Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:01:30 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 36

Average Utilization: 78.8% 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 | 45.1% | 1,203 | 1,583 | 96.5% | 94.3% | Optimized |
| Center A Distribution Dallas, TX Center B | 52.9% | 2,884 | 1,807 | 95.7% | 74.8% | Improvemen t Needed |
| Distribution Atlanta, GA Center C | 80.4% | 2,448 | 2,775 | 95.9% | 75.3% | Improvemen t Needed |
| Distribution Los | 99.4% | 1,928 | 3,961 | 98.4% | 87.8% | Optimized |
| Genter D Angeles, CA Distribution Newark, NJ Center E | ¹ 61.3% | 2,479 | 2,532 | 98.9% | 61.8% | 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