Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:08:36 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 44

Average Utilization: 68.4% 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 Status Level | |
|--|------------------|-----------------|------------------|---------------------|----------------------------|---------------------|
| Distribution Chicago, IL Center A | 38.7% | 2,291 | 3,918 | 96.5% | 70.4% | Improvemen t Needed |
| Distribution Dallas, TX Center B | 62.0% | 1,147 | 2,781 | 95.5% | 60.5% | Improvemen t Needed |
| Distribution Atlanta, GA Center C | 81.1% | 1,749 | 2,626 | 96.9% | 68.8% | Improvemen t Needed |
| Distribution Los Center D Angeles, CA | 60.8% A | 1,531 | 1,572 | 96.4% | 79.3% | Improvemen t Needed |
| Distribution Newark, NJ Center E | 54.7% | 2,685 | 3,439 | 96.8% | 63.3% | Improvemen t Needed |

Optimiz ation O pportun ities

Deploy 5 additional AGVs in Warehouse 3 to increase throughput

by 20%

- Imple ment voicepicking system to improve accuracy to 99.8%
- Upgra de WMS integration for real-time inventory visibility
- Add au tomated sortation system for small package handling
- Imple ment predictive analytics for demand-based staffing
- Consid er AS/RS system for highvelocity SKUs