

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:09 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 38
Average Utilization: 81.5%
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	60.2%	1,953	2,510	98.9%	80.0%	Improvement Needed
Distribution Center B	Dallas, TX	71.1%	2,446	3,868	98.0%	94.7%	Optimized
Distribution Center C	Atlanta, GA	53.2%	2,987	1,844	96.4%	71.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	89.7%	1,762	2,811	95.3%	71.7%	Improvement Needed
Distribution Center E	Newark, NJ	44.0%	2,340	2,639	96.1%	89.1%	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