

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:47 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 21
Average Utilization: 79.0%
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	92.0%	2,532	2,134	98.3%	71.3%	Improvement Needed
Distribution Center B	Dallas, TX	94.7%	2,489	3,073	98.7%	81.3%	Optimized
Distribution Center C	Atlanta, GA	58.2%	1,200	3,592	97.1%	75.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	95.8%	1,407	3,667	98.1%	75.0%	Improvement Needed
Distribution Center E	Newark, NJ	57.5%	2,154	2,561	98.6%	92.4%	Optimized

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Imple

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