

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:04:16 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 22
Average Utilization: 76.3%
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 Status	
Distribution Center A	Chicago, IL	54.8%	2,977	1,613	95.6%	84.0%	Optimized
	Dallas, TX	81.9%	2,070	1,919	95.1%	69.4%	Improvement Needed
Distribution Center B	Atlanta, GA	56.5%	2,083	2,676	95.8%	60.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	95.8%	1,801	3,681	98.3%	94.7%	Optimized
Distribution Center E	Newark, NJ	36.7%	2,046	1,768	95.7%	73.0%	Improvement Needed

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement AI-driven inventory tracking in Warehouse 1

ment voice-
picking
system to
improve
accuracy to
99.8%

- Upgra
de WMS
integration
for real-time
inventory
visibility

- Add au
tomated
sortation
system for
small
package
handling

- Imple
ment
predictive
analytics for
demand-
based
staffing

- Consid
er AS/RS
system for
high-
velocity
SKUs