

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:10 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 58
Average Utilization: 74.1%
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	105.5%	2,162	3,523	95.5%	63.9%	Improvement Needed
Distribution Center B	Dallas, TX	58.5%	2,474	2,543	95.3%	88.8%	Optimized
Distribution Center C	Atlanta, GA	39.9%	1,880	2,803	99.5%	72.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	62.8%	1,144	3,680	95.2%	63.6%	Improvement Needed
Distribution Center E	Newark, NJ	64.7%	2,349	1,936	96.6%	82.0%	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