Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:03:21 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 46

Average Utilization: 80.4% 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	n Status
Distribution Chicago, IL		1,602	3,447	96.8%	84.0%	Optimized
Center A Distribution Dallas, TX Center B	68.1%	2,072	1,780	97.3%	74.0%	Improvemen t Needed
Distribution Atlanta, GA	67.8%	1,867	2,500	97.6%	83.4%	Optimized
Center C Distribution Los Center D Angeles, CA	57.5% \	2,176	3,573	98.5%	67.2%	Improvemen t Needed
Distribution Newark, NJ Center E	91.0%	2,529	1,999	98.9%	93.4%	Optimized

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