# **Warehouse Automation Analytics**

## Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:03:31 AM Use Case: warehouse-automation

#### **Automation Overview**

Total Warehouses: 5
Total Robots: 30

Average Utilization: 78.5% 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                        | 74.1%            | 1,219           | 1,583            | 98.7%               | 91.6%               | Optimized           |
| Center A<br>Distribution Dallas, TX<br>Center B | 67.1%            | 1,987           | 2,355            | 97.0%               | 71.9%               | Improvemen t Needed |
| Distribution Atlanta, GA                        | 42.3%            | 1,765           | 3,821            | 97.6%               | 87.4%               | Optimized           |
| Center C Distribution Los Center D Angeles, CA  | 72.5%            | 2,030           | 1,882            | 97.1%               | 75.6%               | Improvemen t Needed |
| Distribution Newark, NJ<br>Center E             | 43.0%            | 1,783           | 2,324            | 98.4%               | 66.1%               | 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