

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:07:35 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 31
Average Utilization: 78.1%
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	67.5%	1,303	2,138	96.2%	83.9%	Optimized
	Dallas, TX	99.8%	1,013	3,718	95.8%	82.3%	Optimized
Distribution Center B	Atlanta, GA	59.6%	2,134	2,873	97.1%	72.5%	Improvement Needed
Distribution Center C	Los Angeles, CA	59.4%	1,916	1,925	96.3%	78.2%	Improvement Needed
Distribution Center D	Newark, NJ	74.3%	1,444	1,574	99.0%	73.8%	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