Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:00:45 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 44

Average Utilization: 79.0% 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 Center A	Chicago, IL	41.2%	2,768	3,930	96.5%	73.2%	Improvemen t Needed
	Distribution	-	49.0%	2,092	2,530	98.8%	93.8%	Optimized
	Center B Distribution		75.1%	2,580	1,923	98.3%	86.6%	Optimized
	Center C Distribution Center D	Los Angeles, CA	47.8% A	1,643	2,081	95.4%	73.4%	Improvemen t Needed
	Distribution Center E	Newark, NJ	71.4%	1,892	3,703	95.7%	68.1%	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