

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:16 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 58
Average Utilization: 76.3%
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	69.6%	1,801	3,951	97.3%	71.3%	Improvement Needed
Distribution Center B	Dallas, TX	44.7%	1,179	1,963	95.2%	63.0%	Improvement Needed
Distribution Center C	Atlanta, GA	77.0%	2,409	2,643	95.6%	90.3%	Optimized
Distribution Center D	Los Angeles, CA	72.6%	1,841	2,793	96.5%	93.4%	Optimized
Distribution Center E	Newark, NJ	58.6%	2,608	3,129	97.5%	63.8%	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