

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:15 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 40
Average Utilization: 72.8%
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	68.4%	2,818	1,504	96.2%	73.9%	Improvement Needed
Distribution Center B	Dallas, TX	42.5%	2,980	2,847	97.4%	62.8%	Improvement Needed
Distribution Center C	Atlanta, GA	40.5%	2,866	2,412	95.6%	83.2%	Optimized
Distribution Center D	Los Angeles, CA	59.6%	2,928	3,013	98.8%	62.3%	Improvement Needed
Distribution Center E	Newark, NJ	74.1%	1,195	3,283	96.1%	81.6%	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