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: 63

Average Utilization: 82.0% 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 | 73.3% | 2,758 | 3,892 | 95.0% | 89.2% | Optimized |
| Center A Distribution Dallas, TX | | 2,919 | 2,849 | 97.0% | 80.6% | Optimized |
| Center B Distribution Atlanta, GA | 75.3% | 2,219 | 2,612 | 97.0% | 83.6% | Optimized |
| Center C Distribution Los | 91.3% | 2,592 | 1,800 | 98.8% | 85.1% | Optimized |
| Center D Angeles, CA Distribution Newark, NJ Center E | ^A 69.3% | 2,560 | 1,690 | 99.2% | 71.5% | 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