

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:07:38 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 45
Average Utilization: 77.4%
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	39.4%	1,955	3,167	97.5%	77.9%	Improvement Needed
Distribution Center B	Dallas, TX	82.9%	2,906	3,775	96.2%	85.1%	Optimized
Distribution Center C	Atlanta, GA	76.9%	1,194	3,470	95.7%	70.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	33.0%	1,828	2,045	97.7%	62.6%	Improvement Needed
Distribution Center E	Newark, NJ	67.9%	1,487	3,983	98.0%	91.4%	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