

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:49 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 46
Average Utilization: 79.6%
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 | 90.9% | 2,328 | 3,177 | 96.7% | 70.5% | Improvement Needed |
| Distribution Center B | Dallas, TX | 89.1% | 2,312 | 2,041 | 97.6% | 68.7% | Improvement Needed |
| Distribution Center C | Atlanta, GA | 70.0% | 2,118 | 3,660 | 96.4% | 81.9% | Optimized |
| Distribution Center D | Los Angeles, CA | 59.2% | 1,002 | 1,695 | 96.2% | 85.3% | Optimized |
| Distribution Center E | Newark, NJ | 63.9% | 2,550 | 3,934 | 98.5% | 91.5% | 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