

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:07:28 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 38
Average Utilization: 76.0%
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	71.5%	1,750	3,572	96.6%	81.7%	Optimized
	Dallas, TX	42.9%	2,712	2,833	96.5%	66.4%	Improvement Needed
Distribution Center B	Atlanta, GA	89.9%	1,845	2,530	96.9%	88.3%	Optimized
Distribution Center C	Los Angeles, CA	82.9%	1,050	3,863	97.1%	78.4%	Improvement Needed
	Newark, NJ	48.2%	2,266	3,633	97.4%	65.1%	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