

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:25 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 62
Average Utilization: 79.2%
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 | 66.1% | 2,810 | 2,040 | 99.1% | 70.1% | Improvement Needed |
| Distribution Center B | Dallas, TX | 41.2% | 2,851 | 2,619 | 95.1% | 65.2% | Improvement Needed |
| Distribution Center C | Atlanta, GA | 52.8% | 1,810 | 2,736 | 97.6% | 86.8% | Optimized |
| Distribution Center D | Los Angeles, CA | 56.1% | 1,041 | 3,500 | 97.3% | 79.5% | Improvement Needed |
| Distribution Center E | Newark, NJ | 47.0% | 1,789 | 3,392 | 97.9% | 94.5% | 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