

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:31 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 39
Average Utilization: 78.7%
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 Status	
Distribution Center A	Chicago, IL	63.1%	2,035	2,094	97.8%	93.5%	Optimized
	Dallas, TX	71.4%	1,248	3,396	97.6%	74.3%	Improvement Needed
Distribution Center B	Atlanta, GA	60.8%	2,972	3,277	97.6%	76.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	48.0%	1,454	1,737	98.5%	83.2%	Optimized
Distribution Center E	Newark, NJ	104.4%	1,888	3,706	96.9%	66.4%	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