

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:09:07 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 56
Average Utilization: 78.4%
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	88.8%	2,366	2,846	98.8%	93.5%	Optimized
	Dallas, TX	33.0%	1,630	3,534	95.5%	81.5%	Optimized
Distribution Center B	Atlanta, GA	62.1%	2,920	2,340	99.3%	73.3%	Improvement Needed
Distribution Center C	Los Angeles, CA	75.5%	1,509	2,918	96.6%	72.3%	Improvement Needed
Distribution Center D	Newark, NJ	68.4%	2,154	1,846	98.3%	71.4%	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