Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:02:08 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 44

Average Utilization: 82.3% 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 Chicago, IL | 52.4% | 2,213 | 2,785 | 96.0% | 93.7% | Optimized |
| Center A Distribution Dallas, TX | 35.1% | 1,369 | 3,575 | 97.2% | 81.6% | Optimized |
| Center B Distribution Atlanta, GA | 44.0% | 2,716 | 3,634 | 98.7% | 80.4% | Optimized |
| Center C Distribution Los | 113.7% | 2,935 | 2,162 | 99.3% | 80.1% | Optimized |
| Center D Angeles, CA Distribution Newark, NJ Center E | 45.2% | 1,345 | 2,067 | 96.5% | 75.9% | 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