

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:58 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 54
Average Utilization: 75.5%
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	60.9%	1,266	3,076	97.7%	62.6%	Improvement Needed
Distribution Center B	Dallas, TX	106.5%	1,592	3,199	99.2%	91.7%	Optimized
Distribution Center C	Atlanta, GA	45.0%	1,880	3,317	99.2%	62.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	122.9%	1,725	2,567	99.1%	77.5%	Improvement Needed
Distribution Center E	Newark, NJ	76.7%	1,890	1,644	99.1%	83.4%	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