

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:04:27 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 28
Average Utilization: 67.2%
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 | 80.5% | 1,785 | 1,852 | 97.1% | 64.9% | Improvement Needed |
| Distribution Center B | Dallas, TX | 36.5% | 2,849 | 2,660 | 96.2% | 76.7% | Improvement Needed |
| Distribution Center C | Atlanta, GA | 64.0% | 1,739 | 3,518 | 96.3% | 71.6% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 50.2% | 1,172 | 3,457 | 97.5% | 61.2% | Improvement Needed |
| Distribution Center E | Newark, NJ | 62.8% | 2,458 | 3,599 | 98.0% | 61.7% | 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