Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:07:05 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5 Total Robots: 58

Average Utilization: 77.3% 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 Center A	52.4%	2,009	3,797	97.6%	65.3%	Improvemen t Needed
Distribution Dallas, TX	96.3%	1,047	1,554	97.0%	90.8%	Optimized
Center B Distribution Atlanta, GA Center C	51.8%	1,666	1,981	98.9%	72.0%	Improvemen t Needed
Distribution Los Center D Angeles, CA	117.7% \	2,255	2,611	98.4%	74.7%	Improvemen t Needed
Distribution Newark, NJ Center E	126.6%	2,990	3,030	99.4%	83.9%	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