# **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: 34

Average Utilization: 78.1% 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                         | 58.2%            | 2,205           | 3,922            | 97.0%               | 89.3%               | Optimized           |
| Center A<br>Distribution Dallas, TX              | 66.5%            | 1,558           | 2,541            | 97.8%               | 80.6%               | Optimized           |
| Center B<br>Distribution Atlanta, GA<br>Center C | 59.6%            | 1,516           | 3,939            | 97.9%               | 72.7%               | Improvemen t Needed |
| Distribution Los<br>Center D Angeles, CA         | 90.0%<br>A       | 2,309           | 2,500            | 95.3%               | 67.2%               | Improvemen t Needed |
| Distribution Newark, NJ<br>Center E              | 62.3%            | 2,650           | 3,841            | 99.3%               | 80.7%               | Optimized           |

# 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