

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: 63
Average Utilization: 69.7%
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 | 61.6% | 2,692 | 2,742 | 97.0% | 72.6% | Improvement Needed |
| Distribution Center B | Dallas, TX | 75.1% | 1,566 | 3,106 | 98.5% | 65.5% | Improvement Needed |
| Distribution Center C | Atlanta, GA | 45.2% | 1,297 | 1,591 | 98.5% | 75.9% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 43.8% | 1,334 | 3,291 | 95.6% | 62.4% | Improvement Needed |
| Distribution Center E | Newark, NJ | 96.1% | 1,511 | 1,661 | 97.2% | 72.2% | Improvement Needed |

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput

by 20%

- Implement voice-picking system to improve accuracy to 99.8%

- Upgrade WMS integration for real-time inventory visibility

- Add automated sortation system for small package handling

- Implement predictive analytics for demand-based staffing

- Consider AS/RS system for high-velocity SKUs