Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:36 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 48
Average Utilization: 78.4%
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	Status
Distribution Center A	Chicago, IL	47.4%	1,151	1,782	97.4%	77.8%	Improvement Needed
Distribution Center B	Dallas, TX	117.9%	2,642	1,737	95.2%	86.5%	Optimized
Distribution Center C	Atlanta, GA	59.3%	2,049	3,090	97.3%	70.8%	Improvement Needed
Distribution Center D	Los Angeles, CA	35.0%	2,845	1,554	97.9%	72.3%	Improvement Needed
Distribution Center E	Newark, NJ	87.6%	1,527	2,376	96.1%	84.7%	Optimized

Optimization Opportunities

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

ment voice-picking system to improve accuracy to 99.8%

• Upgrade WMS integration for real-time inventory visibility

• Add automated sortation system for small package handling

• Implement predictive analytics for demand-based staffing

• Consider AS/RS system for high-velocity SKUs