

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:04:58 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 59
Average Utilization: 78.6%
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	83.2%	2,050	2,584	96.2%	79.6%	Improvement Needed
Distribution Center B	Dallas, TX	48.1%	1,986	2,239	95.8%	87.2%	Optimized
Distribution Center C	Atlanta, GA	54.6%	2,694	3,772	96.2%	84.2%	Optimized
Distribution Center D	Los Angeles, CA	63.4%	2,530	3,391	95.8%	63.3%	Improvement Needed
Distribution Center E	Newark, NJ	67.2%	2,385	3,008	99.2%	79.0%	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