# **Warehouse Automation Analytics**

## Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:08:20 AM Use Case: warehouse-automation

#### **Automation Overview**

Total Warehouses: 5
Total Robots: 41

Average Utilization: 83.9% 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                                    | 40.5%              | 1,374           | 1,601            | 95.1%               | 93.6%               | Optimized           |
| Center A<br>Distribution Dallas, TX<br>Center B             | 63.8%              | 2,940           | 2,337            | 97.2%               | 77.9%               | Improvemen t Needed |
| Distribution Atlanta, GA<br>Center C                        | 114.0%             | 2,752           | 3,272            | 97.9%               | 64.6%               | Improvemen t Needed |
| Distribution Los  | 44.7%              | 2,620           | 1,768            | 96.1%               | 88.7%               | Optimized           |
| Center D Angeles, CA<br>Distribution Newark, NJ<br>Center E | <sup>A</sup> 60.0% | 1,442           | 2,950            | 99.4%               | 94.5%               | 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