

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:57 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 45
Average Utilization: 79.0%
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	69.1%	2,032	3,057	96.3%	88.2%	Optimized
	Dallas, TX	81.7%	1,751	3,670	97.1%	75.3%	Improvement Needed
Distribution Center B	Atlanta, GA	78.3%	2,221	3,827	99.3%	75.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	73.6%	2,223	3,889	95.6%	68.6%	Improvement Needed
Distribution Center E	Newark, NJ	97.9%	1,794	2,725	98.4%	87.1%	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