# **Warehouse Automation Analytics**

## Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:05:15 AM Use Case: warehouse-automation

#### **Automation Overview**

Total Warehouses: 5
Total Robots: 46

Average Utilization: 74.3% Throughput Increase: 34.2% Labor Cost Reduction: 28.5%

ROI Period: 2.3 years

### **Warehouse Performance**

Warehouse Location	Capacity Used	Inbound/ Day	Outbound/ Day	Picking Accuracy	Automation Status Level	
Distribution Chicago, IL	75.6%	1,736	2,551	97.5%	88.9%	Optimized
Center A Distribution Dallas, TX Center B	61.7%	1,244	2,738	99.4%	79.7%	Improvemen t Needed
Distribution Atlanta, GA Center C	49.8%	2,938	1,735	99.0%	77.0%	Improvemen t Needed
Distribution Los Center D Angeles, CA	48.9% A	2,825	2,274	98.7%	63.3%	Improvemen t Needed
Distribution Newark, NJ Center E	53.1%	1,123	2,808	96.1%	62.7%	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