# **Warehouse Automation Analytics**

## Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:03:52 AM Use Case: warehouse-automation

#### **Automation Overview**

Total Warehouses: 5
Total Robots: 34

Average Utilization: 69.8% 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 Ch	hicago, IL	66.9%	1,421	2,589	97.4%	84.1%	Optimized
Center A Distribution Da Center B	allas, TX	61.7%	1,918	3,421	97.9%	71.8%	Improvemen t Needed
Distribution At Center C	tlanta, GA	67.5%	2,073	3,472	97.4%	61.5%	Improvemen t Needed
Distribution Lo Center D Ar	os ngeles, CA	69.8%	1,037	2,358	95.7%	70.7%	Improvemen t Needed
Distribution No Center E	ewark, NJ	86.1%	1,552	2,931	99.2%	61.1%	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