Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:06:41 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5 Total Robots: 49

Average Utilization: 78.7% Throughput Increase: 34.2% Labor Cost Reduction: 28.5%

ROI Period: 2.3 years

Warehouse Performance

| Warehouse Location | | Capacity Used | Inbound/ Day | Outbound/ Day | ound/ Picking Automation Statu Accuracy Level | | Status |
|--------------------|---|------------------|-----------------|------------------|--|-------|---------------------|
| | Distribution Chicago, IL | 55.5% | 2,507 | 3,916 | 98.8% | 93.9% | Optimized |
| | Center A Distribution Dallas, TX Center B | 42.1% | 2,498 | 3,650 | 97.7% | 76.0% | Improvemen t Needed |
| | Distribution Atlanta, GA Center C | 70.2% | 1,828 | 3,368 | 95.8% | 61.9% | Improvemen t Needed |
| | Distribution Los Center D Angeles, CA | 88.2% A | 1,103 | 3,637 | 95.5% | 74.8% | Improvemen t Needed |
| | Distribution Newark, NJ Center E | 52.9% | 1,850 | 2,074 | 96.2% | 86.8% | Optimized |

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