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: 52

Average Utilization: 67.5% 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 Center A | 43.1% | 2,781 | 3,468 | 96.3% | 74.7% | Improvemen t Needed |
| Distribution Dallas, TX Center B | 62.1% | 2,377 | 3,638 | 97.3% | 67.9% | Improvemen t Needed |
| Distribution Atlanta, GA Center C | 49.2% | 2,114 | 1,826 | 97.5% | 63.5% | Improvemen t Needed |
| Distribution Los Center D Angeles, CA | 45.0% A | 2,501 | 3,714 | 97.1% | 66.3% | Improvemen t Needed |
| Distribution Newark, NJ Center E | 83.4% | 2,451 | 1,744 | 96.5% | 65.2% | 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