

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:05:10 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 47
Average Utilization: 74.9%
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%	2,904	3,523	96.8%	60.2%	Improvement Needed
Distribution Center B	Dallas, TX	106.3%	2,650	2,642	96.6%	67.3%	Improvement Needed
Distribution Center C	Atlanta, GA	59.3%	1,436	1,786	96.6%	68.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	54.6%	1,380	2,820	97.1%	84.8%	Optimized
Distribution Center E	Newark, NJ	44.1%	1,285	1,986	97.8%	93.6%	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