

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:21 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 63
Average Utilization: 74.8%
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	59.1%	2,998	3,890	99.0%	83.5%	Optimized
	Dallas, TX	63.3%	2,674	3,979	96.8%	84.0%	Optimized
Distribution Center B	Atlanta, GA	54.4%	1,577	3,751	98.5%	71.6%	Improvement Needed
Distribution Center C	Los Angeles, CA	110.4%	2,229	2,342	97.9%	71.3%	Improvement Needed
Distribution Center D	Newark, NJ	76.2%	1,283	3,454	95.9%	63.9%	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