

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: 32
Average Utilization: 79.6%
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	102.6%	2,099	2,255	95.2%	84.7%	Optimized
	Dallas, TX	106.5%	2,324	1,993	98.0%	94.1%	Optimized
Distribution Center B	Atlanta, GA	58.4%	2,840	3,089	95.4%	78.8%	Improvement Needed
Distribution Center C	Los Angeles, CA	93.4%	1,339	1,875	95.3%	61.0%	Improvement Needed
Distribution Center D	Newark, NJ	95.1%	1,908	2,765	97.3%	79.7%	Improvement Needed

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement predictive maintenance for robotic arms

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