Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:03:30 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 21

Average Utilization: 77.2% 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	52.7%	2,084	3,077	99.1%	69.1%	Improvemen t Needed
Distribution Dallas, TX	52.2%	2,298	1,632	99.5%	84.8%	Optimized
Center B Distribution Atlanta, GA	83.0%	1,160	1,801	97.1%	92.4%	Optimized
Center C Distribution Los Center D Angeles, CA	82.3% \	2,967	1,915	97.5%	64.9%	Improvemen t Needed
Distribution Newark, NJ Center E	105.5%	2,102	3,867	95.6%	74.9%	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