Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:05:38 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 50

Average Utilization: 76.5% 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	Status
Distribution Chicago, IL Center A	79.8%	2,737	2,201	99.3%	77.6%	Improvemen t Needed
Distribution Dallas, TX Center B	41.0%	1,274	2,287	95.2%	76.2%	Improvemen t Needed
Distribution Atlanta, GA Center C	78.8%	1,553	3,769	97.4%	79.6%	Improvemen t Needed
Distribution Los Center D Angeles, CA	56.7% A	2,769	3,270	97.9%	61.8%	Improvemen t Needed
Distribution Newark, NJ Center E	106.0%	1,021	2,233	96.3%	87.2%	Optimized

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