

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:04 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 34
Average Utilization: 78.8%
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	59.6%	2,358	3,888	97.6%	90.6%	Optimized
	Dallas, TX	31.3%	1,404	1,661	95.6%	94.6%	Optimized
Distribution Center B	Atlanta, GA	45.3%	2,231	3,430	98.4%	65.1%	Improvement Needed
Distribution Center C	Los Angeles, CA	63.2%	2,211	3,379	95.9%	73.2%	Improvement Needed
Distribution Center D	Newark, NJ	70.7%	1,150	3,209	95.6%	70.6%	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