

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:12 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 28
Average Utilization: 78.5%
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	84.0%	2,295	2,530	97.7%	74.4%	Improvement Needed
Distribution Center B	Dallas, TX	45.4%	2,802	3,376	97.7%	89.7%	Optimized
Distribution Center C	Atlanta, GA	46.1%	2,966	3,576	95.6%	84.2%	Optimized
Distribution Center D	Los Angeles, CA	84.6%	1,238	2,933	98.4%	72.1%	Improvement Needed
Distribution Center E	Newark, NJ	99.0%	2,076	3,351	97.8%	71.9%	Improvement Needed

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