

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:04:20 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 43
Average Utilization: 73.4%
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 | 57.4% | 2,430 | 1,836 | 96.3% | 70.7% | Improvement Needed |
| Distribution Center B | Dallas, TX | 85.0% | 2,385 | 2,822 | 97.8% | 61.4% | Improvement Needed |
| Distribution Center C | Atlanta, GA | 82.5% | 2,001 | 1,670 | 95.5% | 68.0% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 84.1% | 1,122 | 2,327 | 98.1% | 88.9% | Optimized |
| Distribution Center E | Newark, NJ | 107.4% | 2,766 | 1,741 | 95.2% | 78.1% | 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