

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:05:12 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 81
Average Utilization: 78.0%
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	75.1%	1,553	2,245	96.8%	75.2%	Improvement Needed
Distribution Center B	Dallas, TX	62.5%	1,184	3,920	96.5%	90.9%	Optimized
Distribution Center C	Atlanta, GA	128.1%	1,596	1,883	95.6%	62.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	36.8%	1,029	1,675	95.4%	71.8%	Improvement Needed
Distribution Center E	Newark, NJ	66.8%	1,054	2,696	95.6%	89.2%	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