# **Warehouse Automation Analytics**

## Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:07:51 AM Use Case: warehouse-automation

#### **Automation Overview**

Total Warehouses: 5
Total Robots: 38

Average Utilization: 75.2% 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 Center A                    | 41.9%            | 2,426           | 3,240            | 96.7%               | 76.9%               | Improvemen t Needed    |
| Distribution Dallas, TX                              | 116.0%           | 2,007           | 1,978            | 98.8%               | 88.0%               | Optimized              |
| Center B<br>Distribution Atlanta, GA                 | 112.8%           | 1,306           | 2,604            | 98.2%               | 87.9%               | Optimized              |
| Center C<br>Distribution Los<br>Center D Angeles, CA | 76.0%<br>A       | 2,986           | 1,836            | 97.7%               | 61.7%               | Improvemen t Needed    |
| Distribution Newark, NJ<br>Center E                  | 33.1%            | 1,771           | 1,569            | 98.4%               | 61.4%               | Improvemen<br>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