Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:02:18 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5 Total Robots: 54

Average Utilization: 80.2% 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	n Status
Distribution Chicago, IL	53.8%	2,605	3,636	95.9%	80.1%	Optimized
Center A Distribution Dallas, TX Center B	56.0%	2,938	3,912	95.8%	74.3%	Improvemen t Needed
Distribution Atlanta, GA Center C	51.9%	2,800	1,612	96.9%	71.4%	Improvemen t Needed
Distribution Los	103.4%	1,663	2,703	98.0%	88.7%	Optimized
Center D Angeles, CA Distribution Newark, NJ Center E	72.2%	1,145	3,224	97.1%	86.6%	Optimized

Optimiz ation O pportun ities

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

picking 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