# **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: 44

Average Utilization: 72.4% 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 Chica                          | go, IL | 82.3%            | 2,051           | 2,436            | 97.6%               | 94.4%                      | Optimized           |
|                    | Center A<br>Distribution Dallas<br>Center B | s, TX  | 90.5%            | 1,011           | 2,043            | 99.0%               | 68.5%                      | Improvemen t Needed |
|                    | Distribution Atlanta<br>Center C            | a, GA  | 60.5%            | 1,817           | 1,950            | 95.8%               | 66.3%                      | Improvemen t Needed |
|                    | Distribution Los<br>Center D Angel          | es, CA | 106.4%           | 2,991           | 2,055            | 95.5%               | 63.8%                      | Improvemen t Needed |
|                    | Distribution Newar                          | rk, NJ | 111.8%           | 1,248           | 3,357            | 96.7%               | 69.0%                      | 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