

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:08:11 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 39
Average Utilization: 86.0%
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	56.8%	1,482	2,432	98.4%	90.2%	Optimized
	Dallas, TX	84.6%	2,740	3,924	97.3%	69.3%	Improvement Needed
Distribution Center B	Atlanta, GA	59.1%	2,869	1,956	96.1%	93.7%	Optimized
Distribution Center C	Los Angeles, CA	110.2%	1,642	2,961	96.2%	85.4%	Optimized
Distribution Center D	Newark, NJ	111.5%	1,686	3,469	98.0%	91.4%	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