

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:15 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 54
Average Utilization: 68.4%
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 | 63.1% | 1,947 | 2,111 | 95.9% | 66.0% | Improvement Needed |
| Distribution Center B | Dallas, TX | 72.3% | 2,125 | 2,789 | 97.6% | 87.9% | Optimized |
| Distribution Center C | Atlanta, GA | 91.2% | 2,026 | 2,949 | 98.2% | 60.6% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 87.9% | 2,291 | 3,838 | 96.7% | 64.4% | Improvement Needed |
| Distribution Center E | Newark, NJ | 83.1% | 2,796 | 2,484 | 95.9% | 62.9% | 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