Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

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Automation Overview

Total Warehouses: 5 Total Robots: 59

Average Utilization: 73.6% 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 | 57.6% | 1,720 | 2,782 | 99.4% | 82.1% | Optimized |
| Center A Distribution Center B | Dallas, TX | 79.4% | 1,143 | 2,563 | 99.5% | 68.9% | Improvemen t Needed |
| Distribution A Center C | Atlanta, GA | 106.2% | 1,074 | 2,672 | 97.0% | 77.8% | Improvemen t Needed |
| Distribution L Center D | ₋os Angeles, CA | 41.0% | 1,106 | 3,102 | 96.2% | 67.5% | Improvemen t Needed |
| Distribution N Center E | Newark, NJ | 61.8% | 1,806 | 1,736 | 97.6% | 71.7% | 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