

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:05:31 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 41
Average Utilization: 72.6%
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 | 78.5% | 1,240 | 1,779 | 95.0% | 66.5% | Improvement Needed |
| Distribution Center B | Dallas, TX | 99.6% | 2,588 | 1,579 | 96.5% | 68.7% | Improvement Needed |
| Distribution Center C | Atlanta, GA | 108.2% | 1,968 | 2,933 | 97.7% | 66.1% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 68.0% | 1,417 | 3,807 | 95.4% | 93.4% | Optimized |
| Distribution Center E | Newark, NJ | 70.7% | 2,448 | 3,418 | 96.1% | 68.4% | 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