

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:50 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 45
Average Utilization: 83.3%
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	62.6%	2,549	1,613	98.6%	72.5%	Improvement Needed
Distribution Center B	Dallas, TX	72.4%	1,533	2,826	99.0%	78.6%	Improvement Needed
Distribution Center C	Atlanta, GA	48.1%	1,738	3,379	97.4%	78.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	75.5%	1,559	3,300	95.0%	91.8%	Optimized
Distribution Center E	Newark, NJ	107.0%	1,660	1,513	97.9%	94.6%	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