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: 46

Average Utilization: 82.6% 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 Level | n Status |
|---|--------------------|-----------------|------------------|---------------------|---------------------|------------------------|
| Distribution Chicago, IL | 68.6% | 2,610 | 1,793 | 98.8% | 89.8% | Optimized |
| Center A Distribution Dallas, TX | | 1,948 | 3,588 | 96.8% | 90.3% | Optimized |
| Center B Distribution Atlanta, GA | 76.8% | 2,542 | 3,913 | 99.2% | 80.8% | Optimized |
| Center C Distribution Los | 55.5% | 2,324 | 3,192 | 96.5% | 82.6% | Optimized |
| Center D Angeles, CA Distribution Newark, NJ Center E | ^A 53.1% | 2,782 | 2,974 | 97.0% | 69.5% | 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