

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:48 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 55
Average Utilization: 89.0%
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	74.4%	1,158	2,900	99.0%	87.1%	Optimized
	Dallas, TX	62.1%	2,350	2,868	97.0%	93.4%	Optimized
Distribution Center B	Atlanta, GA	54.8%	1,533	3,022	99.1%	79.0%	Improvement Needed
Distribution Center C	Los Angeles, CA	63.3%	2,005	2,206	97.2%	94.5%	Optimized
Distribution Center D	Newark, NJ	77.1%	1,909	2,699	98.1%	91.0%	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