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: 50

Average Utilization: 76.1% 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 Center A | 50.2% | 2,638 | 1,505 | 99.0% | 61.3% | Improvemen t Needed |
| Distribution Dallas, TX | 57.5% | 1,521 | 1,664 | 97.6% | 89.8% | Optimized |
| Center B Distribution Atlanta, GA Center C | 102.2% | 1,367 | 1,901 | 98.3% | 69.1% | Improvemen t Needed |
| Distribution Los Center D Angeles, CA Distribution Newark, NJ Center E | 64.5% | 2,153 | 3,753 | 98.6% | 81.9% | Optimized |
| | ¹ 78.0% | 1,774 | 3,218 | 96.3% | 78.5% | 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