

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:08:29 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 47
Average Utilization: 79.2%
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	82.8%	2,539	2,336	99.5%	94.0%	Optimized
	Dallas, TX	106.3%	2,001	2,003	97.9%	88.4%	Optimized
Distribution Center B	Atlanta, GA	46.1%	1,453	2,540	99.2%	74.5%	Improvement Needed
Distribution Center C	Los Angeles, CA	131.4%	1,011	2,520	95.3%	73.4%	Improvement Needed
Distribution Center D	Newark, NJ	86.4%	2,796	3,117	97.0%	65.7%	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