

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:17 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 42
Average Utilization: 72.8%
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 Status	
Distribution Center A	Chicago, IL	33.5%	2,400	2,688	96.0%	92.7%	Optimized
	Dallas, TX	78.1%	1,011	1,807	99.4%	61.4%	Improvement Needed
Distribution Center B	Atlanta, GA	118.5%	2,627	2,587	99.1%	63.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	102.2%	1,891	3,297	98.5%	63.8%	Improvement Needed
Distribution Center E	Newark, NJ	64.5%	2,144	3,426	95.7%	82.8%	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