Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:04:39 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 46

Average Utilization: 78.8% 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 Level	n Status
Distribution Chicago, IL	38.3%	2,699	2,063	96.3%	85.5%	Optimized
Center A Distribution Dallas, TX Center B	84.7%	1,501	3,095	98.3%	62.8%	Improvemen t Needed
Distribution Atlanta, GA	107.6%	2,230	3,333	98.4%	90.3%	Optimized
Center C Distribution Los	72.8%	1,385	3,675	97.7%	91.8%	Optimized
Genter D Distribution Newark, NJ Center E	^A 59.5%	2,839	2,531	98.6%	63.7%	Improvemen t Needed

Optimiz ation O pportun ities

Deploy 5
additional
AGVs in
Warehouse
3 to
increase
throughput
by 20%
• Imple
ment voice-

picking 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