

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:27 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 64
Average Utilization: 76.4%
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 | 64.3% | 2,371 | 1,890 | 96.1% | 74.4% | Improvement Needed |
| Distribution Center B | Dallas, TX | 101.7% | 1,372 | 2,925 | 98.2% | 61.4% | Improvement Needed |
| Distribution Center C | Atlanta, GA | 69.7% | 1,710 | 2,033 | 98.1% | 83.2% | Optimized |
| Distribution Center D | Los Angeles, CA | 48.9% | 1,130 | 2,127 | 98.9% | 91.2% | Optimized |
| Distribution Center E | Newark, NJ | 48.7% | 2,069 | 2,047 | 98.7% | 71.9% | Improvement Needed |

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement predictive maintenance for robots in Warehouse 2

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