

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:08:00 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 45
Average Utilization: 77.3%
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	56.7%	2,852	1,826	95.7%	66.0%	Improvement Needed
Distribution Center B	Dallas, TX	104.1%	1,634	1,557	96.6%	78.9%	Improvement Needed
Distribution Center C	Atlanta, GA	48.9%	2,425	2,141	96.9%	82.2%	Optimized
Distribution Center D	Los Angeles, CA	71.6%	1,974	1,826	98.2%	91.6%	Optimized
Distribution Center E	Newark, NJ	91.2%	2,675	2,853	96.9%	68.0%	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