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: 49

Average Utilization: 82.8% 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 | | 1,880 | 2,951 | 96.4% | 87.9% | Optimized |
| Center A Distribution Dallas, TX Center B | 62.3% | 2,793 | 2,957 | 95.6% | 65.6% | Improvemen t Needed |
| Distribution Atlanta, GA | 53.7% | 2,602 | 2,312 | 97.9% | 89.7% | Optimized |
| Center C Distribution Los | 83.1% | 2,236 | 3,808 | 96.4% | 82.2% | Optimized |
| Genter D Distribution Newark, NJ Center E | ¹ 98.3% | 1,601 | 3,070 | 96.3% | 88.6% | Optimized |

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