

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:10 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 56
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	70.3%	1,841	2,552	99.2%	70.3%	Improvement Needed
Distribution Center B	Dallas, TX	107.8%	1,532	3,767	97.3%	66.3%	Improvement Needed
Distribution Center C	Atlanta, GA	56.6%	1,854	1,902	97.1%	83.0%	Optimized
Distribution Center D	Los Angeles, CA	123.0%	1,413	3,630	95.2%	92.9%	Optimized
Distribution Center E	Newark, NJ	93.0%	1,013	2,327	97.8%	77.3%	Improvement Needed

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement predictive maintenance for robots in Warehouse 2 to reduce downtime by 15%

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