# **Warehouse Automation Analytics**

### Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:09:23 AM Use Case: warehouse-automation

#### **Automation Overview**

Total Warehouses: 5 Total Robots: 58

Average Utilization: 84.9% 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                                    |                    | 2,986           | 2,138            | 97.3%               | 81.4%               | Optimized           |
| Center A<br>Distribution Dallas, TX                         |                    | 2,043           | 2,153            | 95.2%               | 89.0%               | Optimized           |
| Center B<br>Distribution Atlanta, GA<br>Center C            | 85.2%              | 2,142           | 2,411            | 95.4%               | 78.7%               | Improvemen t Needed |
| Distribution Los  | 129.6%             | 1,218           | 3,046            | 98.7%               | 83.3%               | Optimized           |
| Center D Angeles, CA<br>Distribution Newark, NJ<br>Center E | <sup>A</sup> 37.3% | 1,685           | 2,322            | 97.7%               | 91.9%               | Optimized           |

# 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