# **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: 29

Average Utilization: 70.8% Throughput Increase: 34.2% Labor Cost Reduction: 28.5%

ROI Period: 2.3 years

## **Warehouse Performance**

| Warehouse Location                       | Capacity<br>Used | Inbound/<br>Day | Outbound/<br>Day | Picking<br>Accuracy | Automation Status<br>Level |                     |
|--|------------------|-----------------|------------------|---------------------|----------------------------|---------------------|
| Distribution Chicago, IL Center A        | 85.1%            | 1,624           | 3,460            | 98.5%               | 78.1%                      | Improvemen t Needed |
| Distribution Dallas, TX<br>Center B      | 67.3%            | 1,474           | 1,515            | 99.2%               | 65.1%                      | Improvemen t Needed |
| Distribution Atlanta, GA Center C        | 59.6%            | 2,857           | 3,747            | 97.3%               | 71.6%                      | Improvemen t Needed |
| Distribution Los<br>Center D Angeles, CA | 70.0%<br>\       | 2,322           | 1,650            | 99.5%               | 67.2%                      | Improvemen t Needed |
| Distribution Newark, NJ<br>Center E      | 59.5%            | 1,257           | 3,966            | 96.5%               | 72.1%                      | 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