Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:02:26 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 31

Average Utilization: 75.7% Throughput Increase: 34.2% Labor Cost Reduction: 28.5%

ROI Period: 2.3 years

Warehouse Performance

| Warehouse Location | | Capacity Used | Inbound/ Day | Outbound/ Day | Picking Accuracy | Automation Status Level | |
|--------------------|---|------------------|-----------------|------------------|---------------------|----------------------------|---------------------|
| | Distribution Chicago, IL | | 1,753 | 3,770 | 97.1% | 83.0% | Optimized |
| | Center A Distribution Dallas, TX Center B | 54.7% | 2,883 | 1,542 | 96.5% | 63.6% | Improvemen t Needed |
| | Distribution Atlanta, GA Center C | 122.4% | 1,626 | 1,731 | 96.9% | 71.1% | Improvemen t Needed |
| | Distribution Los Center D Angeles, CA | 112.2% \ | 2,044 | 2,730 | 96.8% | 68.6% | Improvemen t Needed |
| | Distribution Newark, NJ Center E | 62.0% | 2,797 | 2,666 | 97.2% | 92.1% | 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