

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:06:06 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 62
Average Utilization: 71.9%
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	50.3%	2,825	1,878	97.7%	64.8%	Improvement Needed
Distribution Center B	Dallas, TX	127.4%	2,666	1,535	96.1%	81.2%	Optimized
Distribution Center C	Atlanta, GA	126.8%	1,796	2,542	96.9%	69.0%	Improvement Needed
Distribution Center D	Los Angeles, CA	69.8%	1,365	3,357	99.2%	83.8%	Optimized
Distribution Center E	Newark, NJ	59.8%	2,770	3,745	95.6%	60.8%	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