

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:45 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 65
Average Utilization: 78.0%
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	46.2%	1,108	1,717	96.6%	83.3%	Optimized
	Dallas, TX	70.2%	2,546	2,944	97.4%	92.8%	Optimized
Distribution Center B	Atlanta, GA	59.1%	1,155	1,767	97.8%	75.2%	Improvement Needed
Distribution Center C	Los Angeles, CA	67.0%	2,770	3,127	97.9%	63.8%	Improvement Needed
Distribution Center D	Newark, NJ	85.0%	2,517	3,270	98.1%	75.0%	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