

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:28 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 51
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	71.2%	2,414	3,101	98.6%	72.9%	Improvement Needed
Distribution Center B	Dallas, TX	132.7%	2,473	2,531	96.9%	66.6%	Improvement Needed
Distribution Center C	Atlanta, GA	95.8%	1,420	3,621	98.3%	88.6%	Optimized
Distribution Center D	Los Angeles, CA	51.4%	1,501	3,443	98.8%	79.6%	Improvement Needed
Distribution Center E	Newark, NJ	65.3%	2,724	2,136	96.2%	94.6%	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