

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:07:37 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 14
Average Utilization: 77.1%
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 | 52.1% | 2,922 | 3,471 | 99.2% | 67.2% | Improvement Needed |
| Distribution Center B | Dallas, TX | 83.8% | 2,562 | 3,851 | 95.3% | 77.3% | Improvement Needed |
| Distribution Center C | Atlanta, GA | 64.3% | 1,369 | 3,408 | 97.6% | 91.6% | Optimized |
| Distribution Center D | Los Angeles, CA | 81.2% | 2,276 | 1,829 | 98.1% | 83.4% | Optimized |
| Distribution Center E | Newark, NJ | 85.8% | 1,453 | 2,449 | 99.0% | 66.0% | Improvement Needed |

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement AI-driven inventory tracking in Warehouse 1

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