

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:51 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 43
Average Utilization: 76.5%
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	66.7%	1,919	2,147	97.5%	79.8%	Improvement Needed
Distribution Center B	Dallas, TX	42.6%	1,446	1,727	97.9%	80.6%	Optimized
Distribution Center C	Atlanta, GA	117.2%	1,467	3,610	98.0%	72.0%	Improvement Needed
Distribution Center D	Los Angeles, CA	50.4%	2,355	3,165	98.1%	83.5%	Optimized
Distribution Center E	Newark, NJ	40.0%	2,736	3,692	96.6%	66.8%	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