Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:01:30 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 64

Average Utilization: 67.7% 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 Center A	34.2%	2,972	1,636	98.3%	60.7%	Improvemen t Needed
Distribution Dallas, TX Center B	71.1%	2,329	2,020	95.3%	72.8%	Improvemen t Needed
Distribution Atlanta, GA Center C	59.8%	1,900	1,749	95.8%	65.6%	Improvemen t Needed
Distribution Los Center D Angeles, CA	51.9% 4	2,655	2,078	97.7%	77.4%	Improvemen t Needed
Distribution Newark, NJ Center E	74.5%	1,920	3,856	96.6%	61.9%	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