# **Warehouse Automation Analytics**

## Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:01:43 AM Use Case: warehouse-automation

#### **Automation Overview**

Total Warehouses: 5
Total Robots: 45

Average Utilization: 74.4% 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 Level	Status
Distribution Chicago, IL	45.3%	1,475	3,204	95.6%	80.0%	Optimized
Center A Distribution Dallas, TX Center B	72.4%	2,315	2,762	95.1%	70.8%	Improvemen t Needed
Distribution Atlanta, GA Center C	65.7%	2,815	3,212	97.3%	75.4%	Improvemen t Needed
Distribution Los Center D Angeles, CA	97.6% \	2,101	2,400	99.0%	68.1%	Improvemen t Needed
Distribution Newark, NJ Center E	63.3%	1,294	1,927	97.2%	77.5%	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