

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:50 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 59
Average Utilization: 78.4%
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	68.0%	2,336	2,454	98.6%	94.4%	Optimized
	Dallas, TX	54.0%	2,089	2,479	99.0%	71.5%	Improvement Needed
Distribution Center B	Atlanta, GA	65.1%	1,704	1,569	95.4%	90.8%	Optimized
Distribution Center C	Los Angeles, CA	103.7%	1,992	1,532	97.8%	67.7%	Improvement Needed
	Newark, NJ	71.1%	2,565	3,397	98.1%	67.7%	Improvement Needed

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement predictive maintenance for robotic arms

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