

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:00:47 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 48
Average Utilization: 80.5%
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	50.7%	1,290	3,880	96.1%	69.8%	Improvement Needed
Distribution Center B	Dallas, TX	71.9%	1,473	2,699	96.4%	92.7%	Optimized
Distribution Center C	Atlanta, GA	66.3%	1,603	2,977	95.1%	91.0%	Optimized
Distribution Center D	Los Angeles, CA	46.7%	2,419	2,716	97.3%	78.4%	Improvement Needed
Distribution Center E	Newark, NJ	44.1%	2,134	2,313	96.4%	70.6%	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