

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:04:08 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 37
Average Utilization: 77.5%
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	49.1%	2,248	1,933	97.7%	61.8%	Improvement Needed
Distribution Center B	Dallas, TX	44.9%	2,248	2,999	97.2%	91.7%	Optimized
Distribution Center C	Atlanta, GA	87.2%	2,574	2,283	98.8%	63.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	78.3%	1,891	2,488	97.7%	77.3%	Improvement Needed
Distribution Center E	Newark, NJ	99.7%	1,021	3,857	95.3%	93.1%	Optimized

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Imple

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