

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:07:13 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 37
Average Utilization: 77.1%
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	66.7%	2,145	1,531	95.3%	73.6%	Improvement Needed
Distribution Center B	Dallas, TX	52.1%	2,180	3,767	95.7%	77.9%	Improvement Needed
Distribution Center C	Atlanta, GA	78.7%	2,142	3,427	97.1%	60.8%	Improvement Needed
Distribution Center D	Los Angeles, CA	57.7%	2,331	2,443	98.7%	89.6%	Optimized
Distribution Center E	Newark, NJ	119.4%	2,198	3,013	97.2%	83.9%	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