Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:04:10 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5 Total Robots: 33

Average Utilization: 76.3% 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 Center A	68.9%	1,899	2,772	95.7%	79.4%	Improvemen t Needed
	Distribution Dallas, TX Center B	36.6%	2,984	2,831	95.6%	74.1%	Improvemen t Needed
	Distribution Atlanta, GA	59.5%	2,965	1,877	97.4%	87.0%	Optimized
	Center C Distribution Los Center D Angeles, CA	62.4% A	1,285	3,810	97.8%	63.2%	Improvemen t Needed
	Distribution Newark, NJ Center E	45.2%	1,607	3,766	96.6%	77.8%	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