# **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: 57

Average Utilization: 83.1% 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<br>Level | Status              |
|--|------------------|-----------------|------------------|---------------------|---------------------|---------------------|
| Distribution Chicago, IL                             | 70.8%            | 2,378           | 1,855            | 97.5%               | 87.9%               | Optimized           |
| Center A<br>Distribution Dallas, TX                  |                  | 1,049           | 3,914            | 98.7%               | 88.4%               | Optimized           |
| Center B<br>Distribution Atlanta, GA                 | 74.5%            | 1,621           | 2,743            | 98.8%               | 88.0%               | Optimized           |
| Center C<br>Distribution Los<br>Center D Angeles, CA | 60.6%<br>A       | 2,767           | 2,886            | 97.3%               | 74.4%               | Improvemen t Needed |
| Distribution Newark, NJ<br>Center E                  | 108.6%           | 1,425           | 1,908            | 95.1%               | 76.7%               | Improvemen t Needed |

# Optimiz ation O pportun ities

Deploy 5
additional
AGVs in
Warehouse
3 to
increase
throughput
by 20%
• Imple
ment voice-

picking 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