

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:49 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 69
Average Utilization: 74.7%
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 | 59.4% | 1,309 | 3,289 | 96.3% | 74.3% | Improvement Needed |
| Distribution Center B | Dallas, TX | 119.4% | 1,274 | 2,254 | 98.8% | 75.4% | Improvement Needed |
| Distribution Center C | Atlanta, GA | 66.0% | 2,423 | 2,328 | 97.2% | 63.9% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 77.4% | 2,566 | 2,090 | 96.2% | 78.8% | Improvement Needed |
| Distribution Center E | Newark, NJ | 59.9% | 1,199 | 2,273 | 96.1% | 81.0% | Optimized |

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