Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:02:47 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5 Total Robots: 55

Average Utilization: 78.9% 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, I | L 71.4% | 1,018 | 1,551 | 98.3% | 91.2% | Optimized |
| | Center A Distribution Dallas, TX Center B | 79.9% | 2,374 | 3,633 | 98.7% | 64.1% | Improvemen t Needed |
| | Distribution Atlanta, G | A 90.8% | 2,505 | 1,861 | 98.3% | 87.3% | Optimized |
| | Center C Distribution Los Center D Angeles, (| 80.6% CA | 2,854 | 2,171 | 95.9% | 78.9% | Improvemen t Needed |
| | Distribution Newark, N Center E | J 67.2% | 2,146 | 2,687 | 96.7% | 73.2% | 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