

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:07:18 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 56
Average Utilization: 76.0%
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 | 81.0% | 2,599 | 3,660 | 97.3% | 73.5% | Improvement Needed |
| Distribution Center B | Dallas, TX | 65.2% | 1,700 | 3,288 | 96.5% | 80.0% | Optimized |
| Distribution Center C | Atlanta, GA | 60.3% | 1,587 | 3,296 | 99.3% | 94.9% | Optimized |
| Distribution Center D | Los Angeles, CA | 56.2% | 2,754 | 1,892 | 97.2% | 68.7% | Improvement Needed |
| Distribution Center E | Newark, NJ | 66.0% | 1,025 | 2,305 | 97.0% | 63.0% | 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