Distribution Center B	Atlanta, GA	47.6%	2,961	2,017	96.7%	63.9%	Improvement Needed
Distribution Center C	Los Angeles, CA	94.0%	1,372	1,749	95.5%	82.7%	Optimized
Distribution Center D	Newark, NJ	75.7%	2,662	2,039	97.1%	92.9%	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