Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:02:52 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 35

Average Utilization: 83.9% 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 Level | n Status |
|---|--------------------|-----------------|------------------|---------------------|---------------------|------------------------|
| Distribution Chicago, IL | 87.7% | 1,766 | 3,776 | 96.7% | 84.3% | Optimized |
| Center A Distribution Dallas, TX | | 1,065 | 2,658 | 97.5% | 94.2% | Optimized |
| Center B Distribution Atlanta, GA | 94.2% | 1,311 | 2,316 | 98.4% | 91.6% | Optimized |
| Center C Distribution Los | 83.0% | 2,675 | 2,416 | 98.3% | 84.5% | Optimized |
| Center D Angeles, CA Distribution Newark, NJ Center E | ⁴ 50.2% | 2,870 | 2,325 | 95.3% | 64.9% | 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