

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:04:23 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 46
Average Utilization: 79.9%
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	60.1%	2,362	2,784	96.3%	68.5%	Improvement Needed
Distribution Center B	Dallas, TX	113.1%	1,046	1,926	97.5%	78.6%	Improvement Needed
Distribution Center C	Atlanta, GA	40.1%	2,575	1,705	95.9%	89.6%	Optimized
Distribution Center D	Los Angeles, CA	47.7%	2,416	2,210	97.7%	73.0%	Improvement Needed
Distribution Center E	Newark, NJ	85.1%	2,859	3,640	96.7%	89.8%	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