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: 47

Average Utilization: 76.5% 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 | 50.4% | 2,235 | 3,532 | 98.5% | 66.6% | Improvemen t Needed |
| Distribution Dallas, TX | 37.5% | 1,356 | 3,353 | 96.4% | 86.9% | Optimized |
| Center B Distribution Atlanta, GA | 83.7% | 1,325 | 2,627 | 98.8% | 89.0% | Optimized |
| Center C Distribution Los Center D Angeles, CA | 120.0% \ | 1,304 | 2,392 | 98.2% | 73.8% | Improvemen t Needed |
| Distribution Newark, NJ Center E | 47.2% | 2,795 | 3,755 | 99.1% | 66.1% | 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