Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:02:08 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 69

Average Utilization: 68.8% 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 Status Level	
Distribution Chicago, IL Center A	74.5%	1,275	1,847	95.6%	68.4%	Improvemen t Needed
Distribution Dallas, TX Center B	67.5%	2,814	3,703	95.9%	72.2%	Improvemen t Needed
Distribution Atlanta, GA Center C	37.8%	1,863	3,736	99.2%	65.1%	Improvemen t Needed
Distribution Los Center D Angeles, CA	59.9% 4	2,891	1,948	99.0%	67.5%	Improvemen t Needed
Distribution Newark, NJ Center E	65.7%	1,367	2,132	99.5%	70.7%	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