

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:05 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 37
Average Utilization: 73.1%
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	61.1%	1,038	1,551	97.7%	65.9%	Improvement Needed
Distribution Center B	Dallas, TX	51.0%	2,890	3,843	97.2%	87.1%	Optimized
Distribution Center C	Atlanta, GA	62.7%	2,928	2,310	95.0%	62.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	37.0%	1,815	2,741	98.4%	60.4%	Improvement Needed
Distribution Center E	Newark, NJ	67.0%	1,579	2,803	98.0%	89.3%	Optimized

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