

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:08:32 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 39
Average Utilization: 78.6%
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 | 68.8% | 1,750 | 2,719 | 97.3% | 79.3% | Improvement Needed |
| Distribution Center B | Dallas, TX | 81.0% | 2,832 | 3,464 | 95.2% | 64.6% | Improvement Needed |
| Distribution Center C | Atlanta, GA | 54.3% | 1,200 | 1,696 | 95.5% | 94.9% | Optimized |
| Distribution Center D | Los Angeles, CA | 123.9% | 2,079 | 1,790 | 98.6% | 90.0% | Optimized |
| Distribution Center E | Newark, NJ | 58.2% | 2,166 | 3,342 | 95.2% | 64.2% | Improvement Needed |

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