

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:00:39 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 37
Average Utilization: 79.2%
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 | 83.4% | 2,052 | 3,336 | 99.5% | 76.1% | Improvement Needed |
| Distribution Center B | Dallas, TX | 56.2% | 1,439 | 3,710 | 96.2% | 75.1% | Improvement Needed |
| Distribution Center C | Atlanta, GA | 61.3% | 1,270 | 1,526 | 96.1% | 73.6% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 83.5% | 2,864 | 1,955 | 95.8% | 79.1% | Improvement Needed |
| Distribution Center E | Newark, NJ | 49.2% | 2,391 | 1,540 | 96.8% | 92.1% | 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