

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:20 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 56
Average Utilization: 78.3%
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	44.5%	1,798	2,576	95.6%	71.8%	Improvement Needed
Distribution Center B	Dallas, TX	43.2%	1,442	1,894	95.7%	63.5%	Improvement Needed
Distribution Center C	Atlanta, GA	78.6%	2,635	2,765	95.7%	79.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	87.1%	2,383	1,898	96.2%	94.5%	Optimized
Distribution Center E	Newark, NJ	41.6%	2,793	3,231	96.3%	82.2%	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